THE STATE OF SOUTH CAROLINA
In the Court of Appeals

APPEAL FROM CHARLESTON COUNTY
The Court of Common Pleas for the Ninth Judicial Circuit

Hon. J. C. Nicholson, Jr., Circuit Court Judge

Appellate Case No. 2016-001986

Shon Turner, as Personal Representative
of the Estate of Charles Mikell, deceased, ... Appellant

v.

The Medical University of South Carolina . . . . . Respondent

---

RECORD ON APPEAL - VOLUME I OF IV

Robert B. Ransom
LEVENTIS & RANSOM
Post Office Box 11067
Columbia, SC 29211
803-765-2383
bertcone@aol.com

Alex Apostolou
3443 Rivers Avenue
North Charleston, SC 29405
843-853-3637
alex@apostoloulaw.net

ATTORNEYS FOR THE
APPELLANT SHON TURNER

RECEIVED
AUG 15 2017
SC Court of Appeals

Other Counsel of Record:

M. Dawes Cooke, Jr.

John W. Fletcher
BARNWELL, WHALEY,
PATTERSON & HELMS
Post Office Drawer H
Charleston, SC 29402
843-577-7700

ATTORNEYS FOR THE
RESPONDENT
MEDICAL UNIVERSITY OF
SOUTH CAROLINA

INDEX

Notice of Entry of Judgment (Plaintiff's Motion for New Trial Denied) 3

Form 4 Jury Verdict 4

Plaintiff's Motion for New Trial 6

MUSC's Memorandum in Opposition to Plaintiff's Motion for New Trial 17

Plaintiff's Reply Memorandum on Motion for New Trial 36

Second Amended Complaint 53

Answer to Second Amended Complaint 63

Amended Complaint 72

Affidavit of W. Andrew Kofke, MD 77

Complaint 79

Plaintiff's Response to MUSC's Motion for Partial Summary Judgment 84

Plaintiff's Pretrial Brief 99

Proposed Verdict Form 111

Defendant's Motion to Exclude Testimony of Dr. W. Andrew Kofke 113

Exhibit A — Plaintiff's Answers to Interrogatories 123

Exhibit B — March 4, 2015 Deposition of Dr. Kofke 142

Exhibit C — April 1, 2016 letter from Mr. Ransom to Mr. Cook 175

MUSC's Answers to Plaintiff's First Discovery Request 178

MUSC's Supplemental Answers to Plaintiff's First Discovery Request 189

Plaintiff's Exhibit 1 191

Plaintiff's Exhibit 2 195

Plaintiff's Exhibit 3 204

Plaintiff's Exhibit 4 212

Plaintiff's Exhibit 5 214

Plaintiff's Exhibit 6 222
Plaintiff's Exhibit 7 227
Plaintiff's Exhibit 8 231
Plaintiff's Exhibit 9 240
Plaintiff's Exhibit 10 249
Plaintiff's Exhibit 11 253
Plaintiff's Exhibit 12 256
Plaintiff's Exhibit 14 257
Plaintiff's Exhibit 19 258
Plaintiff's Exhibit 30 265
Plaintiff's Exhibit 31 268
Plaintiff's Exhibit 45(h) 271
Plaintiff's Exhibit 46 273
Defendant's Exhibit 2 274
Defendant's Exhibit 8 275
Transcript of Trial Proceedings 405
Transcript of July 18, 2016 Hearing on Plaintiff's Motion for New Trial 1651
Certificate of Counsel 1675

JULIE J. ARMSTRONG
CLERK OF COURT, C.P. & G.S.
100 BROAD STREET, SUITE 106
CHARLESTON, SC 29401-2258
RETURN SERVICE REQUESTED

CHARLESTON COUNTY
SOUTH CAROLINA

clerkofcourt.charlestoncounty.org

68

ROBERT B. RANSOM
PO BOX 11067
COLUMBIA SC 29211-1067

NOTICE OF ENTRY OF JUDGMENT/ORDER PURSUANT TO RULE 77 SCRCP

Order/Plntff's Motion for New Trial is Denied

CASE NO: 2012CP1007275
Shon Turner VS Medical University of South Carolina

This judgment was entered on the 19th day of August, 2016, and notice mailed first class on Monday, August 22, 2016, to all counsel of record and/or all parties entitled to receive notice.

You may view and download this document at http://clerkofcourt.charlestoncounty.org or obtain a copy in person at the Clerk of Court's Office during regular Charleston County business hours.

FORM 4

STATE OF SOUTH CAROLINA
COUNTY OF CHARLESTON
IN THE COURT OF COMMON PLEAS

JUDGMENT IN A CIVIL CASE

CASE NO. 2012-CP-10-07275

Shon Turner as Personal Representative of the Estate

Of Charles Mikell Deceased
PLAINTIFF(S)

Medical University of South Carolina

DEFENDANT(S)

Submitted by: Court	**Attorney for :** ☐ Plaintiff ☐ Defendant or ☐ Self-Represented Litigant

FILED
2016 MAY -4 PM 3:16
JULIE ARMSTRONG
CLERK OF COURT

DISPOSITION TYPE (CHECK ONE)

☒ **JURY VERDICT.** This action came before the court for a trial by jury. The issues have been tried and a verdict rendered.

☐ **DECISION BY THE COURT.** This action came to trial or hearing before the court. The issues have been tried or heard and a decision rendered.

☐ **ACTION DISMISSED** (*CHECK REASON*): ☐ Rule 12(b), SCRCP; ☐ Rule 41(a), SCRCP (Vol. Nonsuit); ☒ Rule 43(k), SCRCP (Settled); ☐ Other

☐ **ACTION STRICKEN** (*CHECK REASON*): ☐ Rule 40(j), SCRCP; ☐ Bankruptcy; ☐ Binding arbitration, subject to right to restore to confirm, vacate or modify arbitration award; ☐ Other

☐ **DISPOSITION OF APPEAL TO THE CIRCUIT COURT** (*CHECK APPLICABLE BOX*): ☐ Affirmed; ☐ Reversed; ☐ Remanded; ☐ Other

NOTE: ATTORNEYS ARE RESPONSIBLE FOR NOTIFYING LOWER COURT, TRIBUNAL, OR ADMINISTRATIVE AGENCY OF THE CIRCUIT COURT RULING IN THIS APPEAL.

IT IS ORDERED AND ADJUDGED: ☒ See attached order (formal order to follow) ☐ Statement of Judgment by the Court: Jury unanimously found in favor of Defendant on April 26, 2016.

ORDER INFORMATION

This order ☐ ends ☒ does not end the case.
Additional Information for the Clerk :

INFORMATION FOR THE PUBLIC INDEX

Complete this section below when the judgment affects title to real or personal property or if any amount should be enrolled. If there is no judgment information, indicate "N/A" in one of the boxes below.

Judgment in Favor of (List name(s) below)	Judgment Against (List name(s) below)	Judgment Amount To be Enrolled (List amount(s) below)
n/a	**n/a**	**n/a**
		$
		$

If applicable, describe the property, including tax map information and address, referenced in the order:
N/A

The judgment information above has been provided by the submitting party. Disputes concerning the amounts contained in this form may be addressed by way of motion pursuant to the SC Rules of Civil Procedure. Amounts to be computed such as interest or additional taxable costs not available at the time the form and final order are submitted to the judge may be provided to the clerk. **Note: Title abstractors and researchers should refer to the official court order for judgment details.**

Circuit Court Judge

2117
Judge Code

5/4/16
Date

For Clerk of Court Office Use Only

This judgment was entered on the day of , 20 and a copy mailed first class or placed in the appropriate attorney's box on this day of , 20 to attorneys of record or to parties (when appearing pro se) as follows:

Robert Ransom

ATTORNEY(S) FOR THE PLAINTIFF(S)

Dawes Cook

ATTORNEY(S) FOR THE DEFENDANT(S)

CLERK OF COURT

Court Reporter: Sharon Vizer

STATE OF SOUTH CAROLINA)) COUNTY OF CHARLESTON)	IN THE COURT OF COMMON PLEAS CIVIL ACTION NO.:2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased, Plaintiff, vs. MEDICAL UNIVERSITY OF SOUTH CAROLINA, Defendant.	**PLAINTIFF'S MOTION FOR NEW TRIAL**

FILED
2016 MAY -9 AM 11:12
JULIE J. ARMSTRONG
CLERK OF COURT
CHARLESTON

This medical malpractice case was tried to a jury from April 18 to 26, 2016, resulting in a verdict in favor of the Defendant Medical University of South Carolina. Pursuant to Rule 59, SCRCP, and the principles set forth in Folkens v. Hunt, 300 S.C. 251, 387 S.E.2d 265 (1990), the Plaintiff moves for judgment not withstanding the verdict (JNOV) or, in the alternative, for a new trial on the grounds set forth below, to be supported by reference to the appropriate portions of the trial transcript once it is available from the court reporter.

1. Defense Motion for Partial Summary Judgment

In his Second Amended Complaint, the Plaintiff sets out a cause of action for medical malpractice, specifically alleging the Medical University is at fault for "failing to properly manage, supervise and direct the provision of anesthesia care to Mr. Mikell . . ." *See*, Second Amended Complaint, ¶6(f). Evidence to support this allegation is found in the Medical University's own Policies and Basic Standards of Anesthesia Care Manual (Plaintiff's Exhibit 8), which states in part:

> During the elective surgical schedule, all anesthetics administered in the Operating Room will be the responsibility of the anesthesiologist assigned to the specific case or his/her designate. The certified registered nurse anesthetist and house staff will be

under his/her direction and supervision.

* * *

Anesthesia care will be provided by the Attending Anesthesiologist. Certified Registered Nurse Anesthetist and House Staff may perform anesthesia under the supervision of an Attending Anesthesiologist. The patient's medical condition will be the responsibility of a qualified physician member of the medical staff.

Dr. Reeves, the Chairman of the Medical University's Anesthesia Department, testified that these provisions apply to Mr. Mikell's procedure. Likewise, Dr. Nelson himself acknowledges that as the attending anesthesiologist, he is responsible for the anesthesia care provided to Mr. Mikell by the Certified Registered Nurse Anesthetist, Donna Embry.

The legal basis for the Plaintiff's negligent supervision claim is further supplied by S.C. CODE ANN. §§40-33-20(20) and (57), which require that a Certified Registered Nurse Anesthetist "must practice under the supervision of a licensed physician," defined as "the process of critically observing, directing, and evaluating another's performance." Additionally, S.C. CODE OF REG. R. 61-16 §1212(A)(4) states, "A certified registered nurse anesthetist (CRNA) . . . is under the supervision of . . . an anesthesiologist who is immediately available if needed."[1]

At the close of the Plaintiff's case on Thursday, the court denied the Medical University's motion for directed verdict. Implicit in this ruling was a determination that there was evidence in the record sufficient to require submission of all the Plaintiff's claims to the jury, including the claims arising out of Dr. Nelson's conduct. Then, at the close of all the evidence on Friday, the Medical University made what defense counsel styled a "motion for partial summary judgment" on the Plaintiff's claims "against Dr. Nelson" (even though Dr. Nelson is not, and cannot be, named as a defendant in the case.) The court heard argument from counsel and took this motion under advisement over the weekend.

---

[1] Additional requirements for the provision of anesthesia care by CRNAs are set forth in §44-33-34(H).

At the subsequent charge conference on Monday morning, the Plaintiff requested a jury instruction that the Basic Standards, the statute, and the regulation could all be used to establish the applicable standard of care. *See*, Madison ex rel. Bryant v. Babcock Center, Inc., 371 S.C. 123, 638 S.E.2d 650 (2006). Plaintiff likewise argued that, pursuant to Cox v. Lund, 286 S.C. 410, 417, 334 S.E.2d 116, 120 (1985),[2] the applicable standard of care was established by Dr. Nelson's own testimony, that he should not have left the procedure room unless Mr. Mikell's oxygen saturation values were "consistently in the 90s."[3] Plaintiff further requested a jury instruction that where a duty arises from a statute or regulation, violation of that statute or regulation is negligence *per se*. *See*, Ralph King Anderson, Jr., South Carolina Requests to Charge - Civil, 2002, §20-6; Norton v. Opening Break, 319 S.C. 469, 462 S.E.2d 861 (1995); Green v. Sparks, 232 S.C. 414, 102 S.E.2d 435 (1958).

The Medical University objected to the negligence *per se* jury instruction, arguing that §40-33-20 (the "Nurse Practice Act") and Reg. 61-16 §1212(A)(4) are merely "licensing" provisions which do not establish any duty of care. In support of this position, the Medical University cited Hurst v. Sandy, 329 S.C. 471, 494 S.E.2d 847 (Ct. App. 1997). The Hurst case in turn cites Rayfield v. South Carolina Dept. of Corrections, 297 S.C. 95, 374 S.E.2d 910 (Ct. App. 1988) for the proposition that a statute creates a duty of care when: (1) its essential purpose is to protect from the type of harm the plaintiff has suffered; and (2) the plaintiff is a member of the class of persons whom the statute is intended to protect.

---

[2] "Expert testimony is not required to establish negligence when the act complained of was done in the face of a proscription known to the actor."

[3] Plaintiff's Exhibit 5, the one-minute anesthesia record, clearly demonstrated that at the time when Donna Embry claimed Dr. Nelson had left the room – 7:50 a.m. or 7:51 a.m., depending on which of her entries in the altered anesthesia narrative the jury chose to believe – Mr. Mikell's oxygen saturation values were not consistently in the 90s.

The Rayfield test is clearly met here. An essential purpose of the Nurse Practice Act and its regulations is to protect patients from harm resulting from the administration of anesthetic drugs by persons who are not trained as physicians. Mr. Mikell is a member of the class of persons whom the statute is intended to protect because he received anesthesia from a non-physician medical care provider.

Furthermore, unlike the professional engineers licensing statute at issue in Hurst, §40-33-20(20) of the Nurse Practice Act specifically imposes a standard of care on CRNAs, who "must practice in accordance with approved written guidelines developed under supervision of a licensed physician . . . or approved by the medical staff within the facility where practice privileges have been granted." It is in order to comply with this statutory mandate that the Medical University implemented its Policies and Basic Standards of Anesthesia Care Manual. So it is simply not accurate to characterize the Nurse Practice Act as a mere "licensing" provision.

Additionally, the Nurse Practice Act is not the sole source of the legal duty between Dr. Nelson and Mr. Mikell. That duty also springs from the physician-patient relationship itself. *See*, Roberts v. Hunter, 310 S.C. 364, 426 S.E.2d 797 (1993). The scope of this duty is defined by the 2005 Medical Malpractice Reform Act, S.C. CODE ANN. §15-79-110(6), which requires Dr. Nelson to do "that which the reasonably prudent health care provider . . . would . . . do . . . under the same or similar circumstances." What a reasonably prudent health care provider would do under the circumstances of this case is determined with reference to, *inter alia*, the Nurse Practice Act and its concomitant regulations. *See*, Madison ex rel. Bryant v. Babcock Center, Inc., 371 S.C. 123, 638 S.E.2d 650 (2006).

Finally, the instant case does not involve statutes defining the elements of a crime or the so-called "public duty rule," as do the cases relied upon by the Court of Appeals in Hurst. The Nurse

Practice Act and its regulations do not impose a duty on the part of public officials, but rather on the part of medical care providers who, like Dr. Nelson and Nurse Embry, are not public officials.

In summary, the Nurse Practice Act defines the standard of care to be exercised by a physician complying with his duty of due care to a patient. As Judge Bell explained in Rayfield, *supra*, 347 S.E.2d at 915:

> Negligence *per se* simply means the jury need not decide if the defendant acted as would a reasonable man in the circumstances. The statute fixes the standard of conduct required of the defendant, leaving the jury merely to decide whether the defendant breached the statute. If he did, his failure to take due care is established as a matter of law.

In obedience to this principle, because there was evidence that Dr. Nelson failed to properly supervise Nurse Embry's provision of anesthesia to Mr. Mikell, the jury was entitled to find that Dr. Nelson was negligent *per se*.

However, during the charge conference the court commented that a doctor's negligent failure to supervise a CRNA would not constitute medical malpractice, but would merely be ordinary negligence. The court then reasoned that because the Second Amended Complaint alleged medical malpractice but not negligent supervision, the latter claim need not be submitted to the jury. The Plaintiff contended failure to properly supervise the provision of medical care was indeed malpractice. The Plaintiff also asked the court to consider conforming the pleadings to the proof, *see*, SCRCP 15(b), because the issue of supervision had clearly been raised and tried to the jury without objection. The court declined to do so and instead granted the Medical University's motion for partial summary judgment.

The court further ruled there was no need for the jury to determine the Plaintiff's claim that Dr. Nelson committed malpractice by going in and out of the procedure room while his patient was sick. Specifically, the court found there was no evidence of some specific act which Dr. Nelson could

or should have undertaken to prevent Mr. Mikell's cardiac arrest. The court found this despite testimony from the Plaintiff's medical expert, Dr. Kofke, that Dr. Nelson breached the standard of care by leaving the room when his patient was sick; and that the cardiac arrest would most probably not have occurred had both Nurse Embry and Dr. Nelson been present in the room to manage Mr. Mikell's airway. The court further rejected Plaintiff's argument that Dr. Nelson himself said he should not have left the room unless the oxygen saturations were consistently in the 90s, when evidence from the one-minute anesthesia record showed the oxygen saturation levels were never consistently in the 90s.

Having determined to grant the motion for partial summary judgment on the claims against Dr. Nelson, the court however declined to inform the jury that those claims were being removed from its consideration. The court instead directed that those claims not be argued to the jury and a special interrogatory relating to physician negligence – initially proposed and agreed to by the Medical University – was removed from the verdict form. Counsel them presented their closing arguments, the jury was charged and deliberations began.

On Tuesday morning, the court lamented the decision to grant the motion for partial summary judgment and a discussion ensued with counsel about how this might be rectified. Because counsel could not agree on a solution, the court determined not to intervene. The jury thereafter returned its verdict with a finding of no medical malpractice.

The court's rulings on these issues had the unfortunate effect of eviscerating the Plaintiff's closing argument and crippling the Plaintiff's case by creating a rhetorical vacuum, with no way for Plaintiff's counsel to reconcile for the jury why the claims against Dr. Nelson – which had occupied a significant amount of time during the presentation of evidence – were now inexplicably absent from discussion and consideration.

2. Blank Mayday Form

The court allowed into evidence, over the Plaintiff's objections, a blank Mayday form which defense counsel then repeatedly used to violate the best evidence rule, *see*, SCRE 1004, by arguing the blank form showed that the Mayday record for Mr. Mikell's cardiac arrest – the loss of which the Medical University never explained – did not contain any useful or important information. This was permitted by the court even though Nurse Embry testified she used the missing Mayday record to recreate the sequence of events in her altered anesthesia narrative, including the specific times when Dr. Nelson left and returned to the procedure room.

The admission of this improper secondary evidence, and the allowance of this improper argument, was prejudicial to the Plaintiff, effectively nullifying the adverse evidentiary inference to which the Plaintiff was entitled under Stokes v. Spartanburg Regional Medical Center, 368 S.C. 515, 629 S.E.2d 675 (Ct. App. 2006). The Medical University's sole purpose in offering the blank Mayday form into evidence was the avoidance of this adverse inference.

3. Opinion testimony by Dr. Zile

The court allowed the jury to hear opinion testimony from defense witness Dr. Zile, who had not been identified by the Medical University as an expert prior to trial but who was nevertheless permitted to repeatedly testify, over multiple objections: (1) that beginning in 2003 and continuing thereafter, there was a 50% chance Mr. Mikell would die within the next five years (implying that by October 2010, Mr. Mikell had far exceeded his life expectancy); and (2) that several of Mr. Mikell's heart medications were stopped after the October 1, 2010 cardiac arrest because they were no longer "indicated," meaning no longer needed.

Although the court ruled that Dr. Zile had not been timely identified as an expert witness so that the Plaintiff had no notice of the substance of his opinions; and that Dr. Zile would not be

permitted to render opinion testimony beyond his role as a treating physician, the court nevertheless allowed the referenced opinion testimony to be heard by the jury and refused to strike it, despite timely objections and motions by the Plaintiff.

4. Repetitive, Redundant and Confusing Jury Instructions

The instructions given to the jury relative to the Plaintiff's cause of action for medical malpractice were redundant, repetitive and confusing with multiple definitions of "negligence," "medical negligence" and "professional negligence" being provided. These definitions went beyond the current statutory definition of "medical malpractice," which is set forth in S.C. CODE ANN. §15-79-100(6).

Many courts have noted that prejudice results from the giving of repetitive or redundant jury instructions, which tend to overemphasize certain aspects of a case to the exclusion of others and give the impression that the trial judge favors one party or another. *See, e.g.*, Uriell v. Regents of University of California, 184 Cal. Rptr. 3d 79 (2015)(it is error to give instructions that unduly overemphasize issues, theories or defenses either by repetition or singling them out or making them unduly prominent); GJP, Inc. v. Ghosh, 251 S.W.2d 854 (Tex.App. 2008)(trial court's charge should not burden jury with surplus instructions which tilt or nudge jury one way or the other); Kondaurov v. Kerdasha, 629 S.E.2d 181 (2006)(party is not entitled to redundant, repetitive charges); Howat v. Donelson, 711 N.E.2d 440 (Ill. App. 1999)(use of repetitious phrases is discouraged); Jenkins v. Bazzoli, 650 N.E.2d 966 (Oh. App. 1994)(trial court should avoid repeating instructions); Jackson v. Rodriguez, 325 S.E.2d 857 (Ga. App. 1984)(it is error to repeat again and again that portion of a charge which is more favorable to one party than the other); Tittle v. Hurlbutt, 497 P.2d 1354 (Haw. 1972)(noting an imperative against cumulative and repetitious instructions); Coca v. People, 391 P.2d 462 (Co. 1964)(party not entitled to four different jury instructions, all covering same

subject and each couched in only slightly different verbiage); Bean v. Gorby, 292 P.2d 199 (Ariz. 1956)(undue repetition which unduly prejudices jury).

The Plaintiff recognizes the court used standard form instructions for medical malpractice. Nevertheless, charging the jury about three different kinds of negligence – including explanations about what is and is not considered malpractice – was unnecessarily confusing and unfairly prejudicial to the Plaintiff. For example, the jury could easily have concluded the Plaintiff needed to satisfy every definition charged in order to recover. Likewise, the jury could have believed the Plaintiff had the burden of proving Dr. Nelson and Nurse Embry did not possess "that degree of learning, skill and experience ordinarily possessed by others practicing in their fields," when that was never at issue in the case.

The court specifically rejected the Plaintiff's contention that the §15-79-100(6) definition of "medical malpractice," adopted by the General Assembly as part of the comprehensive 2005 Medical Malpractice Reform Act, was intended to supplant prior common law formulations. The court reasoned that the statutory definition was only intended to apply to pre-suit procedures. But this misapprehension leads to the odd result that "medical malpractice" could mean one thing at the beginning stage of a case and something entirely different at trial. The General Assembly should not be understood to have intended that medical malpractice plaintiffs hit a moving target. The whole purpose of the statutory definition is to achieve uniformity.

5. Discovery Abuse

The court is well familiar with the discovery abuse issues in this case. As a partial remedy, by email dated March 8, 2016, Plaintiff's counsel indicated a desire to take as many as nine (9) additional depositions, including re-deposing Martha Zwermer, RN and Mark Payne, MD, both of whom were present in the procedure room during Mr. Mikell's colonoscopy.

When Nurse Zwermer and Dr. Payne were originally deposed in August 2014, the Medical University had not: (a) revealed the software glitch, the text messages, or the phone calls; (b) produced any audit trails; or (c) admitted the creation and subsequent destruction/loss of the Mayday record. Thus, the Plaintiff could not inquire into any of these matters with Nurse Zwermer and Dr. Payne in order to ask, e.g., what was happening with Mr. Mikell while Nurse Embry was texting and talking on the phone?

However, in an email dated March 17, 2016, the court limited the Plaintiff to only (4) four additional depositions, thereby creating a Hobson's choice. In the end, the Plaintiff deposed other witnesses (Dr. Reeves, Dr. Berry, John Fisher and Annette Thompson) instead of Nurse Zwermer and Dr. Payne. Plaintiff's counsel was thereafter hamstrung in his ability to effectively attack Dr. Payne's trial testimony – that he would not have started Mr. Mikell's colonoscopy had there been any problems – by asking him about the text messages and phone calls. A cardinal rule of trial advocacy is to never ask a question without already knowing the answer.

CONCLUSION

The combined effect of all these issues was to handicap the Plaintiff, confuse the jury and render the verdict unfair, controlled as it was by errors of law in removing the claims against Dr. Nelson from the jury's consideration; allowing inadmissible secondary evidence and opinion testimony to remain before the jury; and deliberations based upon confusing jury instructions. For these reasons, the Plaintiff respectfully asks the court to grant judgment notwithstanding the verdict or, in the alternative, a new trial.

BY: 

Robert B. Ransom
LEVENTIS & RANSOM
Post Office Box 11067
Columbia, SC 29211
(803) 765-2383

(803) 799-1612 (fax)
Bertcone@aol.com

Alex Apostolou
3443 Rivers Avenue
North Charleston, SC 29405
(843) 853-3637
Alexapostolou@bellsouth.net

ATTORNEYS FOR THE PLAINTIFF

FILED
2016 MAY -9 AM 11:12
JULIE J. ARMSTRONG
CLERK OF COURT
CHARLESTON COUNTY

CERTIFICATE OF MAILING

The undersigned hereby certifies that a true copy of the Plaintiff's Motion for New Trial has been served upon opposing counsel by depositing in the United States mail a copy of same properly addressed with sufficient postage affixed thereto this 6 day of May, 2016.

Robert B Ransom

STATE OF SOUTH CAROLINA	)	IN THE COURT OF COMMON PLEAS
	)	
COUNTY OF CHARLESTON	)	CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased,	)	**MEMORANDUM IN OPPOSITION TO PLAINTIFF'S MOTION FOR A NEW TRIAL**
Plaintiff,	)	
vs.	)	
MEDICAL UNIVERSITY OF SOUTH CAROLINA,	)	
Defendant.	)	

AND NOW COMES Defendant Medical University of South Carolina ("MUSC"), by and through its undersigned counsel, and respectfully files this Memorandum in Opposition to Plaintiff's Motion for New Trial.

I. This Court correctly Granted MUSC's Motion for Partial Directed Verdict[1] as to the Limits of Liability set forth in Section 15-78-120(a)(1)-(2) of the South Carolina Tort Claims Act.

A. The Plaintiff presented no Evidence that Any Act or Omission by MUSC was caused by a deviation from the standard of care by a licensed physician.

"A directed verdict should be granted where the evidence raises no issue for the jury as to the defendant's liability." *Guffey v. Columbia/Colleton Regional Hospital, Inc.*, 364 S.C. 158, 612 S.E.2d 695 (2005)(citing *Roberts v. Hunter*, 310 S.C. 364, 426 S.E.2d 797 (1993))(directed verdict affirmed where there was no evidence on any one element of the alleged cause of action). To prevail in a medical malpractice action, the plaintiff must establish "(1) the generally

[1] Plaintiff mistakenly characterizes the motion as one for summary judgment.

recognized practices and procedures in a defendant doctor's field of medicine under the same or similar circumstances, and (2) a departure by the defendant from the recognized and generally accepted standards, practices and procedures..." *Fletcher v. MUSC*, 390 S.C. 458, 463, 702 S.E.2d 372, 374 (Ct. App. 2010), *cert. denied* (2012)(citing *Jones v. Doe*, 372 S.C. 53, 61, 640 S.E.2d 514, 518 (Ct. App. 2006)(quoting *Cox v. Lund, 286 S.C. 410, 414, 334 S.E.2d 116, 118 (1985))*. Furthermore, "[i]n a medical malpractice action, the plaintiff must establish proximate cause as well as the negligence of the physician." *Guffey v. Columbia/Colleton Regional Hospital, Inc.*, 364 S.C. at 158, 612 S.E.2d at 695 (citing *Ellis v. Oliver*, 323 S.C. 121, 473 S.E. 2d 821 (1989)). "The probative value of the expert testimony stands or falls upon an evidentiary showing of the facts upon which the opinion is, or must logically be, predicated." *Fletcher v. MUSC*, 390 S.C. at 463, 702 S.E.2d at 374 (citing *Ward v. Epting*, 290 S.C. 547, 563, 351 S.E.2d 867, 876 (Ct. App. 1986)).

The Court properly directed a verdict for the Defendant as to any negligence by a licensed physician (specifically, Dr. Nelson). The result of this ruling was that, had the jury rendered a verdict for the Plaintiff, the Plaintiff could not have availed himself of the higher limit of recovery set forth in Section 15-78-120(c) of the South Carolina Tort Claims Act. Plaintiff's expert, Dr. Andrew Kofke, did not testify as to anything that Dr. Nelson did or failed to do that caused Mr. Mikell to arrest. Dr. Kofke testified that Dr. Nelson was not in the room enough, but he could not determine when Dr. Nelson was in the room because the medical records are "goofy." Dr. Kofke admitted that the anesthesiologist can supervise up to four CRNAs at one time and so obviously does not have to be in the procedure room at all times. The uncontroverted evidence established that Dr. Nelson was in the room typing in the electronic record at 7:49 a.m. and that Dr. Nelson's 7:49 a.m. entry was not changed. Dr. Kofke testified

that his rule of thumb is that the anesthesiologist should be able to get to the operating room within two minutes of being summoned. There was no evidence at trial that Dr. Nelson deviated from these standards. Both Dr. Nelson and Donna Embrey, CRNA testified that Mr. Mikell's oxygen saturation returned to a normal level once the nasal airway was inserted at approximately 7:48 a.m. and was within an acceptable normal value when Dr. Nelson left the room at approximately 7:51 a.m. The undisputed evidence further established that bag-mask ventilation was initiated at approximately 7:55 a.m. and that Dr. Nelson was in the room at that time.

In his Motion for New Trial, Plaintiff argues that the common knowledge exception to expert testimony applies and Dr. Nelson's testimony created an issue of fact for the jury to determine whether he deviated from the standard of care. Plaintiff contends that Dr. Nelson's testimony established that he should not have left the room unless Mr. Mikell's oxygen saturation values were consistently in the 90's. South Carolina law applies the common knowledge exception to "situations where the common knowledge or experience of a laymen is extensive enough to recognize or to infer negligence from the facts." *See Cox v. Lund*, 286 S.C. 410, 416, 334 S.E. 2d 116 at 120 (1985)(*citing Green v. Lilliewood*, 272 S.C. 186, 192, 249 S.E.2d 910 (1978), our Court, *citing Jarboe v. Harting*, 397 S.W.2d 775 (Ky.1965)). Even if Dr. Nelson's testimony established the applicable standard of care regarding whether it was appropriate for him to the leave the room after the nasal airway was placed, the issue of whether he appropriately left the room was undisputed by Plaintiff's expert. Unlike *Cox* where "a question of fact in sharp dispute was whether Dr. Lund's ability to maintain visual observation as the colonoscope proceeded through the colon", there was no dispute of material fact regarding whether Dr. Nelson appropriately left the room at 7:51 a.m. after the nasal airway was placed.

Plaintiff asks the Court to conclude that the occurrence of the arrest, in and of itself, is evidence of negligence by a licensed physician. However, South Carolina does not recognize the doctrine of ***res ipsa loquitur***. *See Fletcher v. MUSC*, 390 S.C. at 463, 702 S.E.2d at 374 (citing *Snow v. City of Columbia*, 305 S.C. 544, 555 n.7, 409 S.E.2d 797, 803 n.7 (Ct. App. 1991)("In an action for negligence, the plaintiff must prove by direct or circumstantial evidence that the defendant did not exercise reasonable care. South Carolina's rejection of *res ipsa loquitur* is consistent with its general adherence to fault based liability in tort.")). The Court is "not permitted to speculate that misfortune was the result of negligence in the absence of any evidence as to how the physicians deviated from the standard of care." *See Fletcher v. MUSC*, 390 S.C. at 464, 702 S.E.2d at 374. This case is very much like *Fletcher*. There the expert admitted, as Dr. Kofke did, that the complication that befell the plaintiff can happen in the absence of negligence. Like Dr. Kofke, he could not identify a specific negligent act or omission on the part of the physician. Finally, like Dr. Kofke, he concluded that the physician must have done something wrong because a complication occurred. The Court of Appeals held that the expert's testimony was not sufficient to create a jury issue as to the physician's negligence. Based on the foregoing, this Court correctly granted MUSC's Motion for Partial Directed Verdict because Plaintiff presented no evidence of negligence by a licensed physician.

B. The Nurse Practice Act does not support a Private Right of Action for Negligence *Per Se* Against a Licensed Physician

As a matter of law, the Nurse Practice Act, S.C. Code Ann. § 40-33-10, *et.seq.*, does not establish a private right of action and is not a basis for establishing liability on behalf of a licensed physician. *See Hurst v. Sandy*, 329 S.C. 471, 494 S.E.2d 847 (Ct. App. 1997). In *Hurst v. Sandy*, the Court of Appeals, relying on *Rayfield v. S.C. Dept. of Corrections*, 297 S.C. 95, 374 S.E.2d 910 (Ct.App.1988), *cert. denied*, 298 S.C. 204, 379 S.E.2d 133 (1989), held that a

"licensing statute will not ordinarily provide a basis for a negligence per se action." *See Hurst v. Sandy*, 329 S.C. at 478-80, 494 S.E.2d at 850-51. In *Rayfield v. S.C. Dept. of Corrections*, the Court of Appeals set forth the two requirements that must be met to determine when a duty created by statute will support an action for negligence.

> In order to show that the defendant owes him a duty of care arising from a statute, the plaintiff must show two things: (1) that the essential purpose of the statute is to protect from the kind of harm the plaintiff has suffered; and (2) that he is a member of the class of persons the statute is intended to protect. *Id.* at 103, 374 S.E.2d at 914. In a subsequent decision, our Supreme Court further extended the analysis by stating that "the plaintiff must prove violation of the statute was causally linked, both in fact and proximately, to the injury." *Whitlaw v. Kroger Co.*, 306 S.C. 51, 55, 410 S.E.2d 251, 253 (1991).

Hurst v. Sandy, 329 S.C. at 478, 494 S.E. 2d at 850 (*citing Rayfield v. S.C. Dept. of Corrections*, 297 S.C. at 103, 374 S.E.2d at 914).

An action for negligence *per se*:

> . . . [C]annot be maintained where it appears that the statute ... was enacted ... for a purpose wholly different from that of preventing the injury of which complaint is made. To afford a right of action for injury from the violation of a statute ... the complainant's injury must have been such as the statute ... was intended to prevent. If none of the consequences which the enactment was designed to guard against have resulted from its breach, such a breach does not constitute an actionable wrong, even though some other injurious consequence has resulted. It is not enough for a plaintiff to show that the defendant neglected a duty imposed by statute and that he would not have been injured if the duty had been performed. He must go further and show that his injury was caused by his exposure to a hazard from which it was the purpose of the statute to protect him.

Rayfield v. S.C. Dept. of Corrections, 297 S.C. at 104, 374 S.E.2d at 915 *(citing Bell v. Atlantic Coast Line Railway Co.*, 202 S.C. 160, 174, 24 S.E.2d 177, 183 (1943)(*quoting* 38 Am.Jur. *Negligence*, Section 163 at 834)).

Hurst v. Sandy involved Chapter 22 of Title 40 of the South Carolina Code which codifies the law relating to the registration of engineers and land surveyors by the South Carolina State Board of Registration for Professional Engineers and Land Surveyors. *See* 7 S.C.Juris.

Architects and Engineers § 1 (1991); S.C.Code Ann. § 40–22–10 to § 40–22–460 (1991). The Court of Appeals found that the provisions of Chapter 22 are intended to regulate the practice of engineering by requiring persons who want to engage in the profession to be licensed and registered. Further, the Court found that the Chapter is directed to the engineering profession because it authorizes the Board to sanction a registrant who violates any of the provisions of the Code or regulations of the Board. *See Hurst v. Sandy,* 329 S.C. at 478, 494 S.E.2d at 850-851 *(citing* S.C. Code Ann. § 40–22–390 (Supp.1996)). The Court of Appeals held that the Plaintiffs failed to satisfy the first prong of the *Rayfield* test because the essential purpose of the statute was to regulate the practice of the profession of engineering, rather than the imposition of civil liability to private individuals. *Id.* at 479, 851 (*citing Dorman v. Aiken Communications, Inc.* 303 S.C. 63, 398 S.E.2d 687 (1990); *Whitworth v. Fast Fare Mkts. of S.C. Inc.,* 289 S.C. 418, 338 S.E.2d 155 (1985); 4 S.C.Juris. *Action* § 14 (1991)(stating that in the determination of private rights, the court has applied as a general rule that a statute which does not purport to establish a civil liability, but merely makes provision to secure the safety or welfare of the public as an entity is not subject to a construction establishing a civil liability)).

The Court of Appeals, in *Hurst v. Sandy* further stated:

> Even if we were to assume that the Hursts established the elements of negligence per se, we are still faced with a question of whether such an action may be premised on a licensing statute. In their brief, the Hursts cite one authority which supports their contention that state statutes setting standards for engineers may be the foundation for a cause of action against the engineer for negligence.[4] However, we find no such standards have been set in this statute.[5]5 *480 Our reading of the relevant South Carolina code sections and cases, convinces us that the essential purpose of the statute, as alleged by the Hursts, is inconsistent with the legislative intent in enacting this statute. Further, we find that a licensing statute will not ordinarily provide a basis for a negligence per se action. Therefore, we hold, as to this claim, the Hursts have not demonstrated that an issue of material fact is in dispute. We affirm the trial court on this cause of action.

Hurst v. Sandy, 329 S.C. at 478-80, 494 S.E.2d at 850-51 (Ct. App. 1997).

Like the licensing statute at issue in *Hurst v. Sandy*, the exclusive purpose of the Nurse Practice Act, S.C. Code Ann. § 40-33-10, *et seq.*, and its accompanying Regulations, S.C. Code Reg. R. 61-16 § 1212(A)(4), is the regulation of the practice of the nursing profession in the State of South Carolina, not the imposition of civil liability to private individuals. Chapter 33 of Title 40 codifies the law relating to the licensure of nurses by the State Board of Nursing. It establishes the Board of Nursing and the duties and responsibilities of the Board which includes establishing basic levels of education and competency that must be met, the licensure requirements applicable to all nurses practicing in South Carolina, and authority to discipline nurses in this State. *See* S.C. Code Ann. 40-33-10, *et seq.* The statute defines the minimum levels of education that must be completed to be eligible for licensure in this State. It further defines the scope of the CRNA's practice under South Carolina law.[2] There is no indication in the language of the statute that the legislature intended it to create a private right of action. Consistent with the holding in *Hurst v. Sandy* the Nurse Practice Act is a licensing statute and does not provide a basis for a negligence per se action.

C. An Anesthesiologist is not Vicariously Liable for the Negligence of the CRNA by virtue of the CRNA's scope of Practice as Defined in the Nurse Practice Act

---

[2] The statute provides:

(20) "Certified Registered Nurse Anesthetist" or "CRNA" means an advanced practice registered nurse who:(a) has successfully completed an advanced, organized formal CRNA education program at the master's level accredited by the national accrediting organization of this specialty area and that is recognized by the board;(b) is certified by a board-approved national certifying organization, and(c) demonstrates advanced knowledge and skill in the delivery of anesthesia services. A CRNA must practice in accordance with approved written guidelines developed under supervision of a licensed physician or dentist or approved by the medical staff within the facility where practice privileges have been granted. S.C. Code Ann. § 40-33-20

Plaintiff argues that the Nurse Practice Act and MUSC's Policies and Basic Standards of Anesthesia Care Manual establish that the anesthesiologist is vicariously liable for the negligence of the CRNA by virtue of the duty to supervise a CRNA. The Nurse Practice Act defines the "supervision" of a CRNA by an anesthesiologist as "critically observing, directing, and evaluating another's performance." In addition, the American Association of Anesthesiologists, in its position statement regarding the Anesthesia Care Team, defines the model of supervision as one of "delegation" of tasks. *See* Statement of the Anesthesia Care Team, American Society of Anesthesiologists (approved Oct. 26, 1982; last amended Oct. 16, 2013). Neither the Nurse Practice Act nor any other policy or position statement defines supervision as a means of establishing vicarious liability on behalf of the anesthesiologist. To do so would result in the inability of the anesthesiologist to supervise more than one CRNA at a time and delegate pertinent responsibilities that are within the CRNA's scope of practice, training, and education, including physiologic monitoring, to the CRNA.

Furthermore, South Carolina does not recognize the captain of the ship doctrine. *Ellis v. Niles*, 324 S.C. 223, 227, 479 S.E.2d 47, 49 (1996)(in its purest form, this doctrine imposed vicarious liability on the operating surgeon for the negligence of any person assisting in the operation. *See* Price, *The Sinking of the "Captain of the Ship"*, 10 J. Legal Med. 323 (1989)). In *Ellis*, the South Carolina Supreme Court stated:

> Whether the law recognizes a particular duty is an issue of law to be determined by the court. *See e.g., Mickle v. Blackmon,* 252 S.C. 202, 166 S.E.2d 173 (1969). If there is no duty, then the defendant in a negligence action is entitled to a directed verdict. *Rogers v. South Carolina Department of Parole and Community Corrections,* 320 S.C. 253, 464 S.E.2d 330 (1995); *cf., Roberts v. Hunter,* 310 S.C. 364, 426 S.E.2d 797 (1993) (doctor entitled to directed verdict in a medical malpractice action where no doctor-patient relationship exists).

Ellis v. Niles, 324 S.C. 223, 227, 479 S.E.2d 47, 49 (1996).

Even if South Carolina law imposed vicarious liability on an anesthesiologist for the negligence of the CRNA, which it does not, the jury found that Donna Embrey, CRNA, was not negligent.

In addition, Plaintiff argues that the Court improperly denied his request for a negligent supervision instruction. As stated previously, the uncontroverted evidence established that Dr. Nelson was not negligent in his supervision of Donna Embrey, CRNA.

Based on the foregoing, the Court properly granted MUSC's Motion for Partial Directed Verdict as to negligence of a licensed physician and denied Plaintiff's request for a negligent supervision charge.

D. If the Grant of MUSC's Motion for Partial Directed Verdict was Error, it was Harmless Error.

Even if the grant of MUSC's Motion for Partial Directed Verdict was error, it was harmless. "No definite rule of law governs [a finding of harmless error]; rather the materiality and prejudicial character of the error must be determined from its relationship to the entire case." *See State v. Byers*, 392 S.C. 438, 448, 710 S.E.2d 55, 60 (2011). "Error is harmless when it could not reasonably have affected the result of the trial." *Id.* (citing *State v. Reeves*, 301 S.C. 191, 193-94, 391 S.E.2d 241, 243 (1990)).

The sole allegation against MUSC based on the acts and omissions of a licensed physician was that Dr. Nelson failed to adequately supervise the CRNA. However, the jury found that the CRNA was not negligent; therefore, there could be no liability for failure to supervise her. The grant of MUSC's Motion for Partial Directed Verdict as to the liability of MUSC based on the negligence of a licensed physician had no effect on the result of the trial and did not result in prejudice to the Plaintiff. *See Smith v. Ridgeway Chemicals,* 302 S.C. 303, 395 S.E.2d 642 (S.C. App. 1990) (Holding that any error in refusing to submit the husband's case to

the jury was harmless because jury returned a verdict in favor of the defendant on the wife's claim, from which the husband's claim derived).

Finally, the Plaintiff was not even entitled to try the case based on a claim of negligence by Dr. Nelson. The Plaintiff did not disclose in discovery until the week before trial that he claimed any negligence on the part of Dr. Nelson or that Dr. Kofke was going to testify as to negligence on Dr. Nelson's part. The Court exercised its discretion to permit the Plaintiff to introduce evidence on this issue, but it would have been well within the Court's discretion to bar such evidence.

II. The Blank Mayday Record

A. The Blank Mayday Record was Properly Admitted as a Business Record

Plaintiff asserts that the admission of the blank Mayday Record was a violation of the Best Evidence Rule which provides in pertinent part: "[t]o prove the content of a writing, recording, or photograph, the original writing, recording, or photograph is required, except as otherwise provided in these rules or by statute." *See State v. Halcomb*, 382 S.C. 432, 444, 676 S.E.2d 149, 155 (Ct. App. 2009). Further, Rule 1004, SCRE, states in relevant part: "[t]he original is not required, and other evidence of the contents of a writing, recording, or photograph is admissible if—[ ] All originals are lost or have been destroyed, unless the proponent lost or destroyed them in bad faith." *State v. Halcomb*, 382 S.C. at 444, 676 S.E.2d at 155.

The blank Mayday Record was properly admitted into evidence because it is a business record and was properly admitted under the business record exception. *See* Rule 803(6), SCRE. Furthermore, the blank Mayday Record was not admitted to describe the contents of the Mayday Record that was completed for Mr. Mikell. The document was properly admitted to show the type of information ordinarily recorded in the Mayday Record, not any information specific to Mr. Mikell. Furthermore, MUSC established a proper foundation for the admission of the blank

Mayday Record. Sheila Scarbrough, RN, MSN, testified that she created the blank Mayday Record form. She further testified regarding the Mayday Policy and the application of the Mayday Record in clinical practice which includes the information that is ordinarily recorded in the record pertaining to resuscitation. The Court prohibited the Defendant from introducing evidence of what was actually in the missing Mayday Record; the blank Mayday Record was offered only as evidence of what information was *not* in the missing record.

B. The Blank Mayday Record was properly Admitted to Rebut the Adverse Inference Instruction

Plaintiff moved for an adverse inference instruction in accordance with *Stokes v. Spartanburg Regional Medical Center*, 368 S.C. 515, 629 S.E.2d 675 (Ct. App. 2006) based on the spoliation of evidence. The adverse inference charge pertained to the missing Mayday Record and Plaintiff was permitted to argue that the Mayday Record contained information adverse to MUSC. An adverse inference is rebuttable. *See Stokes v. Spartanburg Regional Medical Center*, 368 S.C. at 679, 629 S.E.2d at 521. Therefore, MUSC was entitled to introduce evidence that tended to demonstrate that the Mayday Record could not have contained any relevant adverse evidence.

C. The Court Should not Even Have Instructed the Jury on Spoliation of Evidence

1. The Missing Mayday Record was not Relevant to Causation

Plaintiff relied on *Stokes v. Spartanburg Regional Medical Center*, 368 S.C. 515, 626 S.E.2d 675 (Ct. App. 2006) in support of his request for an adverse inference charge based on the alleged spoliation of evidence. *Stokes* permits the jury to draw a negative inference from the failure to produce records even in the absence of intentional misconduct. *See Stokes v. Spartanburg Regional Medical Center*, 368 S.C. 515, 629 S.E.2d 675. Furthermore, *Stokes* requires a showing that the missing evidence must have been relevant to the litigation. *Id.*

As a preliminary matter, the party seeking an adverse inference charge "must be prepared to make a showing that the document or evidence might reasonably have supported whatever presumption is being requested of the fact finder." *See Pringle v. SLR, Inc. of Summerton*, 382 S.E. 397, 675 S.E.2d 783 (Ct. App. 2009)(*citing and quoting* Kevin Eberle, Spoliation in South Carolina, 19-SEP S.C. Law, Sept. 2007, 26, 32))(holding that any inference a jury could make from the absence of the evidence at issue – a chair – would not change the fact that there was no indication the chair was dangerous or unfit for use. The chair in question would not have provided any additional information indicating that its use would have constituted negligence on part of respondent). In *Stokes v. Spartanburg Regional Med. Ctr.*, 386 S.C. 515, 629 S.E.2d 675 (Ct. App. 2006), the Court of Appeals upheld the trial court's jury instruction on the issue of "missing" records because both allegedly missing items of evidence would have helped determine the cause of the decedent's death. Plaintiff failed to provide any evidence that any information in the missing Mayday Record would show the cause of Mr. Mikell's arrest. The information ordinarily documented in the Mayday Record pertains to resuscitation, not the events or condition of the patient prior to the arrest. Therefore, the Court erred in granting Plaintiff's request for an adverse inference instruction based on the missing Mayday Record.

2. The Standard Applied by the Court of Appeals in *Stokes* is an Incorrect Statement of Law and Inconsistent with the Standard applied by Other Courts

The Defendant contended at trial, and wishes to preserve its objection, that the standard for granting an adverse inference instruction based on the spoliation of evidence applied by the Court of Appeals in *Stokes* is an incorrect statement of the law and inconsistent with standards applied by other courts. The Fourth Circuit Court of Appeals in *Silvestri v. General Motors Corp.*, 271 F.3d 583 (2001) outlined the definition of spoliation and the purpose of the spoliation doctrine:

> Spoliation refers to the destruction or material alteration of evidence or to the failure to preserve property for another's use as evidence in pending or reasonably foreseeable litigation. *West v. Goodyear Tire & Rubber Co.*, 167 F.3d 776, 779 (2d Cir.1999) (citing *Black's Law Dictionary* 1401 (6th ed.1990)). The right to impose sanctions for spoliation arises from a court's inherent power to control the judicial process and litigation, but the power is limited to that necessary to redress conduct "which abuses the judicial process." *Chambers v. NASCO, Inc.*, 501 U.S. 32, 45–46, 111 S.Ct. 2123, 115 L.Ed.2d 27 (1991) (recognizing the inherent power of the courts to fashion appropriate sanctions for conduct that disrupts the judicial process); *see also United States v. Shaffer Equip. Co.*, 11 F.3d 450, 462 (4th Cir.1993) (recognizing "that when a party deceives a court or abuses the process at a level that is utterly inconsistent with the orderly administration of justice or undermines the integrity of the process, the court has the inherent power to dismiss the action"); *cf.* Fed.R.Civ.P. 37(b)(2) (authorizing sanctions for violations of discovery orders).
>
> The policy underlying this inherent power of the courts is the need to preserve the integrity of the judicial process in order to retain confidence that the process works to uncover the truth. "[B]ecause no one has an exclusive insight into truth, the process depends on the adversarial presentation of evidence, precedent and custom, and argument to reasoned conclusions—all directed with unwavering effort to what, in good faith, is believed to be true on matters material to the disposition." *Shaffer Equipment*, 11 F.3d at 457. The courts must protect the integrity of the judicial process because, "[a]s soon as the process falters ... the people are then justified in abandoning support for the system." *Id.*

Silvestri v. Gen. Motors Corp., 271 F.3d 583, 590 (4th Cir. 2001).

The standard for spoliation set forth by the Fourth Circuit provides guidance regarding the threshold that should be met to establish spoliation in South Carolina:

> A party seeking sanctions based on the spoliation of evidence must establish, inter alia, that the alleged spoliator had a duty to preserve material evidence. This duty arises "not only during litigation but also extends to that period before the litigation when a party reasonably should know that the evidence may be relevant to anticipated litigation." *Silvestri v. Gen. Motors Corp.*, 271 F.3d 583, 591 (4th Cir. 2001). Generally, it is the filing of a lawsuit that triggers the duty to preserve the evidence. *Victor v. Stanley, Inc. v. Creative Pipe, Inc.*, 269 F.R.D. 497, 522 (D. Md. 2010). Moreover, spoliation does not result merely from the "negligent loss or destruction of evidence." *Vodusek*, 71 F.3d at 156. Rather, the alleged destroyer must have known that the evidence was relevant to some issue in the anticipated case, and thereafter willfully engaged in conduct resulting in the evidence's loss or destruction. *See id.* Although the conduct must be intentional, the party seeking sanctions need not prove bad faith.

See Turner v. United States, 736 F.3d 274, 282 (4th Cir. 2013). Although courts have recognized, sometimes even the inadvertent, albeit negligent loss of evidence will justify sanctions because of the resulting unfairness; generally, the negligently lost or destroyed evidence must be relevant to a material issue in the case or is the material issue in a case. *See Silvestri v. General Motors Corp.*, 271 F.3d 583 (2001)(citing *Kirklan v. New York City Housing Auth.*, 236 A.D.2d 170, 173, 666 N.Y.S2d 609 (N.Y.App. Div. 1997); *Squitieri v. New York*, 248 A.D.2d 201, 669 N.Y.S.2d 589, 590-91 (N.Y. App. Div. 1998)).

To obtain an adverse inference instruction based on spoliation of evidence, the Plaintiff should be required to show, consistent with the Fourth Circuit's willfulness standard: (a) that a lawsuit was pending or, at the very least, that MUSC knew of a significant risk of a lawsuit; (b) that MUSC knew that the evidence was relevant to the lawsuit when it was lost or destroyed; (c) that MUSC was under a duty to preserve the evidence; and (d) MUSC willfully or intentionally engaged in conduct causing the evidence to be lost or destroyed the evidence knowing of its relevance. *Stokes* permits a party to obtain an adverse inference instruction absent a showing that the spoliating party was under a duty to preserve the evidence at the time it was altered or destroyed and that the spoliating party acted with the requisite level of intent. *See Stokes v. Spartanburg Regional Medical Center*, 368 S.C. at 521, 629 S.E.2d at 678(citing *Kershaw County Bd. of Educ. V. U.S. Gypsum Co.*, 302 S.C. 390, 394, 396 S.E.2d 369, 372 (1990)).[3]

In this case, the evidence established that the Mayday Record was last seen on the evening of October 1, 2010 when the CRNA reviewed it in the MICU. A lawsuit was not

[3] The South Carolina Supreme Court in *Kershaw County Bd. of Educ. v. U.S. Gypsum Co.*, upheld the trial court's decision to give an adverse inference instruction where the trial court issued an order requiring the manufacturer of the ceiling plaster that had been installed in the schools to be notified prior to any asbestos being removed. Despite the order, the school board failed to notify the manufacturer before asbestos abatement was conducted at one of the schools. Significantly and unlike *Stokes*, the school board was under a duty to preserve the evidence at the time it was intentionally destroyed.

pending at that time, nor did MUSC have any knowledge of the risk of significant a lawsuit. Furthermore, Plaintiff presented no evidence establishing that MUSC engaged in conduct to intentionally lose or destroy the document. Rather, the evidence established that the Mayday Record was last seen in Mr. Mikell's medical chart in the MICU on October 1, 2010. In charging the jury on the adverse inference, the jury was allowed to infer that the missing Mayday Record contained information adverse to MUSC even though there was simply no evidence that MUSC engaged in conduct that abused the judicial process or prejudiced the Plaintiff. This result is unfairly prejudicial and is inconsistent with the very purpose of the spoliation doctrine.

Further, the *Stokes* spoliation charge given in this case was an improper charge on the facts. "In South Carolina, the judge must refrain from all comment which tends to indicate his opinion on the weight or sufficiency of evidence, the credibility of witnesses, the guilt of the accused, or the facts in controversy." *State v. Ates*, 297 S.C. 316, 317-18, 377 S.E.2d 98, 99 (1989)(citing *Sosebee v. Leeke*, 293 S.C. 531, 362 S.E.2d 22 (1987); *State v. Smith*, 288 S.C. 329, 342 S.E.2d 600 (1986); *State v. Pruitt*, 187 S.C. 58, 196 S.E. 371 (1938)); *see also State v. Brisbon*, 323 S.C. 324, 474 S.E.2d 433 (1996)(citingTrial Handbook for South Carolina Lawyers § 32:7).

> The reasoning for such prohibition was recognized in *Crenshaw v. Southern Railway Company*, 214 S.C. 553, 53 S.E.2d 789 (1949). Such prohibition exists because of the ease with which a judge may, even unintentionally, influence a jury:
>
> "It has long been recognized that even a slight remark, apparently innocent in its language, may, when uttered by the court, have a decided weight in shaping the opinion of the jury. Vested as the trial judge is, with superior authority, disinterested, and possessing experience not available to the ordinary layman, jurors, as a rule, are anxious to catch his view, upon which to found their conclusions."
> *Crenshaw*, 214 S.C. at 560, 53 S.E.2d at 791-2, *citing Pruitt, supra.*

State v. Campbell, 297 S.C. 24, 26, 374 S.E.2d 668, 669 (1988).

The trial judge's instruction was an improper charge on the facts because it could have conveyed to the jury that the Court believed that the missing Mayday Record was evidence that MUSC negligently caused Mr. Mikell's arrest.

III. Testimony of Dr. Zile

Plaintiff contends that the Court erred in allowing Mr. Mikell's treating cardiologist, Dr. Michael Zile, to testify about Mr. Mikell's prognosis and whether the discontinuation of certain medications following the arrest was within the standard of care or posed a risk of cardiac failure. Dr. Zile was properly allowed to testify about Mr. Mikell's prognosis in order to rebut Plaintiff's expert, who was permitted to testify about a causal link between the cardiac arrest and Mr. Mikell's death even though he did not give that testimony in his deposition and his opinion was disclosed only the week before trial. In addition, Dr. Zile testified that he had numerous conversations with Mr. Mikell regarding his long-term prognosis and medication regimen. He further testified that Mr. Mikell's long-term prognosis was relevant to his treatment of Mr. Mikell's heart failure. Dr. Zile's testimony fell well within the realm of testimony that a treating physician is competent to give. Indeed, it is difficult to conceive who would be more qualified to testify as to Mr. Mikell's cardiac health than his treating cardiologist.

IV. Repetitive, Redundant, and Confusing Jury Instructions

The Court correctly instructed the jury regarding medical negligence and the standard of proof to prevail in a medical malpractice action in South Carolina. "The mere repetition of a correct statement of the law does not constitute per se reversible error." *Wells v. Halyard*, 341 S.C. 234, 238, 533 S.E.2d 341, 343 (Ct. App. 2000)(citing *Young v. Warr*, 252 S.C. 179, 201, 165 S.E.2d 797, 808 (1969) ("a judgment will not be reversed because of repetition in a charge to the jury unless such [repetition] is prejudicial and it reasonably appears that the jury was misled

thereby"); *Keys v. Winnsboro Granite Co.*, 72 S.C. 97, 102, 51 S.E. 549, 551 (1905) (Where there is no doubt that the charge as a whole correctly states the law, the court's "failure to analyze and connect the numerous requests of the opposing counsel on the same subject, and indicate in logical sequence how they modify each other, does not afford ground for reversal."); *see, e.g., Lewis v. Emory Univ.*, 235 Ga.App. 811, 509 S.E.2d 635 (1998) (the appellate court found charge, repeated on five separate occasions, that jury could not guess or speculate to reach a conclusion in the medical malpractice case, was not reversible error in the context of the entire charge). *But see, e.g., Hunnicutt v. Griffin*, 76 N.C.App. 259, 332 S.E.2d 525 (1985) (the appellate court found charge was erroneously repeated where the trial court instructed the jury six times that negligence cannot be presumed from the mere fact of injury)).

Plaintiff contends that the Court charged the jury with an incorrect statement of law by not including the definition of medical malpractice in the Medical Malpractice Act of 2005. The Medical Malpractice Act defines "medical malpractice" as the "doing that which the reasonably prudent health care provider or health care institution would not do or not doing that which the reasonably prudent health care provider or health care institution would do in the same or similar circumstances." S.C. Code Ann. § 15-79-110(6). The Medical Malpractice Act does not alter the burden of proof to provide medical negligence as established by common law. The statute applies exclusively to pre-suit procedures that must be fulfilled as a requisite to filing a medical negligence claim in South Carolina and defines the type of conduct that falls within the statute. There is nothing in the statute indicating that the legislature intended for the definition of medical malpractice contained in the Act to alter the common law.

Finally, Plaintiff did not object to the charge as being repetitive, redundant, or confusing, and therefore, the issue was not preserved. "An issue not raised to or ruled on by the trial court

is not preserved for appellate review." *Creighton v. Coligny Plaza Ltd. P'ship*, 334 S.C. 96, 108, 512 S.E.2d 510, 516 (Ct. App. 1998)(citing *Schofield v. Richland County Sch. Dist.*, 316 S.C. 78, 447 S.E.2d 189 (1994)). Therefore, the issue of whether the instructions to the jury regarding the standard of proof required to provide medical malpractice were repetitive, redundant and confusing was not preserved for review.

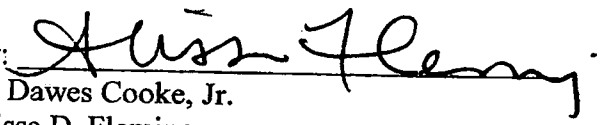
V. Discovery Abuse

Plaintiff contends that the discovery abuses by MUSC prevented him from effectively examining Dr. Payne's testimony at trial. He contends that he was permitted to re-depose only four witnesses, rather than nine, as he requested. Plaintiff had the choice to depose any witness of his choosing and decided not to re-depose Dr. Payne or Nurse Zwemer. Dr. Payne was the Gastroenterologist who performed the colonoscopy on Mr. Mikell. At trial, he testified that he would not have started the colonoscopy or inserted the scope if Mr. Mikell was unstable or desaturating prior to its insertion. To be certain, Plaintiff had the complete medical record, including the one minute version of the Anesthesia/PACU Record prior to Dr. Payne and Nurse Zwemer's deposition in August of 2014. He could have asked any questions related to the start of the procedure, including Mr. Mikell's condition prior to the insertion of the scope at that time. Plaintiff has not shown that any relevant evidence was not made available to him prior to the depositions of Dr. Payne and Nurse Zwemer. Moreover, Plaintiff was not prejudiced by any alleged discovery abuse nor was he deprived of any material information in that prevented him from ineffectively questioning witnesses at trial. In fact, Plaintiff's entire case was based on the alleged spoliation of evidence and he was permitted to undertake additional discovery at MUSC's expense.

CONCLUSION

Based on the foregoing, this Court should deny Plaintiff's Motion for New Trial.

Barnwell Whaley Patterson & Helms, LLC

By: 
M. Dawes Cooke, Jr.
Alissa D. Fleming
288 Meeting Street, Suite 200 (29401)
Post Office Drawer H
Charleston, SC 29402
Tel: (843) 577-7700
Fax: (843) 577-7708
mdc@barnwell-whaley.com
afleming@barnwell-whaley.com

Counsel for Defendant Medical University of South Carolina

Charleston, South Carolina
June 3, 2016

STATE OF SOUTH CAROLINA)	IN THE COURT OF COMMON PLEAS
)	
COUNTY OF CHARLESTON)	CIVIL ACTION NO.:2012-CP-10-7275
SHON TURNER, as Personal)	
Representative of the)	
ESTATE OF CHARLES MIKELL,)	
deceased,)	
)	**PLAINTIFF'S REPLY MEMORANDUM**
Plaintiff,)	**ON MOTION FOR NEW TRIAL**
)	
vs.)	
)	
MEDICAL UNIVERSITY OF)	
SOUTH CAROLINA,)	
)	
Defendant.)	
)	

FILED
2016 JUL -7 PM 3:16
CLERK OF COURT

The Plaintiff makes this Reply to the Medical University's Memorandum in Opposition to Plaintiff's Motion for A New Trial (hereinafter "Memorandum").

I. Evidence of Dr. Nelson's Liability

At the close of all the evidence, Mr. Cooke asked the Court to grant "partial summary judgment" in favor of the Medical University on "the Plaintiff's claims against Dr. Nelson." This turn of phrase was perhaps intended to disassociate his motion from the Court' previous denial of the motion for direct verdict which Mr. Cooke had made at the close of the Plaintiff's case.

Which is to say, Mr. Cooke astutely recognized that if there had been sufficient evidence to defeat his directed verdict motion at the close of the Plaintiff's case, such evidence would not have simply evaporated by the close of all the evidence. So he sought to distance himself from the Court's prior adverse ruling by making a "motion for partial summary judgment." It was this unique nomenclature which later caused the Court to retrospectively question the propriety of granting "summary judgment" in favor of someone who is not a party to the action.

In its Memorandum, the Medical University now attempts to reconstitute Mr. Cooke's motion as a "directed verdict motion" relative to "any negligence by a licensed physician."[1] This is simply another of the Medical University's efforts at revisionist history, similar to its provocatively false claim that it not was until a week before trial that the Plaintiff first disclosed his intention to prove malpractice by Dr. Nelson.[2]

The Medical University has repeatedly cited the Court to Fletcher v. Medical University of South Carolina, 390 S.C. 458, 702 S.E.2d 372 (Ct. App. 2010) and suggested that, concordant with the circumstances and holding in Fletcher, the Plaintiff failed to present evidence of malpractice by Dr. Nelson resulting in harm to Mr. Mikell. Yet the evidence in the Fletcher case is remarkably different from that presented here. In Fletcher, the plaintiff's medical expert testified that "he believed Drs. Brothers and Rios had deviated in the standard of care during Fletcher's surgery . . . ," 390 S.C. at 462, but the expert acknowledged the injury could occur in the absence of malpractice; and he was unable to identify any specific conduct by the defendants which fell below the standard of care, ibid at 463.

In this case, the Plaintiff's anesthesia expert, Dr. Kofke, testified that to a reasonable degree of medical certainty, Dr. Nelson most probably breached the standard of care by going in and out of

---

[1] Memorandum at page 2

[2] Memorandum at page 10. Under the South Carolina Tort Claims Act, S.C. CODE ANN. §15-78-80(c)(Code 1976, as amended), the Plaintiff is statutorily prohibited from naming Dr. Nelson as a defendant in this action. Nevertheless, Dr. Nelson's conduct is clearly identified as one of the factual bases for the Medical University's alleged liability. For example, Dr. Kofke's January 17, 2013 Affidavit identifies malpractice by the "anesthesia team" (of which Dr. Nelson was a part); Dr. Kofke's March 4, 2015 deposition testimony criticizes Dr. Nelson's absence from the room during Mr. Mikell's desaturation; and Paragraphs 6(f) and 6(i) of the February 22, 2016 Second Amended Complaint specifically allege malpractice "in failing to properly manage, supervise and direct the provision of anesthesia care to Mr. Mikell" and "in leaving the colonoscopy procedure room to attend to other patients at a time when Mr. Mikell's condition was unstable."

the procedure room during a time when his patient was unstable or "sick." So unlike the expert in Fletcher, Dr. Kofke did identify specific conduct by Dr. Nelson which constitutes malpractice. Dr. Kofke's testimony is corroborated by other evidence: (1) Dr. Nelson's own testimony, that he should not have left the room if Mr. Mikell's oxygen saturation levels were not "consistently in the 90s;" (2) the anesthesia chart, which shows Mr. Mikell's oxygen saturation levels were never consistently in the 90s; and (3) Nurse Embry's testimony, that oxygen saturation levels below 90 require prompt attention.

More particularly, the anesthesia record shows Mr. Mikell's oxygen saturation levels were never stable. The O2 sats recorded in the real time variables portion of the anesthesia record are as follows:

7:48 - 96.7	7:54 - 73.3	8:00 - 67.6
7:49 - 75	7:55 - 62.1	8:01 - 88.1
7:50 - 69.2	7:56 - 75	8:02 - 88.4
7:51 - 90.1	7:57 - 41.2	8:03 - 96.4
7:52 - 80.7	7:58 - 47.5	8:04 - 88.3
7:53 - 88	7:59 - not recorded	8:05 - 79.9

Notably, fifteen of the eighteen O2 sat values recorded between 7:48 a.m. and 8:05 a.m. are at or below 90. Under no view of the evidence can these values possibly be construed as "consistently in the 90s," raising the rhetorical question, Why did Dr. Nelson leave the room?

The anesthesia record also contains narrative entries, apparently made by Dr. Nelson, which according to the Medical University establish his presence in the procedure room at 7:48 a.m. The PICIS audit trail shows Nurse Embry initially charted that Dr. Nelson left the room at 7:50 a.m. – when the O2 sat was 69.2 – but she later changed that entry (allegedly using information from the Mayday record) to show Dr. Nelson left at 7:51 a.m. Not coincidentally, 7:51 a.m. is the only moment during an entire 15 minute period when Mr. Mikell's O2 sat is at or above 90.

The jury would be entitled to conclude that Mr. Mikell's oxygen saturation levels during the relevant time period – between 7:48 a.m. (when Dr. Nelson was entering information into the chart) and 7:51 a.m. (when he left the room) – were neither stable nor consistently in the 90s, instead fluctuating between a high of 96.7 and a low of 69.2. Likewise, the jury would be entitled to conclude that Dr. Nelson did in fact leave the room at 7:50 a.m. (as Nurse Embry first charted), when Mr. Mikell's oxygen saturation level was 69.2. Either one of these reasonable inferences would justify a finding of malpractice by Dr. Nelson.

Dr. Kofke further testified that the anesthesia record was conflicting and inconsistent to the point of being "goofy," (meaning suspect) making it difficult to discern the exact times when Dr. Nelson came into and left out of the room. This state of the anesthesia record – it is indeed suspect – likewise makes it difficult to correlate Mr. Mikell's condition with the times when Dr. Nelson was coming and going. Nurse Embry and Dr. Nelson added to this confusion by each identifying different times when Dr. Nelson came and left. Greater confusion, however, is not a basis for removing the case from the jury's consideration.

There was an abundance of disputed evidence about the accuracy of the time-line set forth in Nurse Embry's altered anesthesia narrative, including whether the narrative has been reverse engineered in order to provide an *ex post facto* defense. Indeed, multiple printouts of the anesthesia narrative were admitted into evidence, no two of which are identical. There is undisputed evidence that Nurse Embry changed Dr. Nelson's entries in the anesthesia narrative – without his knowledge or permission – in order to alter by four (4) minutes the time when Dr. Nelson came back into the room. A great deal of disputed evidence was presented about whether the anesthesia narrative can be corroborated by real time variables data or other "objective" data found elsewhere in the chart. The conclusions to be drawn from this evidence are anything but a matter of law for the Court.

Added to this is the adverse inference the jury is entitled to draw from the loss/destruction of the Mayday record, which Nurse Embry denied knowing anything about before admitting she used it as a guide to alter Dr. Nelson's entries and compile the time-line in the anesthesia narrative. All of this creates multiple genuine issues of material fact which are for the jury alone to resolve.

There is also evidence Dr. Nelson allowed Mr. Mikell to be given the anesthetic – which pursuant to South Carolina law and Medical University hospital policy must be administered under his direct supervision – both while he was out of the room and before the PICIS anesthesia system was checked and found to be fully functional. The failure to confirm that the PICIS system is in good working order before administering the anesthetic is itself a violation of the Medical University's own policies and procedures and thus at least some evidence of a breach of the standard of care.

Contrary to the insinuation in the Medical University's Memorandum, the role of the Court is not to determine "the probative value of the expert testimony."[3] Also contrary to the Medical University's description, the evidence is not "undisputed"[4] or "uncontroverted."[5] The Medical University seems to believe the altered anesthesia narrative is unassailably accurate and that the time-line it contains is sacrosanct, thereby binding the jury to accept it as infallible. That position is simply ridiculous. The whole trial constituted a full-blown evidentiary assault on the accuracy of the anesthesia record and Nurse Embry's credibility in creating it the day after the event. The jury is entitled to reject the entirety of the anesthesia record if it chooses to do so.

This factual record is dramatically different from Fletcher, wherein the Court of Appeals observed, "no evidence establishes how [the defendants] deviated from the standard of care," thereby

---

[3] Memorandum at page 2.

[4] Memorandum at page 3.

[5] Memorandum at page 9.

leaving the jury "to speculate that misfortune was the result of negligence in the absence of any evidence as to how the physicians deviated from the standard of care." 390 S.C. at 463-464 (emphasis added). Far from there being "no evidence" or an "absence of any evidence" that Dr. Nelson breached the standard of care, in this case there is abundant evidence from which a jury could reasonably find Dr. Nelson at fault for exiting the room when his patient was unstable with O2 sats dipping into the 60s, leaving Nurse Embry by herself to struggle against Mr. Mikell's obstructed airway in the lead up to a cardiac arrest – an outcome which Dr. Kofke testified most probably would not have occurred if Dr. Nelson had remained in the room to help with the patient.

Although the jury may ultimately have refused to credit some or even all of the Plaintiff's view of this evidence, the Plaintiff was certainly entitled to have the disputed factual issues submitted for the jury's consideration and determination. As the Fletcher decision itself notes, a jury issue is created – and a motion to remove a case from the jury's consideration must be denied – even when the evidence supporting a breach of the standard of care is "equivocal" at best. 390 S.C. at 467.

It simply is not the case that the Plaintiff presented "no evidence" of a breach of the standard of care by Dr. Nelson. The granting of the motion for "partial summary judgment" on the "claims against Dr. Nelson" was therefore error.

Contrary to the Medical University's assertion, the Plaintiff does not rely upon a "common knowledge" exception to the requirement of expert testimony to establish the relevant standard of care.[6] First, Dr. Kofke's expert testimony established it was a breach of the standard of care for Dr. Nelson to leave the procedure room when he did. Second, the Plaintiff correctly notes that under the rule set forth in Cox v. Lund, 286 S.C. 410, 417, 334 S.E.2d 116, 120 (1985), Dr. Nelson's own

[6] Memorandum at page 3.

admission that he should not have left the room if his patient's oxygen saturation levels were not consistently in the 90s is sufficient to establish the applicable standard of care: "Expert testimony is not required to establish negligence when the act complained of was done in the face of a proscription known to the actor." Ibid.[7]

Just because a complication like cardiac arrest can occur in the absence of negligence does not mean it cannot also be brought about by negligence. Almost by definition, medical malpractice just is the occurrence of a foreseeable complication that is preventable through the exercise of reasonable care. It is not only foreseeable but also predictable that a patient with severe obstructive sleep apnea and a history of heart failure will lose his unprotected airway when put to sleep with Propofol and then experience an abnormal heart rhythm once his blood oxygen saturation levels drop into the 60s. One focus of the Plaintiff's trial presentation was the anesthesia providers' failure to anticipate that foreseeable "complication," along with their failure to manage it safely by using standard techniques to ventilate the patient – techniques which, according to Dr. Kofke, are highly effective in preventing an upper airway obstruction from reaching the point of a life-threatening cardiac arrest.

By citing Fletcher and attempting to mischaracterize the evidence in this case as nothing more than *res ipse loquitur* – Mr. Mikell experienced cardiac arrest, so malpractice must be presumed – the Medical University simply ignores the totality of the record, which contains an abundance of disputed evidence about what took place and why the cardiac arrest was preventable. The Plaintiff was entitled to have the jury determine these disputed issues.

---

[7] Establishing the standard of care applicable to Dr. Nelson via his own testimony should not be confabulated with applying a classic "common knowledge" exception to the requirement for expert testimony. *Compare,* Green v. Lilliewood, 272 S.C. 186, 249 S.E.2d 910 (1978) and S.C. CODE ANN. 15-36-100(C)(2)(Code 1976, as amended).

II. Vicarious Liability

The Medical University continues to deliberately misconstrue the claims against Dr. Nelson as "vicarious liability" for the acts of Nurse Embry. That simply is not true. The Plaintiff's claims against Dr. Nelson arise out of his own actions and conduct: allowing the anesthetic to be given when he was not present and prior to confirming that the PICIS system was working properly; failing to adequately supervise and direct Nurse Embry; and leaving the room when his patient was not stable. The "captain of the ship" doctrine, rejected by the South Carolina Supreme Court in Ellis v. Niles, 324 S.C. 223, 479 S.E.2d 47 (1996), has never been plead nor argued by the Plaintiff as any basis for Dr. Nelson's liability in this case.

Indeed, in Ellis the record revealed that Dr. Bynoe, a trauma surgeon, had not even been present in the hospital building when the patient came in for treatment.[8] It was on that factual basis that the Court sustained a ruling in his favor, finding that no physician-patient relationship had been created between the patient and Dr. Bynoe, who could not be held "vicariously liable" under the "captain of the ship" doctrine. Unlike Ellis, there was a physician-patient relationship between Dr. Nelson and Mr. Mikell, who is not seeking to impose vicarious liability under the "captain of the ship" doctrine.

III. Evidence of Proximate Cause

In regard to the issue of proximate cause, Dr. Kofke testified to a reasonable degree of medical certainty that Dr. Nelson's absence from the room most probably resulted in Mr. Mikell's desaturation descending into a full-blown cardiac arrest. When pressed to elaborate, Dr. Kofke testified two medical care providers would have been able to adequately ventilate Mr. Mikell by

---

[8] "Dr. Bynoe never came to the trauma room during the patient's treatment, although he at one point spoke with [another physician] on the telephone." Ellis, 324 S.C. at 226.

applying the standard airway management techniques which were demonstrated to the jury through the use of several illustrations. Dr. Kofke testified these maneuvers would be more difficult for a single provider to successfully execute, especially while talking on a telephone or sending text messages.

In explaining his analysis, Dr. Kofke pointed out that Mr. Mikell had undergone anesthesia on two subsequent occasions during his acute hospitalization, yet experienced neither obstruction, desaturation, nor cardiac arrest. These undisputed facts lead Dr. Kofke to conclude Mr. Mikell's cardiac arrest was the result of inadequate ventilation due to the malpractice of Dr. Nelson and Nurse Embry. In further support of this conclusion, Dr. Kofke pointed to Dr. Nelson's own deposition admission, that he had no problem bag-mask ventilating Mr. Mikell once he came back into the room.

Dr. Kofke's rationale was that if every other anesthesia provider who encountered Mr. Mikell was able to adequately ventilate him without a cardiac arrest, then Nurse Embry and Dr. Nelson should be able to do so, too. Likewise, if Dr. Nelson experienced no problem bag-mask ventilating Mr. Mikell upon his return to the room,[9] then adequate bag-mask ventilation was possible and should have occurred before the desaturation ripened into a cardiac arrest.

In this regard, it is important to note that malpractice may be proved by circumstantial evidence, *see, e.g.*, Green v. Lilliewood, 272 S.C. 186, 249 S.E.2d 910 (1978), which is a far cry from relying upon the burden-shifting presumption of *res ipse loquitur*. Dr. Kofke's rationale and conclusions are neither speculation nor mere presumption but rather reasonable inferences and

---

[9] Depending on which version of the anesthesia narrative the jury credited, Dr. Nelson came back into the room at either 7:56 a.m. (Nurse Embry's entry) or at 8:00 a.m. (Dr. Nelson's entry). The real time variables portion of the anesthesia record shows Mr. Mikell's heart went into a dangerously abnormal rhythm beginning at 7:56 a.m.

professional judgments drawn from the "goofy" evidence available. The Medical University should not be heard to complain about the "goofy" state of the record when that circumstance has been caused by its own alteration, loss and destruction of evidence.

Once again, the quantum of proof in this case is remarkably different from that in Fletcher, wherein the plaintiff's medical expert provided "no evidence" of "how" the defendant medical care providers had been negligent. The Medical University is free to disagree about the weight to be given the evidence of malpractice in this case, but it cannot pretend there was "no evidence."

IV. Harmless Error

The Medical University contends the verdict in favor of Nurse Embry precludes any possible determination that Dr. Nelson was negligent for failing to supervise her, calling the Court's partial summary judgment ruling "harmless error."[10] This argument relies upon the false premise that the claims against Dr. Nelson were for "vicarious liability" and thus derivative only in nature.[11] Yet the jury could easily have decided not to hold a subordinate member of the anesthesia team liable for care that was supposed to have been directed and supervised by a licensed physician, who was himself exonerated only by the Court's ruling on the motion for partial summary judgment.

It is entirely plausible that the jury believed Dr. Nelson's lack of adequate attention and involvement were the root of the problem and that Nurse Embry's failures were due to the absence of his needed direction, supervision and assistance. There are very good reasons why state law and Medical University policy both require the physician to be present during anesthesia induction. There

---

[10] Memorandum at page 9.

[11] The Medical University deliberately mischaracterizes the Plaintiff's case when it says, "The sole allegation against MUSC based on the acts and omissions of a licensed physician was that Dr. Nelson failed to adequately supervise the CRNA." Memorandum at page 9. Contrary to this false statement, see the specifications of negligence set forth in Paragraph 6 of the Plaintiff's Second Amended Complaint.

are likewise very good reasons why a physician should not leave the room when the patient is unstable and desaturating.

Which is to say, the jury may simply have declined to blame the tearfully remorseful Nurse Embry for a turnover caused by Dr. Nelson's missed play call. The wide received is not at fault when an interception results from the quarterback throwing the ball into double coverage.

In short, it would have been entirely logical for the jury to fault Dr. Nelson and not Nurse Embry. But the Court's decision to grant the Medical University's motion for partial summary judgment prevented the jury from even considering that option.

V. The Blank Mayday Form

In its Memorandum, the Medical University admits that it offered the blank Mayday form into evidence for no other purpose than "to show the type of information ordinarily recorded in the Mayday record,"[12] thereby proving it "could not have contained any relevant adverse evidence."[13] This is the very definition of a backdoor effort to prove the content of the missing Mayday record in direct contravention of the best evidence rule. If showing what the missing Mayday record did or did not contain is something different from proving its contents, Plaintiff's counsel is incapable of understanding the distinction.

On what other issue could the admission of a blank form have any possible bearing? Showing what is "ordinarily recorded" and "not contained" in a standard Mayday form is completely irrelevant to any issue in this case – other than showing what Mr. Mikell's missing Mayday record did and did not contain. Proof of the Mayday record's contents must come from the Mayday record itself.

The relevance of the missing Mayday record is not its use as substantive proof, as in Pringle

---

[12] Memorandum at page 10.

[13] Memorandum at page 11.

v. SLR, Inc. of Summerton, 382 SC. 397, 675 S.E.2d 783 (Ct. App. 2009) cited by the Medical University;[14] but rather its direct bearing on the credibility of Nurse Embry and other Medical University witnesses who testified about the timing and sequence of events leading up to and including Mr. Mikell's desaturation and cardiac arrest. Nurse Embry testified that she used the Mayday record to reconstruct the anesthesia narrative, including the times when Dr. Nelson left and came back into the room.

The missing Mayday record reasonably supports the Plaintiff's position that the anesthesia narrative has been reverse engineered to provide an *ex post facto* defense to medical care which Nurse Embry knew would be the subject of a peer review investigation that might result in disciplinary action being taken against her. Somebody had finally gotten hurt by the PICIS system software glitch. Nurse Embry did not want to be left holding that bag. So she changed the anesthesia narrative to reflect that Dr. Nelson had come into the room four (4) minutes prior to his actual arrival. She then fraudulently documented that all of the monitoring systems had been checked prior to the induction of anesthesia. The Plaintiff contends the Mayday record was then "lost" or "misplaced" because Nurse Embry knew it does not jive with the altered narrative.[15]

---

[14] In its Memorandum, the Medical University incorrectly summarizes the holding in Pringle as the court finding "no indication the chair was dangerous or unfit for use." Memorandum at page 12. To the contrary, the Court of Appeals actually found "there was already evidence the subject chair was defective and summary judgment was still appropriate because the Pringles failed to offer evidence Knights Inn knew or should have known the chair was defective." 382 S.C. at 403.

[15] Of note, the Medical University continues its habit of making statements it knows to be false, when it says at page 14 of its Memorandum that "the evidence established that the Mayday record was last seen on the evening of October 1, 2010." To the contrary, both Nurse Embry's February 2016 deposition and her trial testimony were that she had Mr. Mikell's paper chart – containing the original Mayday record – in her physical possession on October 2, 2010. Sheila Scarbrough further testified that she reviewed a fax of the Mayday record in the Risk Management Office and then used it to create the American Heart Association database entries in December 2010. By logical necessity, Ms. Scarbrough must have "seen" the Mayday record when she used it for that purpose.

The Medical University seeks to combat this argument by using a blank form to show Mayday records are meaningless, benign documents containing no useful information whatsoever. In advancing that specious position, the Medical University is not entitled to violate the best evidence rule.

VI. Adverse Inference Jury Charge

The Court quite correctly charged the jury on the adverse inference arising under Stokes v. Spartanburg Regional Medical Center, 368 S.C. 515, 629 S.E.2d 675 (Ct. App. 2006) which involved remarkably similar evidence to that at issue here. The Medical University cites the Court to Silvestri v. General Motors Corp., 271 F.3d 538 (2001), which is completely irrelevant to this case because it applies "the federal law of spoliation," 271 F.3d at 590, to a Maryland dispute arising under New York law. Federal common law has no application whatsoever to this case.

Unlike the federal courts, the South Carolina Supreme Court has declined to adopt a tort claim for the spoliation of evidence, *see*, Cole Vision Corp. v. Hobbs, 394 S.C. 144, 714 S.E.2d 537 (2011), instead opting to allow the trial jury to determine the proper weight to assign to missing or unavailable evidence, as first approved in Welsh v. Gibbons, 211 S.C. 516, 46 S.E.2d 147 (1948) and as later refined in Kershaw County Bd. of Educ. v. U.S. Gypsum Co., 302 S.C. 390, 396 S.E.2d 369 (1990).

This Court need not become distracted by the Medical University's invitation to analyze the elements of a tort of spoliation arising under federal common law. The Plaintiff has never alleged any substantive claim or cause of action against the Medical University for spoliation of evidence in this case. The controlling rule of decision is quite clearly supplied by the South Carolina Court of Appeals in Stokes. That rule of decision was subsequently approved by the South Carolina Supreme Court in Cole Vision.

VII. Dr. Zile's Opinion Testimony

In regard to the issue of Dr. Zile's opinion testimony, the Medical University resorts to its now oft-repeated false assertion that Dr. Kofke did not timely disclose any opinion about the cause of Mr. Mikell's death,[16] so defense counsel had no choice but to unfairly ambush the Plaintiff at trial with the undisclosed opinion testimony of Dr. Zile – whom the Medical University never at any time identified in discovery as either a fact or expert witness.

This dead horse has been beaten so often it would seem unsporting for the Plaintiff to do anything but remind the Medical University of Dr. Kofke's March 4, 2015 deposition testimony: "The only way that I would think that it didn't, the cardiac arrest didn't contribute to [Mr. Mikell's death], is if he went on to totally recover and get hit by a car or something." This testimony was highlighted in the Plaintiff's Response to Defendant's Motion for Partial Summary Judgment (served on the Medical University on October 12, 2015); and ultimately lead the Court to deny the Medical University's Motion for Partial Summary Judgment on the issue of causation.[17]

VIII. Jury Instructions

Contrary to the Medical University's assertion, the Plaintiff did place an objection on the record to the confusing nature of the jury instruction on medical malpractice. Further, if counsel's lengthy discussions with the Court about the proposed jury instructions – including the statutory definition of medical malpractice contained in S.C. CODE ANN. §15-79-110(6) – are not included

---

[16] According to the Medical University, "Dr. Zile was properly allowed to testify about Mr. Mikell's prognosis in order to rebut Plaintiff's expert, who was permitted to testify about a causal link between the cardiac arrest and Mr. Mikell's death *even though he did not give that testimony in his deposition* and his opinion was disclosed only the week before trial." Memorandum at page 16 (emphasis added).

[17] For the Medical University to now claim it had no notice of Dr. Kofke's causation opinion is simply astonishing. At some point, the Medical University should be held accountable for making false statements to the Court.

as part of the trial record, it is only because the requests of Plaintiff's counsel to do so went unheeded, a matter the final determination of which will have to await preparation of the trial transcript.

IX. Sanctions

In regard to the adequacy of monetary sanctions for the Medical University's discovery abuse, the Plaintiff should not have to choose which witnesses to depose about material facts that have been wrongfully withheld during discovery. The Plaintiff is entitled to have its discovery requests truthfully answered in a timely fashion and to use the information thus obtained to fully and fairly examine each and every witness in this case, not just some "chosen" subset of those witnesses.

That the Medical University was able to successfully prejudice the Plaintiff through its dilatory and false discovery responses is no reason for the Plaintiff's ability to prepare for trial to be unfairly limited. Had the existence of the software glitch, text messages, phone calls, Mayday record and backup anesthesia data been properly and timely disclosed, the Plaintiff would have been able to question Dr. Payne and Nurse Zwermer about those issues without sacrificing the ability to depose John Fisher and Annette Thompson. The discovery rules do not impose on litigants these sorts of choices, which were only made necessary by the Medical University's discovery abuse. That abuse merits a remedy which completely removes all of the prejudice, not just a portion of it.

CONCLUSION

For all of these reasons, as well as those set forth in the Plaintiff's Motion itself, the Court should grant a new trial.

BY: 

Robert B. Ransom
LEVENTIS & RANSOM
Post Office Box 11067
Columbia, SC 29211

(803) 765-2383
Bertcone@aol.com

Alex Apostolou
3443 Rivers Avenue
North Charleston, SC 29405
(843) 853-3637
Alexapostolou@bellsouth.net

ATTORNEYS FOR THE PLAINTIFF

FILED
2016 JUL -7 PM 3:16
JOHN HOWARD
CLERK OF COURT

CERTIFICATE OF MAILING

The undersigned hereby certifies that a true copy of the Plaintiff's Reply Memorandum On Motion for New Trial has been served upon opposing counsel by depositing in the United States mail a copy of same properly addressed with sufficient postage affixed thereto this 1 day of July, 2016.

Robert B Ransom

STATE OF SOUTH CAROLINA)) COUNTY OF CHARLESTON)	IN THE COURT OF COMMON PLEAS CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased, Plaintiff, vs. MEDICAL UNIVERSITY OF SOUTH CAROLINA, Defendant.	**SECOND AMENDED COMPLAINT**

FILED
2016 FEB 22 PM 4:23
CLERK OF COURT

The Plaintiff, complaining of the Defendant, alleges and states as follows:

1. The Plaintiff is a citizen and resident of Charleston County and is the duly appointed personal representative of the Estate of Charles Mikell, who died in Charleston County on January 2, 2011.

2. The Defendant is, upon information and belief, an agency of the State of South Carolina with its principal place of business located in Charleston County, South Carolina. The Defendant is regularly engaged in the provision of healthcare services to members of the public and does so through the actions and conduct of its actual and apparent agents, servants and employees, for whom it is legally responsible. The Plaintiffs are prevented by law from naming the Defendant's agents, servants or employees as individual parties to this action.

3. On or about October 1, 2010, Charles Mikell presented to MUSC to undergo a routine colonoscopy performed by the actual and apparent agents, servants and employees of the

Defendant. A physician/patient relationship was created and continuously existed between Mr. Mikell and the Defendant's actual and apparent agents, servants and employees.

4. During the colonoscopy procedure, Mr. Mikell suffered an intra-operative event during which he desaturated, became hypoxic, experienced bradycardia and then cardiac arrest, resulting in an hypoxic brain injury and other serious injuries all of which substantially contributed to his death on January 2, 2011.

FOR A FIRST CAUSE OF ACTION
(Medical Malpractice)

5. The allegations in Paragraphs 1 through 4 above are realleged as fully as if restated herein.

6. Mr. Mikell's intra-operative event and subsequent injuries and death were all preventable and due to and caused by the negligent, grossly negligent, willful, wanton and reckless actions and conduct of the Defendant and its actual and apparent agents, servants and employees, in the following particulars:

a. in failing to adequately and appropriately monitor Mr. Mikell's vital signs while he was under anesthesia;

b. in administering anesthetic agents to Mr. Mikell at a time when his vital signs were not being properly or adequately monitored;

c. in failing to check that the medical monitoring systems were operational and properly functioning before giving anesthesia to Mr. Mikell;

d. in failing to take reasonable steps to fully activate the medical monitoring systems before administering anesthesia to Mr. Mikell;

e. in administering anesthesia to Mr. Mikell when there was an unresolved issue with

the medical monitoring systems;

f. in failing to properly manage, supervise and direct the provision of anesthesia care to Mr. Mikell;

g. in diverting attention from Mr. Mikell's care to the correction of issues with the medical monitoring systems;

h. in failing to correct issues with the medical monitoring system prior to the administration of anesthesia;

i. in leaving the colonoscopy procedure room to attend to other patients at a time when Mr. Mikell's condition was unstable;

j. in failing to timely note that Mr. Mikell was desaturating during the colonoscopy procedure;

k. in failing to timely respond to Mr. Mikell's desaturation during the colonoscopy procedure;

l. in failing to properly react and respond to Mr. Mikell's desaturation during the colonoscopy procedure;

m. in failing to properly manage Mr. Mikell's airway so that he did not suffer a preventable cardiac arrest;

n. in failing to make and preserve a truthful, accurate and complete record of Mr. Mikell's care and treatment;

o. in such other particulars as the evidence through discovery and trial may otherwise tend to prove or suggest.

7. Mr. Mikell suffered actual harms and losses as a result of the actions and conduct of the

Defendant and its actual and apparent agents, servants and employees.

8. The Plaintiff is entitled to recover actual damages from the Defendant in an amount to be determined by the trier of fact.

FOR A SECOND CAUSE OF ACTION
(Survival Action)

9. The allegations in Paragraphs 1 through 8 above are realleged as fully as if restated herein.

10. Mr. Mikell endured conscious pain and suffering prior to his death as a direct and proximate result of the negligent, grossly negligent, willful, wanton and reckless actions and conduct of the Defendant's actual and apparent agents, servants, employees.

11. Pursuant to S.C. Code. Ann. §15-5-90 (Code 1976, as amended), the Plaintiff is entitled to recover damages from the Defendant for Mr. Mikell's conscious pain and suffering prior to his death.

12. The Plaintiff is entitled to a verdict actual damages against the Defendant in an amount to be determined by the trier of fact.

FOR A THIRD CAUSE OF ACTION
(Wrongful Death)

13. The allegations in Paragraphs 1 through 12 above are realleged as fully as if restated herein.

14. Mr. Mikell's death was the direct and proximate result of the negligent, grossly negligent, willful, wanton and reckless actions and conduct of the Defendant's actual and apparent agents, servants, employees.

15. Pursuant to S.C. Code Ann. §15-51-10 (Code 1976, as amended), the Plaintiff is entitled to recover damages from the Defendant for the wrongful death of Mr. Mikell.

16. The Plaintiff is entitled to a verdict for actual damages against the Defendant in an amount

to be determined by the trier of fact.

FOR A FOURTH CAUSE OF ACTION
(Unfair Trade Practice)

17. The allegations in Paragraph 1 through 16 above are realleged as fully as if restated herein.

18. The Defendant failed to make and keep a truthful, accurate and complete record of what happened to Mr. Mikell.

19. The Defendant has engaged in unfair and deceptive actions and conduct the intent and effect of which has been to conceal and withhold from the Plaintiff the truth of what actually happened to Mr. Mikell. These unfair and deceptive actions and conduct include, but are not limited to:

a. improperly altering records of Mr. Mikell's treatment;

b. improperly destroying and failing to retain records of Mr. Mikell's treatment;

c. failing to disclose and/or produce all data, information, and records about Mr. Mikell's treatment;

d. producing records which have been altered without disclosing the existence or nature of the alterations;

e. failing to disclose that records of Mr. Mikell's treatment have been lost or destroyed;

f. providing false and inaccurate information about its record creation and record retention policies;

g. failing to provide records, information and data concerning Mr. Mikell which are accurate and complete, intending that various parties rely upon inaccurate and incomplete information;

h. encouraging medical care providers to omit material information from patient records;

i. encouraging medical care providers to record important patient-related information only in a form and in a fashion where it cannot later be obtained by patients;

i. discouraging medical care providers from being forthright and straightforward in documenting medical mistakes and medical errors;

j. such other unfair and deceptive acts and conduct as the evidence through discovery and trial may otherwise tend to prove or suggest.

20. This unfair and deceptive conduct is capable of repetition and has in fact been repeated to the injury of the Plaintiff and other members of the public.

21. The Plaintiff has personally been harmed as a result of these unfair and deceptive tactics.

22. The Plaintiff is entitled to recover actual damages, treble damages and attorneys fees from the Defendant in an amount to be determined by the trier of fact.

FOR A FIFTH CAUSE OF ACTION
(Constructive Fraud)

23. The allegations in Paragraph 1 through 22 above are realleged as fully as if restated herein.

24. At various times, the Defendant has represented to the Plaintiff that it was providing him with records, data and information about Mr. Mikell's care, treatment, injuries and death which were truthful, accurate and complete.

25. These representations have been false.

26. The Defendant should have know that these representations were false.

27. These false representations were material to the Defendant's dealings with Mr. Mikell and

the Plaintiff.

28. The Defendant intended that the Plaintiff rely upon its representations.

29. The Plaintiff was unaware that the Defendant's representations were false.

30. The Plaintiff was entitled to rely upon the truth of the Defendant's false representations.

31. The Plaintiff has been harmed by his reasonable reliance upon the Defendant's false representations.

32. The Plaintiff is entitled to recover actual damages from the Defendant in an amount to be determined by the trier of fact.

FOR A SIXTH CAUSE OF ACTION
(Negligent Misrepresentation)

33. The allegations in Paragraph 1 through 32 above are realleged as fully as if restated herein.

34. The Defendant has had a direct financial interest in and motivation for making misrepresentations about records, information and data concerning Mr. Mikell.

35. The Defendant has at all times been under a duty to provide truthful, accurate and complete records, information and data concerning Mr. Mikell.

36. The Defendant has provided records, information and data about Mr. Mikell which are incomplete, inaccurate, false and/or misleading.

37. The Plaintiff has justifiably relied upon the completeness, truthfulness and accuracy of the records, information and data provided by the Defendant concerning Mr. Mikell.

38. The Plaintiff has suffered pecuniary losses as a result of his reasonable reliance upon the completeness, truthfulness and accuracy of the records, information and data provided by the Defendant concerning Mr. Mikell.

39. The Plaintiff is entitled to recover actual damages from the Defendant in an amount to be determined by the trier of fact.

FOR A SEVENTH CAUSE OF ACTION
(Abuse of Process)

40. The allegations in Paragraph 1 through 39 above are realleged as fully as if restated herein.

41. The Defendant has used the legal process of this Court to perpetrate a fraud upon the Plaintiff by presenting to him records, information and data about Mr. Mikell which are incomplete, inaccurate, false and/or misleading.

42. Through its abuse of process, the Defendant has sought to secure for itself certain benefits and advantages which are wrongful and improper.

43. The Plaintiff has been harmed by the Defendant's abuse of process.

44. The Plaintiff is entitled to recover actual damages from the Defendant in an amount to be determined by the trier of fact.

FOR AN EIGHTH CAUSE OF ACTION
(Civil Conspiracy)

45. The allegations in Paragraph 1 through 44 above are realleged as fully as if restated herein.

46. The actual and apparent agents, servants and employees of the Defendant have combined together for the purpose of injuring the Plaintiff.

47. By the combination of its agents', servants' and employees' acts, the Defendant has injured the Plaintiff by withholding from him records, information and data about Mr. Mikell which are truthful accurate, and complete.

48. The purpose and intent of the combined conduct of the Defendant's actual and apparent agents, servants and employees has been to deprive the Plaintiff of access to information

about Mr. Mikell which is truthful, accurate and complete, thereby frustrating the Plaintiff's ability to discharge the duties and obligations imposed on him by virtue of his position as Personal Representative.

FOR A NINTH CAUSE OF ACTION
(Conversion)

49. The allegations in Paragraph 1 through 48 above are realleged as fully as if restated herein.

50. Prior to his death, Mr. Mikell had a legally recognized and protectible interest in the contents of various records which were in the exclusive care, custody and control of the Defendant.

51. The Defendant wrongfully altered, lost, destroyed or withheld Mr. Mikell's records and the information and data contained therein.

52. The Defendant altered and destroyed Mr. Mikell's records and the information and data contained therein without Mr. Mikell's knowledge, permission or approval.

53. Mr. Mikell suffered harm as a result of the Defendant's wrongful alteration and destruction of his records and the information contained therein and a claim for compensation as a result of that harm accrues to the benefit of his estate and its heirs.

WHEREFORE, the Plaintiff prays for judgment against the Defendant in an amount of actual damages to be determined by the trier of fact, along with treble damages, attorneys fees and the costs of this action; and for such further legal and equitable relief as the Court deems just and proper.

BY: Robert B Ransom

Robert B. Ransom
LEVENTIS & RANSOM
Post Office Box 11067
Columbia, SC 29211
(803) 765-2383

(803) 799-1612 (fax)
Bertcone@aol.com

Alex Apostolou
215 East Bay Street, Suite 505F
Charleston, SC 29401
(843) 853-3637
Alexapostolou@bellsouth.net

ATTORNEYS FOR THE PLAINTIFF

CERTIFICATE OF MAILING

The undersigned hereby certifies that a true copy of the Second Amended Complaint has been served upon opposing counsel by depositing in the United States mail a copy of same properly addressed with sufficient postage affixed thereto this 22 day of February 2016

Robert B Pawson

STATE OF SOUTH CAROLINA	)	IN THE COURT OF COMMON PLEAS
	)	
COUNTY OF CHARLESTON	)	CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased,	)	**ANSWER ON BEHALF OF THE MEDICAL UNIVERSITY OF SOUTH CAROLINA TO PLAINTIFF'S SECOND AMENDED COMPLAINT**
Plaintiff,	)	
vs.	)	
MEDICAL UNIVERSITY OF SOUTH CAROLINA,	)	
Defendant.	)	

TO: ROBERT B. RANSOM, ESQUIRE, ESQUIRE, FOR THE PLAINTIFF:

The Defendant The Medical University of South Carolina ("MUSC"), by and through its undersigned attorneys, denying all allegations not specifically or expressly admitted, reserving all rights to amend this pleading pursuant to the South Carolina Rules of Civil Procedure, Rule 15, and subject to its Motion to Dismiss Plaintiff's causes of action for violation of the South Carolina Unfair Trade Practice Act, civil conspiracy, abuse of process and conversion filed herewith, hereby answers the Plaintiff's Second Amended Complaint by alleging as follows:

FOR A FIRST DEFENSE

1. Defendant MUSC has insufficient information and knowledge to form a belief as to the truth of the allegations in Paragraph 1 of Plaintiff's Second Amended Compliant and therefore denies the allegations.

2. In answering the allegations in Paragraph 2 of Plaintiff's Second Amended Complaint, Defendant MUSC admits that it is an entity organized and existing under the laws of the State of South Carolina and that it is an agency of the State of South Carolina as defined in

the South Carolina Tort Claims Act, S.C. Code Ann. §15-78-10, et. seq. The remaining allegations in Paragraph 2 of Plaintiff's Second Amended Complaint constitute conclusions of law to which Defendant MUSC is required neither to admit nor deny.

3. In answering the allegations in Paragraph 3 of Plaintiff's Second Amended Complaint, Defendant MUSC admits that Charles Mikell presented to MUSC on October 1, 2010 to undergo a colonoscopy. The remaining allegations in Paragraph 3 of Plaintiff's Second Amended Complaint constitute conclusions of law to which Defendant MUSC is required neither to admit nor deny.

4. Defendant MUSC craves reference to the medical records of Charles Mikell and denies any allegations in Paragraph 4 of Plaintiff's Second Amended Complaint that are inconsistent therewith and demands strict proof thereof. In further answering the allegations in Paragraph 4 of Plaintiff's Second Amended Complaint, Defendant MUSC lacks sufficient information and knowledge to form a belief as to the truth of any cause or contributing cause of Mr. Mikell's death or the date of his death and therefore denies these allegations and demands strict proof thereof.

FOR A FIRST CAUSE OF ACTION
(Medical Malpractice)

5. In answering the allegations in Paragraph 5 of Plaintiff's Second Amended Complaint, Defendant MUSC incorporates its responses to the paragraphs referenced and incorporated in Paragraph 5 of Plaintiff's Complaint as if fully stated herein verbatim.

6. Defendant MUSC denies the allegations in Paragraph 6 of Plaintiff's Second Amended Complaint, including subparts a, b, c, d, e, f, g, h, i, j, k, l, m, n, and o of Plaintiff's Second Amended Complaint and demands strict proof thereof.

7. MUSC denies the allegations in Paragraphs 7 and 8 of Plaintiff's Amended Complaint and demands strict proof thereof.

FOR A SECOND CAUSE OF ACTION
(Survival Action)

8. In answering the allegations of Paragraph 9 of Plaintiff's Second Amended Complaint, Defendant MUSC incorporates its response to the paragraphs referenced and incorporated in Paragraph 9 of Plaintiff's Second Amended Complaint as if fully stated herein verbatim.

9. Defendant MUSC denies the allegations in Paragraph 10 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

10. The allegations in Paragraph 11 of Plaintiff's Second Amended Complaint constitute conclusions of law to which Defendant MUSC is required neither to admit nor deny.

11. Defendant MUSC denies the allegations in Paragraph 12 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

FOR A THIRD CAUSE OF ACTION
(Wrongful Death)

12. In answering the allegations in Paragraph 13 of Plaintiff's Second Amended Complaint, Defendant MUSC incorporates its responses to the paragraphs referenced and incorporated in Paragraphs 13 of Plaintiff's Second Amended Complaint as if fully stated herein verbatim.

13. Defendant MUSC denies the allegations in Paragraph 14 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

14. The allegations in Paragraph 15 of Plaintiff's Second Amended Complaint constitute conclusions of law to which Defendant MUSC is required to neither admit nor deny.

15. Defendant MUSC denies the allegations in Paragraph 16 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

FOR A FOURTH CAUSE OF ACTION
(Unfair Trade Practices)

16. In answering the allegations in Paragraph 17 of Plaintiff's Second Amended Complaint, Defendant MUSC incorporates its responses to the paragraphs referenced and incorporated in Paragraph 17 of Plaintiff's Second Amended Complaint as if fully stated herein verbatim.

17. Defendant MUSC denies the allegations in Paragraphs 18, 19, including subparts a, b, c, d, e, f, g, h, i, and j of Plaintiff's Second Amended Complaint and demands strict proof thereof.

18. Defendant MUSC denies the allegations in Paragraphs 20, 21, and 22 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

FOR A FIFTH CAUSE OF ACTION
(Constructive Fraud)

19. In answering the allegations in Paragraph 23 of Plaintiff's Second Amended Complaint, Defendant MUSC incorporates its responses to the paragraphs referenced and incorporated in Paragraph 23 of Plaintiff's Second Amended Complaint as if fully stated herein verbatim.

20. Defendant MUSC denies the allegations in Paragraphs 24, 25, 26, 27, 28, 29, 30, 31, and 32 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

FOR A SIXTH CAUSE OF ACTION
(Negligent Misrepresentation)

21. In answering the allegations in Paragraph 33 of Plaintiff's Second Amended Complaint, Defendant MUSC incorporates its responses to the paragraphs referenced and

incorporated in Paragraph 33 of Plaintiff's Second Amended Complaint as if fully stated herein verbatim.

22. Defendant MUSC denies the allegations in Paragraph 34 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

23. The allegations in Paragraph 35 of Plaintiff's Second Amended Complaint constitute conclusions of law to which no response is required.

24. Defendant MUSC denies the allegations in Paragraphs 36, 37, 38, and 39 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

FOR A SEVENTH CAUSE OF ACTION
(Abuse of Process)

25. In answering the allegations in Paragraph 40 of Plaintiff's Second Amended Complaint, Defendant MUSC incorporates its responses to the paragraphs referenced and incorporated in Paragraph 40 of Plaintiff's Second Amended Complaint as if fully stated herein verbatim.

26. Defendant MUSC denies the allegations in Paragraphs 41, 42, 43, and 44 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

FOR AN EIGHTH CAUSE OF ACTION
(Civil Conspiracy)

27. In answering the allegations in Paragraph 45 of Plaintiff's Second Amended Complaint, Defendant MUSC incorporates its responses to the paragraphs referenced and incorporated in Paragraph 45 of Plaintiff's Second Amended Complaint as if fully stated herein verbatim.

28. Defendant MUSC denies the allegations in Paragraphs 46, 47, and 48 of Plaintiff's Second Amended Complaint and demands strict proof thereof.

FOR A NINTH CAUSE OF ACTION
(Conversion)

29. In answering the allegations in Paragraph 49 of Plaintiff's Second Amended Complaint, Defendant MUSC incorporates its responses to the paragraphs referenced and incorporated in Paragraph 49 of Plaintiff's Second Amended Complaint as if fully stated herein verbatim.

30. The allegations in Paragraph 50 of Plaintiff's Second Amended Complaint constitute conclusions of law to which no response is required.

31. Defendant MUSC denies the allegations in Paragraphs 51, 52, 53 and the WHEREFORE clause of Plaintiff's Second Amended Complaint and demands strict proof thereof.

FOR A SECOND DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

32. Plaintiff's Second Amended Complaint is barred and otherwise limited by the applicable provisions of the South Carolina Tort Claims Act, S.C. Code Ann. §15-78-10, et. seq. (1976), specifically, S.C. Code Ann. §15-78-60(5) and (25). Furthermore, Defendant MUSC is not subject to a claim for punitive damages under the South Carolina Tort Claims Act, S.C. Code Ann. §15-78-120(b).

FOR A THIRD DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

33. Any damages suffered by Plaintiff are the direct and proximate result of the contributory and or comparative negligence of Plaintiff and/or Charles Mikell and Plaintiff's recovery should be barred or alternatively, reduced proportionally to Plaintiff's and/or Charles Mikell's comparative negligence.

FOR A FOURTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

34. Plaintiff's Second Amended Complaint and any damages recoverable are limited by the South Carolina Wrongful Death Act, S.C. Code Ann. §15-51-10, et. seq. (1976)(supp. 2005).

FOR A FIFTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

35. Plaintiff's Second Amended Complaint and any damages recoverable are limited by the South Carolina Survival Act, S.C. Code Ann. §15-5-90(1976)(supp. 2005).

FOR A SIXTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

36. Plaintiff's Unfair Trade Practice claim is barred because the UTPA prohibits a representative claim.

FOR A SEVENTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

37. Plaintiff has failed to adequately plead a cause of action for fraud with particularity in accordance with Rule 9, SCRCP, and therefore, the Plaintiff is barred from recovery.

FOR AN EIGHTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

38. Plaintiff's claims are barred in whole or in part by the applicable statute of limitations.

FOR A NINTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

39. Plaintiff's cause of action for fraud and negligent misrepresentation are barred by the doctrines of waiver, estoppel and laches.

FOR A TENTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

40. Defendant MUSC has taken no action with a view to lessen or which tends to lessen competition.

FOR AN ELEVENTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

41. The activities alleged in Plaintiff's Second Amended Complaint do not fall within the contemplation of S.C. Code § 39-5-10, etc.

FOR A TWELFTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

42. Any alleged unfair or deceptive method, act or practice engaged in by MUSC was not a willful or knowing violation of S.C. Code § 39-5-20.

FOR A THIRTEENTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

43. Plaintiff's cause of action for civil conspiracy is barred because he can obtain relief through other causes of action.

FOR A FOURTEENTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

44. Plaintiff's cause of action for civil conspiracy is barred because South Carolina law does not recognize intra-corporate conspiracies.

FOR A FIFTEENTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

45. Plaintiff's cause of action for civil conspiracy is barred because there was no purpose of injuring the Plaintiff, and no special damages to the Plaintiff.

FOR A SIXTEENTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

46. Plaintiff's cause of action for abuse of process is barred because no cause of action for abuse of process exists where the defendant did not cause process to issue against plaintiff.

FOR A SEVENTEENTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

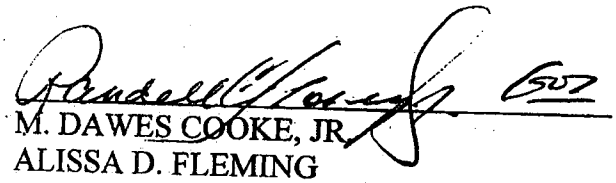
47. Plaintiff fails to state a claim for conversion because there is no evidence that MUSC improperly exercised its legal rights.

FOR A EIGHTEENTH DEFENSE
AND BY WAY OF AFFIRMATIVE DEFENSE

48. Plaintiff has failed to state facts sufficient to constitute a cause of action pursuant to Rule 12(b)(6), SCRCP.

WHEREFORE, having fully answered the Plaintiff's Amended Complaint, the Defendant Medical University of South Carolina, prays that the same be dismissed with costs and for such other relief as this Court may deem to be just and proper.

BARNWELL WHALEY PATTERSON
& HELMS, LLC

By: 

M. DAWES COOKE, JR.
ALISSA D. FLEMING
288 Meeting Street, Suite 200 (29401)
Post Office Drawer H
Charleston, SC 29402
Tel: (843) 577-7700
Fax: (843) 577-7708
Email: mdc@barnwell-whaley.com
afleming@barnwell-whaley.com
ATTORNEYS FOR DEFENDANT THE
MEDICAL UNIVERSITY OF SOUTH CAROLINA

March 9, 2016
Charleston, South Carolina

STATE OF SOUTH CAROLINA)	IN THE COURT OF COMMON PLEAS
)	
COUNTY OF CHARLESTON)	CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased,)	**AMENDED COMPLAINT** (Survival) (Wrongful Death)
Plaintiff,)	
vs.)	
MEDICAL UNIVERSITY OF SOUTH CAROLINA,)	
Defendant.)	

FILED
2013 JAN 31 PM 4:52
JULIE J. ARMSTRONG
CLERK OF COURT
BY

The Plaintiff, complaining of the Defendant, alleges and states as follows:

1. The Plaintiff is a citizen and resident of Charleston County and is the duly appointed personal representative of the Estate of Charles Mikell, who died in Charleston County on January 2, 2011.

2. The Defendant is, upon information and belief, an agency of the State of South Carolina with its principal place of business located in Charleston County, South Carolina. The Defendant is regularly engaged in the provision of healthcare services to members of the public and does so through the actions and conduct of its actual and apparent agents, servants and employees, for whom it is legally responsible. The Plaintiffs are prevented by law from naming the Defendant's agents, servants or employees as individual parties to this action.

3. On or about October 1, 2010, Charles Mikell presented to MUSC to undergo a routine colonoscopy performed by the actual and apparent agents, servants and employees of the

Defendant. A physician/patient relationship was created and continuously existed between Mr. Mikell and the Defendant's actual and apparent agents, servants and employees.

4. During the colonoscopy procedure, Mr. Mikell suffered an intra-operative event during which he desaturated, became hypoxic, experienced bradycardia and then cardiac arrest, resulting in an hypoxic brain injury all of which substantially contributing to his death on January 2, 2011.

FOR A FIRST CAUSE OF ACTION
(Medical Malpractice)

5. The allegations in Paragraphs 1 through 4 above are realleged as fully as if restated herein.

6. Mr. Mikell's intra-operative event and subsequent injuries and death were all preventable and due to and caused by the negligent, grossly negligent, willful, wanton and reckless actions and conduct of the Defendant's actual and apparent agents, servants and employees, in the following particulars:

a. in failing to appropriately account for Mr. Mikell's medical history prior to performing the colonoscopy;

b. in failing to obtain tests and studies the results of which would have revealed Mr. Mikell's level of risk in undergoing the colonoscopy procedure;

c. in failing to take those reasonable steps which would have mitigated Mr. Mikell's risk of injury during the colonoscopy;

d. in failing to have in place an appropriate backup plan and/or safety procedures which would have prevented Mr. Mikell from suffering hypoxia and cardiac arrest during the colonoscopy procedure;

e. in failing to have properly credentialed, adequately trained staff attending to Mr. Mikell during the colonoscopy procedure;

f. in failing to have appropriate emergency equipment available during Mr. Mikell's colonoscopy procedure;

g. in failing to timely note that Mr. Mikell was desaturating during the colonoscopy procedure;

h. in failing to timely respond to Mr. Mikell's desaturation during the colonoscopy procedure;

i. in failing to properly react and respond to Mr. Mikell's desaturation during the colonoscopy procedure;

j. in such other particulars as the evidence through discovery and trial may otherwise tend to prove or suggest.

7. Pursuant to S.C. Code Ann. §15,36-100, the Affidavit of W. Andrew Kofke, MD is attached hereto.

8. Mr. Mikell suffered actual harms and losses as a result of the actions and conduct of the Defendant and its actual and apparent agents, servants and employees.

9. The Plaintiff is entitled to recover actual damages from the Defendant in an amount to be determined by the trier of fact.

FOR A SECOND CAUSE OF ACTION
(Survival Action)

10. The allegations in Paragraphs 1 through 9 above are realleged as fully as if restated herein.

11. Mr. Mikell endured conscious pain and suffering prior to his death as a direct and proximate

result of the negligent, grossly negligent, willful, wanton and reckless actions and conduct of the Defendant's actual and apparent agents, servants, employees.

12. Pursuant to S.C. Code. Ann. §15-5-90 (Code 1976, as amended), the Plaintiff is entitled to recover damages from the Defendant for Mr. Mikell's conscious pain and suffering prior to his death.

13. The Plaintiff is entitled to a verdict actual damages against the Defendant in an amount to be determined by the trier of fact.

FOR A THIRD CAUSE OF ACTION
(Wrongful Death)

14. The allegations in Paragraphs 1 through 13 above are realleged as fully as if restated herein.

15. Mr. Mikell's death was the direct and proximate result of the negligent, grossly negligent, willful, wanton and reckless actions and conduct of the Defendant's actual and apparent agents, servants, employees.

16. Pursuant to S.C. Code Ann. §15-51-10 (Code 1976, as amended), the Plaintiff is entitled to recover damages from the Defendant for the wrongful death of Mr. Mikell.

17. The Plaintiff is entitled to a verdict for actual damages against the Defendant in an amount to be determined by the trier of fact.

WHEREFORE, the Plaintiff prays for judgment against the Defendant in an amount of actual damages to be determined by the trier of fact, together with the costs of this action; and for such further legal and equitable relief as the Court deems just and proper.

BY: _____

Robert B. Ransom, #4872
LEVENTIS & RANSOM
Post Office Box 11067

Columbia, SC 29211
(803) 765-2383
(803) 799-1612 (fax)
Bertcone@aol.com

Alex Apostolou
215 East Bay Street, Suite 505F
Charleston, SC 29401
(843) 853-3637
Alexapostolou@bellsouth.net

ATTORNEYS FOR THE PLAINTIFF

STATE OF PENNSYLVANIA)
)
COUNTY OF PHILADELPHIA)

AFFIDAVIT OF W. ANDREW KOFKE, MD

FILED
2013 JAN 31 PM 4:52
JULIE J. ARMSTRONG
CLERK OF COURT

PERSONALLY APPEARED BEFORE ME, the undersigned who, being duly sworn, deposes and states as follows:

1. I am over the age of eighteen (18) years, am legally competent to make this affidavit, and have personal knowledge of the matters set forth herein.

2. I am a medical doctor licensed by the State of Pennsylvania. I received my medical degree from the University of Pittsburgh School of Medicine in 1978. I received fellowship training in Critical Care Medicine and Neuroanesthesia at Massachusetts General Hospital. In the past, I have held teaching positions in anesthesia at Harvard Medical School, Pennsylvania State University, the University of Pittsburgh and West Virginia University. I am currently a Professor in the Department of Anesthesia at the University of Pennsylvania. I have been Board Certified in Anesthesiology since 1983 and in 1986 I received Sub-Specialty Certification in Critical Care Medicine. I am quite familiar with the standards of care applicable to all aspects of the practice of anesthesia including sedation during endoscopic procedures.

3. I have reviewed medical records for Charles Mikell from the Medical University of South Carolina (MUSC), where Mr. Mikell underwent sedation for an elective colonoscopy performed on October 1, 2010. The MUSC chart reveals that due to his body habitus and history of cardiac problems and obstructive sleep apnea, Mr. Mikell was at high risk for hypoxia while undergoing sedation. Moreover, he had a history indicating susceptibility to arrhythmias.

4. With patients like Mr. Mikell, an effort needs to be undertaken by qualified and experienced anesthesia providers to protect and maintain the airway during sedation. A variety of methods are available to do this. The records of the case do not reflect any particular maneuvers to avoid hypoxemia after the sedation was begun other than a nasal airway with the predictable result that Mr. Mikell desaturated, became hypoxic and suffered a cardiac arrest during the colonoscopy procedure. These events were followed by a lengthy hospitalization.

5. In my professional judgment, the hypoxia and cardiac arrest were preventable events which could most probably have been avoided had reasonable care been exercised by the anesthesia team attending to Mr. Mikell.

BY: _____
W. Andrew Kofke, MD

FURTHER AFFIANT SAYETH NAUGHT

SWORN TO BEFORE ME this
17th day of January, 2013.

Tiffany M. Pinkney
Notary Public for the State of Pennsylvania

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Tiffany M. Pinkney, Notary Public
City of Philadelphia, Philadelphia County
My Commission Expires Oct. 7, 2015
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

My commission expires:

10/7/2015

STATE OF SOUTH CAROLINA)
)
COUNTY OF CHARLESTON)

SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased,

Plaintiff,

vs.

MEDICAL UNIVERSITY OF SOUTH CAROLINA,

Defendant.

IN THE COURT OF COMMON PLEAS

CIVIL ACTION NO.: _____

COMPLAINT
(Survival)
(Wrongful Death)

FILED
2012 NOV -6 PM 2:35
JULIE J. ARMSTRONG
CLERK OF COURT
BY _____

The Plaintiff, complaining of the Defendant, alleges and states as follows:

1. The Plaintiff is a citizen and resident of Charleston County and is the duly appointed personal representative of the Estate of Charles Mikell, who died in Charleston County on January 2, 2011.

2. The Defendant is, upon information and belief, an agency of the State of South Carolina with its principal place of business located in Charleston County, South Carolina. The Defendant is regularly engaged in the provision of healthcare services to members of the public and does so through the actions and conduct of its actual and apparent agents, servants and employees, for whom it is legally responsible. The Plaintiffs are prevented by law from naming the Defendant's agents, servants or employees as individual parties to this action.

3. On or about October 1, 2010, Charles Mikell presented to MUSC to undergo a routine colonoscopy performed by the actual and apparent agents, servants and employees of the

Defendant. A physician/patient relationship was created and continuously existed between Mr. Mikell and the Defendant's actual and apparent agents, servants and employees.

4. During the colonoscopy procedure, Mr. Mikell suffered an intra-operative event during which he desaturated, became hypoxic, experienced bradycardia and then cardiac arrest, resulting in an hypoxic brain injury and causing and contributing to his death on January 2, 2011.

FOR A FIRST CAUSE OF ACTION
(Medical Malpractice)

5. The allegations in Paragraphs 1 through 4 above are realleged as fully as if restated herein.

6. Mr. Mikell's intra-operative event and subsequent injuries and death were all preventable and due to and caused by the negligent, grossly negligent, willful, wanton and reckless actions and conduct of the Defendant's actual and apparent agents, servants and employees, in the following particulars:

a. in failing to appropriately account for Mr. Mikell's medical history prior to performing the colonoscopy;

b. in failing to obtain tests and studies the results of which would have revealed Mr. Mikell's level of risk in undergoing the colonoscopy procedure;

c. in failing to take those reasonable steps which would have mitigated Mr. Mikell's risk of injury during the colonoscopy;

d. in failing to have in place an appropriate backup plan and/or safety procedures which would have prevented Mr. Mikell from suffering hypoxia and cardiac arrest during the colonoscopy procedure;

e. in failing to have properly credentialed, adequately trained staff attending to Mr. Mikell during the colonoscopy procedure;

f. in failing to have appropriate emergency equipment available during Mr. Mikell's colonoscopy procedure;

g. in failing to timely note that Mr. Mikell was desaturating during the colonoscopy procedure;

h. in failing to timely respond to Mr. Mikell's desaturation during the colonoscopy procedure;

i. in failing to properly react and respond to Mr. Mikell's desaturation during the colonoscopy procedure;

j. in such other particulars as the evidence through discovery and trial may otherwise tend to prove or suggest.

7. Mr. Mikell suffered actual harms and losses as a result of the actions and conduct of the Defendant and its actual and apparent agents, servants and employees.

8. The Plaintiff is entitled to recover actual damages from the Defendant in an amount to be determined by the trier of fact.

FOR A SECOND CAUSE OF ACTION
(Survival Action)

9. The allegations in Paragraphs 1 through 8 above are realleged as fully as if restated herein.

10. Mr. Mikell endured conscious pain and suffering prior to his death as a direct and proximate result of the negligent, grossly negligent, willful, wanton and reckless actions and conduct of the Defendant's actual and apparent agents, servants, employees.

11. Pursuant to S.C. Code. Ann. §15-5-90 (Code 1976, as amended), the Plaintiff is entitled to recover damages from the Defendant for Mr. Mikell's conscious pain and suffering prior to his death.

12. The Plaintiff is entitled to a verdict actual damages against the Defendant in an amount to be determined by the trier of fact.

FOR A THIRD CAUSE OF ACTION
(Wrongful Death)

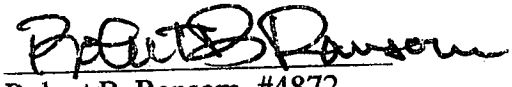
13. The allegations in Paragraphs 1 through 12 above are realleged as fully as if restated herein.

14. Mr. Mikell's death was the direct and proximate result of the negligent, grossly negligent, willful, wanton and reckless actions and conduct of the Defendant's actual and apparent agents, servants, employees.

15. Pursuant to S.C. Code Ann. §15-51-10 (Code 1976, as amended), the Plaintiff is entitled to recover damages from the Defendant for the wrongful death of Mr. Mikell.

16. The Plaintiff is entitled to a verdict for actual damages against the Defendant in an amount to be determined by the trier of fact.

WHEREFORE, the Plaintiff prays for judgment against the Defendant in an amount of actual damages to be determined by the trier of fact, together with the costs of this action; and for such further legal and equitable relief as the Court deems just and proper.

BY: 

Robert B. Ransom, #4872
LEVENTIS & RANSOM
Post Office Box 11067
Columbia, SC 29211
(803) 765-2383
(803) 799-1612 (fax)
Bertcone@aol.com

Alex Apostolou
215 East Bay Street, Suite 505F
Charleston, SC 29401
(843) 853-3637
Alexapostolou@bellsouth.net

ATTORNEYS FOR THE PLAINTIFF

COPY

STATE OF SOUTH CAROLINA)	IN THE COURT OF COMMON PLEAS
)	
COUNTY OF CHARLESTON)	CIVIL ACTION NO.:2012-CP-10-7275
SHON TURNER, as Personal)	
Representative of the)	
ESTATE OF CHARLES MIKELL,)	**PLAINTIFF'S RESPONSE TO**
deceased,)	**DEFENDANT'S MOTION FOR**
)	**PARTIAL SUMMARY JUDGMENT**
Plaintiff,)	
)	
vs.)	
)	
MEDICAL UNIVERSITY OF)	
SOUTH CAROLINA,)	
)	
Defendant.)	

FILED
2015 OCT 14 PM 2:19
JULIE J. ARMSTRONG
CLERK OF COURT

NOTE: The Medical University has attached to its motion papers the deposition transcripts from several witnesses whose testimony are referenced herein. The Plaintiff is not duplicating those transcripts by attaching them again to this Memorandum but simply uses page and line designations to refer to the appropriate portions of the testimony. An Appendix listing exhibits is attached.

This is a medical malpractice action in which the Defendant Medical University's own defense expert, James M. Berry, MD, admits the standard of care was breached while the decedent, Charles Mikell, was undergoing a colonoscopy. As a consequence of that admitted malpractice, Mr. Mikell endured a lengthy hospital stay including two weeks in a medically induced coma while breathing on a ventilator via a tube surgically placed through his neck.

The Medical University also admits that critical records and data showing what happened to Mr. Mikell have either been altered, lost, destroyed or withheld from production during discovery.

The case nevertheless comes before the court on a Motion for Partial Summary Judgment by which the Medical University seeks to limit its losses, asking the court to throw out the Plaintiff's wrongful death claim based on its assertion there is "not a scintilla of evidence" that the Medical University's admitted malpractice was the proximate cause of Mr. Mikell's death.

SUMMARY OF ARGUMENT

The motion should be denied for several reasons. First, the Medical University recently admitted to altering,[1] losing,[2] destroying[3] or withholding[4] critically important evidence about what happened to Mr. Mikell while a patient under its care, thereby giving rise to an adverse inference which alone is sufficient to create a genuine issue of material fact.[5] Second, the Medical University disputes the cause of Mr. Mikell's death, making it an issue for the jury to determine.[6] Third, the Plaintiff's medical expert, William A. Kofke, MD, has testified he is "confident" Mr. Mikell's death was caused, at least in part, by an uninterrupted chain of events flowing from the Medical University's admitted malpractice.[7]

---

[1] Eric Nelson, DO testified that Donna Embry, CRNA changed his entries in Mr. Mikell's electronic medical record without Dr. Nelson's knowledge or authorization. *See*, Deposition of Eric Nelson, DO at page 84, line 21 to page 85, line 9; page 87, line 20 to page 88, line 6; page 89, lines 1 - 9.

[2] Sheila Scarbrough testified that a "Mayday card" detailing the events in question should be a part of Mr. Mikell's medical chart, but it cannot be located. *See*, Deposition of Sheila Scarbrough at page 9, line 22 thru page 10, line 6; page 11, lines 1 - 5; page 18, lines 5 - 25. Additionally, Patricia Aysse could not explain why important data is missing from Mr. Mikell's anesthesia record. *See*, Deposition of Patricia Aysse at page 19, lines 6 - 16; page 20, lines 13 - 23.

[3] Ms. Scarbrough testified that she had the "Mayday card" shredded. *See*, Deposition of Sheila Scarbrough at page 17, lines 8 - 12.

[4] Patricia Aysse testified that data and information from Mr. Mikell's colonoscopy are stored on a Medical University computer server and in a database. *See*, Deposition of Patricia Aysse at page 22, lines 8 -15. The Medical University has so far made no effort to retrieve this data and information, *see*, Patricia Aysse Deposition at page 23, lines 4 - 11, leading the Plaintiff to file a Motion for Discovery Sanctions on September 9, 2015.

[5] *See*, Stokes v. Spartanburg Regional Medical Center, 368 S.C. 515, 629 S.E.2d 675 (Ct. App. 2006).

[6] Michael Zile, MD testified that the cause of death identified by the Coroner on Mr. Mikell's official Death Certificate is not accurate. *See*, Deposition of Michael Zile, MD at page 28, lines 18 - 23.

[7] Dr. Kofke's testimony is set forth in detail below.

FACTUAL BACKGROUND

On October 1, 2010, Mr. Mikell – who was 49 years old at the time – underwent a routine screening colonoscopy at the Medical University. As part of the colonoscopy, Mr. Mikell was placed under deep sedation using propofol,[8] an intravenous anesthetic agent. Within minutes of being given the propofol, Mr. Mikell stopped breathing. Then, his heart stopped pumping blood. Mr. Mikell was ultimately rescued from these life threatening events following a Mayday code which included shocking his heart several times to return it to a stable rhythm, but not before he sustained injuries to his kidneys and brain.

Mr. Mikell had expected to go home in the afternoon on October 1, 2010. Instead, he was admitted to the hospital and remained there until November 19, 2010. During the initial phase of his hospitalization, Mr. Mikell's body temperature was artificially lowered into a hypothermic state and he was kept in a medically induced coma as treatment for a brain injury brought about by a lack of oxygen. Among other medical procedures and treatments, Mr. Mikell underwent a tracheotomy so that his breathing could be controlled by a ventilator machine while he was kept unconscious. He also required repeated dialysis for an acute injury to his kidneys.

After being discharged from the hospital, Mr. Mikell was seen several times a week by various healthcare professionals including nurses who last visited in his home on December 30, 2010. Mr. Mikell's friends and family say that after coming home from the hospital, he was weak and fatigued, unable to participate in his usual activities.

On January 2, 2011, Mr. Mikell was found dead on the couch in his home. At that point, Mr. Mikell had been hospitalized for 50 of the 93 days since the cardiac arrest. During this entire period,

---

[8] Propofol is the same anesthetic an anesthesiologist in California used to treat Michael Jackson for insomnia, resulting in the King of Pop's untimely death.

he never went more than two or three days without seeing a healthcare professional for issues related to the cardiac arrest.

None of these facts are disputed by the Medical University.

ADMITTED MALPRACTICE

During discovery, the Medical University produced records of the anesthesia given to Mr. Mikell during his colonoscopy. *See*, Exhibit A, attached . A cursory review of the extant anesthesia record reveals multiple blank boxes where vital signs data would normally be recorded. This is not in dispute.

At his deposition, defense expert Dr. Berry testified that these empty blanks are most likely explained by the anesthesia providers' breach of the standard of care in failing to turn on and warm up the monitoring equipment that captures and records the patient's vital signs during the colonoscopy:

> Q. Okay. Now, we see for example, when we look at these end tidal CO2 numbers, first off, there's no data recorded any time between 7:34 and 7:48. Would you agree with that?
> A. Yes.
>
> * * *
>
> Q Okay. Wouldn't the most likely explanation for this – for this [blank] line [on the chart] be that the capnography [monitor] was not hooked up until 7:48?
> A Yes.
> Q. Okay. That's a breach of the standard of care, isn't it?
> A. I don't understand the question.
> Q. Is it a breach of the standard of care with a patient like Mr. Mikell to administer the anesthetic some seven minutes before the capnography is hooked up?
> A. Yes, if that were the case.
>
> * * *
>
> Q. So again, your – your testimony then, your conclusion from this data is that the monitors – that these values are explained by the fact that the monitors were not hooked up until 7:48?
> MR. BOGDEN: Object to the form.
> THE WITNESS: Well, the first data points came in about 7:48. I can't say when the monitors were hooked up or turned on. Sometimes there's a five-

minute startup time, especially for CO2 monitors.
BY MR. RANSOM: All right. Would it be a breach of the standard of care to begin the procedure and administer the anesthetic before the monitors are warmed up?
A. Yes.

Deposition of James M. Berry, MD, page 77, lines 3 - 8; page 79, line 16 thru page 80, line 2; page 86, lines 3 - 19. In addition to acknowledging that the monitors were either not turned on or not warmed up until 7:48 a.m., Dr. Berry also acknowledged that propofol was given to Mr. Mikell beginning at 7:41 a.m., which Dr. Berry identified as a breach of the standard of care:

Q. And Exhibit 10 also indicates that 75 micrograms per kilogram per minute of propofol were administered at what time?
A. Beginning at 7:41.
Q. Okay. Do you have any basis for disputing the accuracy of that data?
A. Nope.

* * *

Q. Okay. What about the propofol? Would it be a breach of the standard of care to administer propofol to a patient like Mr. Mikell before he's hooked up to the monitors?
A. I – I would not – I would not do that.
Q. Okay. So that would be a breach of the standard of care?
A. Yes.

Ibid, page 71, lines 19 - 25; page 72, line 24 thru page 73, line 7. Dr. Berry went on to acknowledge the consequences of this malpractice:

Q Okay. And the reason for that is because with Mr. Mikell's condition, we know, for example, between his sleep apnea and his heart condition that he's at risk for being particularly sensitive to the medications that are being given to sedate him, correct?
A. Yes.
Q. And that sensitivity displays itself in the sense that he can begin to desaturate and have heart problems fairly quickly, right?
A. Yes.
Q. So it's important, in order to be able to prevent that from happening, that he be hooked up to the monitors so that the anesthesia care providers can see from the vital signs metric standpoint exactly what's going on, right?
A. Well, it doesn't prevent it from happening, but it allows early recognition if it does happen.
Q. Right. Early recognition is important when you're trying to keep a man like

Mr. Mikell from getting into trouble, right?
A. Yes.

Id., page 73, line 8 thru page 74, line 5. Which is to say, according to the anesthesia record and Dr. Berry's own testimony, Mr. Mikell was given the anesthetic agent (propofol) before the vital signs monitors were turned on and warmed up (thus explaining the blanks in the chart), so when Mr. Mikell's condition started to deteriorate, his anesthesia providers were unaware of it until he was already in a life and death situation.[9] This unsafe manner of proceeding was a breach of the standard of care which resulted in Mr. Mikell suffering injuries that required prolonged hospitalization and convalescence.

HARM RESULTING TO THE PATIENT

1. Dr. Berry

Dr. Berry described the impact which the Medical University's malpractice, Mr. Mikell's resulting injuries and the consequent lengthy hospitalization and convalescence all had on Mr. Mikell's overall health and vitality:

Q Okay. And would you think that those – that these events that took place October and into November in any way contributed to his death in early January?
A Oh, **I think the events clearly showed that his medical condition was on the decline. I'm sure they didn't help him.** But, you know, his – his death was from his cardiac disease –
Q Right.
A. – as far as –
Q. But would these – would this incident that took place with this colonoscopy and the subsequent hospitalization – would it be fair to say that those things at least contributed to his death?
MR. BOGDAN: Object to the form.
THE WITNESS: It's hard to say. **I think they were clear manifestations**

[9] In this regard, Dr. Berry agrees 100% with the conclusions of the Plaintiff's medical expert, Dr. Kofke. *See*, Deposition of William A. Kofke, MD at page 49, line 14 thru page 50, line 5; and page 51, lines 9 thru 13.

of his – his declining health.

Id., page 175, line 12 thru page 176, line 5 (emphasis added).

Mr. Mikell's treating medical care providers – two of them Medical University employees – have also offered comments about the relationship among all of the events leading to Mr. Mikell's death.

2. Dr. Akhtar - MUSC

Jeffrey M. Akhtar, MD was Mr. Mikell's primary care physician for several years before his death. It was Dr. Akhtar who recommended the colonoscopy that brought Mr. Mikell to grief. Dr. Akhtar testified Mr. Mikell had not fully recovered from injuries which did nothing to increase his life expectancy:

Q. I think you had said a moment ago that you don't know why he died.
A. That's correct.
Q. I wanted to ask you, then, **in regard to the cardiac arrest that he suffered while he was undergoing this colonoscopy, did that have any negative long term effect on his health?**
MS. FLEMING: Object to the form. You can answer that question.
A. **It did.** He developed kidney disease after it, so that was another organ system that was injured.
Q. Did he ever fully recover from the adverse consequences of the cardiac arrest?
MS. FLEMING: Objection to the form.
A. He got better, but – and he was almost back to baseline.
Q **Was he fully recovered when you last saw him?**
A. **No**, I mean, he had a tracheostomy.
Q. And he was being referred for home health?
A. Uh-huh.
Q. Is that a yes?
A. That's a yes.
Q. And he was being referred for physical therapy?
A. Correct.
Q. Does that tend to suggest to you that he hadn't fully recovered?
MS. FLEMING: Objection to the form.
A. **He hadn't fully recovered**, but he was getting better.
Q. **Did the cardiac arrest do anything to increase his life expectancy?**
A **No.**

Deposition of Jeffrey M. Akhtar, MD at page 58, line 14 thru page 59, line 24 (emphasis added). Dr. Akhtar was unwilling to say the events in question were not related to Mr. Mikell's death:

Q **Do you believe the cardiac arrest contributed to his kidney disease?**
A **Yes.**
Q. **Made it worse?**
MS. FLEMING: Objection to the form.
A. **It looks like it caused it.**
Q. Do you know whether the cardiac arrest in any way contributed to his death?
A. I do not.
Q. Can you say for sure that it didn't?
A. I cannot say for sure.
Q. Can you say that it most probably did not?
MS. FLEMING: Objection to the form.
A. I don't understand the question.
Q. Yes. Can you say – **can you tell me that the cardiac arrest most probably did <u>not</u> contribute to his death?**
A. **I cannot.**

Ibid at page 60, line 20 thru page 61, line 13 (emphasis added).

3. <u>Dr. Van Bakel - MUSC</u>

Adrian Van Bakel, MD, PhD was Mr. Mikell's cardiologist at MUSC both before and after the colonoscopy and cardiac arrest. Dr. Van Bakel saw Mr. Mikell on December 14, 2010 and described his hospitalization as "quite an astounding adventure." According to Dr. Van Bakel's office note, when he saw Mr. Mikell in mid-December, he looked "quite weak," was becoming tired "quite easily," and was receiving injections to treat anemia. *See also*, Deposition of Adrian Van Bakel, MD at page 68, lines 6 - 11; page 69, lines 5 - 6. Dr. Van Bakel testified as follows:

Q. I need to ask you a couple of questions. Bear with me on this because I've got a job to do. But I want to ask you, can you say, **do you have an opinion as to whether or not the events of October 1st, 2010, meaning his cardiac arrest, caused his death on January 2nd of 2011?**
A. I don't -- **I can't say one way or another** because we don't know the cause of his death.

Ibid, page 77, lines 4 - 12 (emphasis added). Dr. Van Bakel *was* able to say that Mr. Mikell's

"astounding adventure" was not a "positive development" for him. *Id.* at page 81, lines 1 - 15.

4. Dr. Browder

Richard Browder, MD is a kidney specialist who saw Mr. Mikell on December 29, 2010 – just four days before his death. Dr. Browder testified as follows:

> Q. Fascinating. Okay. So in summary, it appears as though, as a result of the events of October 1st, he suffered a kidney injury that, by the time he was last seen in your office the end of December, he had largely, if not completely, recovered from that?
> A. Largely, not completely, that's fair.

Deposition of Richard Browder, MD at page 54, lines 5 - 11.

In summary, several witnesses associated with the Medical University's defense – its own medical expert and two of its own physician employees, none of whom are biased in favor of the Plaintiff – and at least one independent physician all concede that during the colonoscopy, Mr. Mikell sustained serious injuries requiring extended hospitalization and post-hospital care, injuries for which he was still receiving treatment and from which he had not yet fully or completely recovered by the time of his death. The Medical University's physician employees further concede that the events in question did nothing to improve Mr. Mikell's overall health and they cannot say these events did not contribute to Mr. Mikell's death.

5. Dr. Kofke

In juxtaposition to this defense-oriented evidence, the Plaintiff's medical expert, Dr. Kofke, testified that Mr. Mikell's cardiac arrest and hospitalization did contribute to his death:

> Q . . . Do you intend to give any opinions about what might have caused him to be in the hospital or ultimately what caused his death?
> A. Well, it's kind of a tricky question, not that you're trying to be tricky, but I think that **if he hadn't had the cardiac arrest, none of that would have happened. * * * I'm confident that none of it would have happened if he hadn't had the cardiac arrest. . . .**
> * * *

Q Do you intend to testify that the events that occurred on October 1st of 2010, somehow caused or contributed to Mr. Mikell's death:

A. **I think that they contributed**, I'm not sure that they caused.

Deposition of William Andrew Kofke, MD at page 116, lines 6 thru 19; page 119, lines 9 thru 13 (emphasis added). Dr. Kofke was pressed for an explanation about this and testified as follows:

A. All I know is that if the cardiac arrest hadn't happened, he would have gone home that night. But instead, he had a cardiac arrest and ended up with a prolonged ICU stay and trach and peg, and you know. So **I can't help but conclude that the cardiac arrest contributed to this**. I don't know or I don't recall what the exact cause of his moment of death was. * * * **The only way that I would think that it didn't, that the cardiac arrest didn't contribute to it, is if he went on to totally recover and get hit by a car or something.** I mean, you know, die of some other cause unrelated to this.

Q. And how do you know – I mean what factors are you relying on to reach the opinion that the cardiac arrest contributed to Mr. Mikell's death?

A. Because he had a cardiac arrest and then he ended up in the ICU for some period of time with renal failure and that was all due to the cardiac arrest. And I don't know what he died from. It's kind of irrelevant if he died shortly after this. **He was going to go home that day and instead, he ended up in an ICU and dying at home at some time afterwards. After being in the ICU for some period of time.**

Ibid at page 119, line 20 thru page 121, line 4 (emphasis added). Dr. Kofke summarized his conclusions about the cause of death with this final description:

A. . . . He had a cardiac arrest, he didn't go home. Instead he went through a prolonged hospital course, and the exact mechanism of death becomes less important other than to say that **it wouldn't have happened had he not arrested. All that stuff, however it is that he died, it wouldn't have happened.**

Id., at page 122, lines 2 thru 9 (emphasis added).

In short, Dr. Kofke clearly expresses being "confident" that without "all that stuff" – meaning the cardiac arrest; the medically induced coma; the hypothermia; the kidney failure; the renal dialysis; the tracheotomy; the mechanical ventilation; the intensive care unit; the 50 day hospitalization; the physical therapy; the rehabilitation; the home health care – Mr. Mikell's death

"wouldn't have happened." Dr. Kofke actually testified twice that without "all that stuff," Mr. Mikell's death "wouldn't have happened."

The Medical University may not like Dr. Kofke's conclusions – and it is certainly free to dispute them with the jury – but it cannot deny that Dr. Kofke has testified the Medical University's malpractice contributed to Mr. Mikell's death. Nor can the Medical University deny that Dr. Kofke's testimony provides at least "a mere scintilla of evidence" on the issue of proximate causation.

In its motion, the Medical University nevertheless attacks the foundation for Dr. Kofke's conclusions, claiming "he did not review or analyze medical records . . . relating to the issue of causation." This attack is simply nonsense. The entirety of Dr. Kofke's testimony clearly demonstrates his familiarity with the course and details of Mr. Mikell's care.[10] The Medical University obviously wants to challenge Dr. Kofke about just how detailed an analysis is needed in order to draw reasonable inferences about the factors contributing to Mr. Mikell's death. But for his own part, Dr. Kofke has testified that the precise details are "kind of irrelevant" and "less important" because he is "confident" and "can't help but conclude" the events are so interrelated that only an intervening car wreck would suffice to break the causal chain.

STANDARD OF PROOF

In its Motion, the Medical University identifies an incorrect legal standard for proof of proximate causation in a medical malpractice case like this one. Citing Hoard v. Roper Hospital, Inc., 387 S.C. 539, 694 S.E.2d 1 (2010), the Medical University contends, "Where, as here, the

[10] When asked what material he had reviewed in reaching his conclusions, Dr. Kofke identified "the chart" including "the medical record from MUSC." *See*, Deposition of William A. Kofke, MD at pages 37 - 38. These records number several thousands of pages.

Plaintiff relies exclusively on expert testimony to prove causation, such testimony must provide a significant causal link between the alleged negligence and the plaintiff's injuries, rather than a tenuous and hypothetical connection." Memorandum in Support of Defendant's Motion for Partial Summary Judgment, at page 7.

Contrary to the Medical University's assertion, the Plaintiff in this case does not "rely exclusively on expert testimony to prove causation." Instead, in addition to the testimony of Dr. Berry, Dr. Akhtar, Dr. Van Bakel and Dr. Kofke, the Plaintiff relies on the undisputed sequence of events which leads in unbroken succession from cardiac arrest to hospitalization to physical therapy to home health care to death. Even the defense witnesses concede this chain of events had a "negative effect" on Mr. Mikell's health, inflicting maladies from which he had "not fully recovered" at the time of his death.

Where – as in this case – both expert testimony and circumstantial evidence are presented as proof of causation, a court's inquiry need only be whether there is sufficient competent evidence from which the jury may infer a causal connection. Green v. Lilliewood, 272 S.C. 186, 249 S.E.2d 910 (1978). In considering the sufficiency of circumstantial evidence, the facts and circumstances should be assessed in light of ordinary experience and common sense. *Ibid.* In many cases the temporal sequence of events alone – the circumstances of an injury and the events that follow – will warrant a reasonable inference of causation. *Id; see also,* Grice v. Dickerson, 241 S.C. 225, 127 S.E.2d 722 (1962)(rheumatoid arthritis caused by trauma); King v. Williams, 276 S.C. 478, 279 S.E.2d 618 (1981)(problems caused by failure to properly diagnose foot injury).

Applying these principles, if anything is found lacking in Dr. Kofke's testimony, the circumstances surrounding the last three months of Mr. Mikell's life – completely covered up with medical care for injuries resulting from a cardiac arrest – should suffice to fill in the gaps. As several

of Mr. Mikell's medical care providers have candidly observed, common sense teaches that the course of events in this case most certainly did nothing to improve Mr. Mikell's health or increase his life expectancy. One does not need a medical degree or a PhD to comprehend the seriously negative impact these events had on Mr. Mikell. His friends and family certainly understood. Dr. Kofke is confident all the dots connect.

PROOF OF SOLE CAUSE NOT REQUIRED

It is of course elementary that the Medical University's malpractice does not have to be the sole cause of Mr. Mikell's death in order for his estate to recover for his wrongful death. *See*, Bishop v. South Carolina Department of Mental Health, 331 S.C. 79, 502 S.E.2d 78 (1998); Small v. Pioneer Machinery, Inc., 329 S.C. 448, 494 S.E.2d 835 (1997). "Proximate cause" does not mean the "sole cause." *Ibid.* A defendant's conduct can be a proximate cause if it is at least one of the direct, concurring causes of an injury. *Id.* It is generally for the jury to determine whether a defendant's negligence is a concurring cause of the plaintiff's injury. *Id.* Only when the evidence is susceptible of only one reasonable inference does proximate cause become a matter of law for the court. *Id*; *see also*, Hughes v. Children's Clinic, PA, 269 S.C. 389, 398, 237 S.E.2d 753, 757 (1977).

Additionally, the South Carolina Court of Appeals made the following pertinent observations in Wallace v. Owens-Illinois, Inc., 300 S.C. 518, 521, 389 S.E.2d 155, 157 (1989):

> [T]he general rule is that one who does a wrongful act is answerable for all consequences that may ensue in the normal course of events. Any number of causes and effects may intervene between the original wrongful act and the final injurious consequence. If the intervening acts are (1) set in motion by the original wrongful act and (2) are the normal and foreseeable result of the original act, the final result, as well as every intermediate cause, is considered in law to be the proximate result of the first wrongful cause.

Thus, once the Medical University's malpractice – the first wrongful cause – set into motion a natural process which in the normal course of events included severe injuries, highly invasive

treatment, lengthy hospitalization, therapy, rehabilitation, declining health and reduced activity, its liability for the "final result" – death – became fixed.

Lastly, it is likewise fundamental that a defendant takes the plaintiff as he is found so that a plaintiff is entitled to recover damages resulting from the aggravation of any pre-existing conditions. Waring v. Johnson, 341 S.C. 248, 533 S.E.2d 906 (Ct. App. 2000); Raino v. Goodyear Tire & Rubber Co., 309 S.C. 255, 422 S.E.2d 98 (1992). The fact that Mr. Mikell may have been in less than perfect health when he presented himself for the colonoscopy does not relieve the Medical University from liability for whatever harm ultimately followed from the cardiac arrest caused by its admitted malpractice. In assessing the evidence of proximate cause for the wrongful death claim in this case, one cannot overlook the fact that Mr. Mikell had heart problems before he suffered the cardiac arrest at issue, making him even more susceptible to that insult.

SUMMARY JUDGMENT STANDARD

As the Medical University itself admits, its motion must be denied if there is even "a mere scintilla of evidence" on the issue of causation. Hancock v. Mid-South Mgmt. Co., 381 S.C. 326, 673 S.E.2d 801 (2009). Dr. Kofke clearly testified that "without all that stuff," Mr. Mikell's death "wouldn't have happened." Which is to say, but for the Medical University's admitted malpractice, Mr. Mikell would not have died two or three days after the last home health visit to culminate his 93 days of almost continuous medical care.

Additionally, on a motion for summary judgment all ambiguities, conclusions and inferences arising from the evidence must be construed most strongly against the moving party. Ferguson v. Charleston Lincoln Mercury, Inc., 349 S.C. 558, 564 S.E.2d 94 (2002). When evidence is lost or destroyed by a party, an inference may be drawn that the evidence would have been adverse to that party. Stokes v. Spartanburg Regional Medical Center, 368 S.C. 515, 629 S.E.2d 675 (Ct. App.

2006); Kershaw County Board of Education v. U.S. Gypsum Co., 302 S.C. 390, 396 S.E.2d 369 (1990). The Plaintiff is entitled to the benefit of this adverse inference. Having altered, lost, destroyed and withheld significant material evidence in this case, the Medical University cannot use Rule 56 to throw out one of the Plaintiff's claims for lack of proof.

The Medical University's motion should be denied and the Plaintiff's cause of action for wrongful death should proceed to trial.

BY: Robert B Ransom

Robert B. Ransom
LEVENTIS & RANSOM
Post Office Box 11067
Columbia, SC 29211
(803) 765-2383
(803) 799-1612 (fax)
Bertcone@aol.com

Alex Apostolou
3443 Rivers Avenue
North Charleston, SC 29405
(843) 853-3637
(843) 853-3638 (fax)
Alexapostolou@bellsouth.net

ATTORNEYS FOR THE PLAINTIFF

CERTIFICATE OF MAILING

The undersigned hereby certifies that a true copy of the Plaintiff's Response to Defendant's Motion for Partial Summary Judgment has been served upon opposing counsel by depositing in the United States mail a copy of same properly addressed with sufficient postage affixed thereto this 12 day of October, 2015.

Robert B Ransom

STATE OF SOUTH CAROLINA)) COUNTY OF CHARLESTON)	IN THE COURT OF COMMON PLEAS FOR THE NINTH JUDICIAL CIRCUIT CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER as Personal Representative of the Estate of CHARLES MIKELL, Deceased, Plaintiff, vs. THE MEDICAL UNIVERSITY OF SOUTH CAROLINA, Defendant.	**PLAINTIFF'S PRE-TRIAL BRIEF**

Pursuant to Rule 16(c), SCRCP, the following information is provided for use of the court during the trial of this case:

1. A concise, non-argumentative statement of the facts of the case.

Charles Mikell was 52 years old when he went to the Medical University for a colonoscopy on October 1, 2010. During the colonoscopy, Mr. Mikell suffered a cardiac arrest. Mr. Mikell was thereupon admitted to Medical University Hospital where his condition including the following:

- breathing on a ventilator
- placed in a medically induced coma with hypothermia
- tracheostomy performed
- PICC line and other venous access ports placed
- hemodialysis for an acute kidney injury
- blood transfusion
- fed through nasogastric tube
- placed on a variety of medications

Mr. Mikell remained a patient at Medical University Hospital until October 26, 2010, when he was transferred to Kindred Hospital, a rehabilitation facility. His condition at Kindred included the following:

- tracheostomy dependent respiratory failure
- anemia
- acute kidney injury requiring hemodialysis and red blood cell stimulation
- marked debility from prolonger hospitalization and critical illness
- dysphagia

Mr. Mikell was discharged from Kindred Hospital to his home on November 19, 2010. Altogether, Mr. Mikell spent 49 days in the hospital, including:

- 26 days in the Intensive Care Unit
- 22 days on a ventilator
- 7 days on hemodialysis

Mr. Mikell was still debilitated after being discharged home from Kindred Hospital, so he received health care visits to his home throughout December 2010.

Mr. Mikell also attended followup medical appointments as follows:

- nephrology (Nov 30, 2010)
- otolaryngology (Dec 09, 2010)
- cardiology (Dec 14, 2010)
- family medicine (Dec 20, 2010)
- nephrology (Dec 29, 2010)

Altogether, Mr. Mikell had 22 separate visits with medical professionals during the 43 day period between his discharge from Kindred Hospital and his death.

On New Years Day 2011, Mr. Mikell complained of a bad cough which had first developed while he was in the hospital. Mr. Mikell's mother found him dead on the couch in his home on January 2, 2011.

Mr. Mikell is survived by his son, Dadrian Mikell (age 18); and his daughter, Madison Mikell (age 22). The Plaintiff, Shon Turner (age 27), is Mr. Mikell's step-son.

As a result of the cardiac arrest and subsequent medical treatment, Mr. Mikell incurred the following expenses for which recovery is being sought:

Medical University Hospital Authority	$191,998.83
Kindred Hospital of Charleston	90,042.80
University Medical Associates	43,516.00
Gentiva Health Services	2,835.00
Charleston Pulmonary Associates	2,050.00
Charleston Nephrology Associates	7,785.00
TOTAL:	$338,227.63

2. An objective statement of the facts in controversy.

Whether the Medical University's anesthesia care providers, Eric Nelson, DO and Donna Embry, CRNA, breached the standard of care during Mr. Mikell's colonoscopy.

Whether the cardiac arrest and other injuries Mr. Mikell suffered on October 1, 2010 caused or contributed to his death on January 2, 2011.

Whether the Medical University improperly altered, lost, destroyed or withheld records and information about Mr. Mikell's treatment and care.

3. The legal issues involved. This includes the law applicable to the cause of action and the defense.

The Plaintiff Shon Turner is the Personal Representative of Mr. Mikell's Estate and brings claims for wrongful death, S.C. Code Ann. §15-51-10; and survival, S.C. Code Ann. §15-5-90.

The underlying claims are for:

Medical Malpractice which is defined by S.C. Code Ann. §15-79-110(6) as "doing that which the reasonably prudent health care provider or health care in- stitution would not do or not doing that which the reasonably prudent health care provider or health care institution would do in the same or similar circumstances."

Negligent Misrepresentation with the following elements:

- a false representation made by the defendant to the plaintiff
- a pecuniary interest by the defendant in making the statement
- a duty of care owed by the defendant to see that truthful information was communited to the plaintiff
- the defendant breached the duty by failing to exercise due care
- the plaintiff jutifiably relied upon the representation
- the plaintiff suffered a pecuniary loss as a direct and proximate result of reliance on the representation

See, Winburn v. Insurance Co. of North America, 287 S.C. 435, 339 S.E.2d 142 (Ct. App. 1985); Hurst v. Sandy, 329 S.C. 471, 494 S.E.2d 847 (Ct. App. 1997).

Conversion with the following elements:

- an interest by the plaintiff in the thing converted
- the defendant converted the property to his own use
- the use was without the plaintiff's permission

See, Owen v. Andrews Bank & Trust Co., 265 S.C. 490, 220 S.E.2d 116 (1975).

Conversion is the unauthorized assumption and exercise of the right of ownership over goods or personal chattels belonging to another, to the alteration of the condition or the exclusion of the owner's rights. Powell v. A.K. Brown Motor Co., 200 S. C. 75, 20 S.E.2d 636 (1942).

The conversion claim relates to the loss or destruction of parts of Mr. Mikell's medical record.

S.C. Code Ann. 40-47-100(17), (24) and (25) define "misconduct" in the practice of medicine to include:

- failure to prepare or maintain an adequate patient record of care provided
- failure to provide pertinent and necessary medical records to a patient when lawfully requested to do so by a patient or by a lawfully designated representative of a patient
- improperly managing medical records, including failure to maintain timely, legible, accurate, and complete medical records

S.C. Code Ann. §44-115-120 requires physicians to retain adult patients' records for at least ten years before destruction. S.C. Code Ann. §44-115-30 states, "A patient or his legal representative has a right to receive a copy of his medical record."

This case involves the provision of anesthesia by a Certified Registered Nurse Anesthetist or "CRNA."

Pursuant to S.C. Code Ann. §40-33-20(20), a CRNA "must practice . . . under supervision of a licensed physician . . ." *Cf.*, S.C. Code Ann. §40-33-34(H)(5)("The physician or dentist responsible for the supervision of a CRNA must be identified on the anesthesia record before administration of anesthesia.")

As further defined by S.C. Code of Reg., R. 61-16 §1212(A)(4), "A certified registered nurse anesthetist (CRNA) . . . is under the supervision of . . . an anesthesiologist who is immediately available if needed; . . ."

S.C. Code Ann. §40-33-20(57), defines the term "supervision" as "the process of critically observing, directing, and evaluating another's performance."

Mr. Mikell was 52 years old at the time of his death. S.C. Code Ann. §19-1-150 sets his life expectancy at another 27.40 years, or until age 79.40.

The Medical University denies that its employees committed medical malpractice or that the events of October 1, 2010 caused or contributed to Mr. Mikell's death. It also relies upon the limitations on liability set forth in the South Carolina Tort Claims Act, S.C. Code Ann. §§15-78-60(5)(discretionary function) and (25)(supervision); and §15-78-120(b)(damage limitations).

4. A listing of exhibits, indicating those as to which there is disagreement and a listing of witnesses who may be called and, if available, their address and phone number.

Please see the Plaintiff's separate Witness List and Exhibit List.

5. Any unusual problems relating to evidenced to be introduced, such as "Business Records as Evidence Act," hearsay, use of depositions, etc.

A. Best Evidence of the Contents of the Mayday Record

The Medical University has not produced the chart copy of a Mayday record created during Mr. Mikell's cardiac arrest. Witness Sheila Scarborough testified that she shredded a copy of the Mayday record faxed to her in the Risk Management office.

The Medical University attempts to overcome its failure to produce the Mayday record by presenting secondary evidence of its contents. However, the best evidence of the contents of the Mayday record is the Mayday record itself. Secondary evidence of its contents is not admissible.

The Medical University claims two independent documents were created, allegedly using information contained in the Mayday record: (1) an altered anesthesia narrative; and (2) an American Heart Association database.

Additionally, on April 6, 2016 the Medical University produced a third independent document: (3) a blank, specimen Mayday record form. Through this blank form, the Medical University seeks to show that nothing important was contained in the Mayday record for Mr. Mikell's cardiac arrest.

The best evidence rule prohibits the Medical University from using any of these three documents, or the testimony of any witness, to prove the contents of the original Mayday record. All such efforts constitute the improper use of inadmissible secondary evidence.

"The elementary wisdom of the best evidence rule rests on the fact that the document is a more reliable, complete and accurate source of information as to its contents and meaning than anyone's description . . . ." Gordon v. United States, 344 U.S. 414, 73 S.Ct. 369 (1953).

The best evidence rule thus prohibits questioning a witness about the contents of a document which is not itself in evidence. Jackson County Board of Health v. Fugett Construction, Inc., 270 Ga. 667, 514 S.E.2d 28 (1999). In South Carolina, the rule specifically prohibits testimony about the contents of a medical record when the record itself is not in evidence. Griggs v. Driggers, 230 S.C. 97, 94 S.E.2d 225 (1956).

It has long been the rule, both in state and federal court, that parole evidence of the contents of a document is inadmissible unless the document itself is unavalable for some reason other than the fault of the proponent. *See, e.g.*, Hurt v. Davis, 1 Brev. 304, 3 S.C.L. 304 (1803); United States v. Alexander, 326 F.2d 736 (4th Cir. 1964); Vaught v.

Nationwide Mutual Ins. Co., 250 S.C. 65, 156 S.E.2d 627 (1967); Windham v. Loyd, 253 S.C. 568, 172 S.E.2d 117 (1970); State v. Holcomb, 382 S.C. 432, 676 S.E.2d 149 (2009).

In 1995, this almost universal common law rule was incorporated into South Carolina Rule of Evidence 1004:

> The original is not required, and other evidence of the contents of a writing, recording, or photograph is admissible if —
>
> (1) All originals are lost or have been destroyed, unless the proponent lost or destroyed them in bad faith; * * *

In regard to proof that originals have been lost or destroyed, the court in Uzell v. Horn, 71 S.C. 426, 51 S.E.2d 253, 254-255 (1905) explained there should be evidence of a reasonable search conducted by those in whose possession the original would be expected to be found:

> If it belongs to the custody of certain persons, or is proved, or may be presumed, to have been in their possession, they must, in general, be called and sworn to account for it, if they are in the reach of the court; . . .

In this case, Scott Reeves, MD, Chairman of the Department of Anesthesia at the Medical University, appointed two faculty members to conduct a peer review investigation of Mr. Mikell's cardiac arrest. Yet Dr. Reeves testified on April 7, 2016 that no investigation has ever been conducted into the whereabouts of the chart copy of the Mayday record, the fate of which simply remains known only to the Medical University.

Importantly, no witness has ever testified that the chart copy has been lost or destroyed. According to Donna Embry, CRNA, when last seen the original Mayday record was in Mr. Mikell's medical chart at his bedside, right where it belonged. That is the only evidence in the record.

The Medical University has a legal obligation to preserve adult patient records for ten years and to produce them to the patient or the patient's legal representative upon proper request. The proper request(s) have been made. Yet the Medical University has not produced the Myday record. Its initial contention, that no Mayday record ever existed, has been exposed as false.

In the absence of competent evidence that the chart copy of the Mayday record has in fact been lost or destroyed, the Medical University cannot introduce secondary evidence of its contents. Moreover, even if the Medical University were to present such testimony, it cannot disassociate itself from its prior false testimony about the non-existence of a Mayday record.

Accordingly, Donna Embry, CRNA should not be permitted to testify that changes she made to the anesthesia narrative had the effect of conforming it to the contents of the Mayday record.

Additionally, Sheila Scarborough should not be permitted to testify that entries she made in an American Heart Association database are equivalent to the contents of the Mayday record.

Moreover, the Medical University should not be permitted to place a blank, specimen copy of a generic Mayday record into evidence in an effort to show the missing original would not have contained any useful information.

B. Mr. Mikell's Death Certificate and Opinion Testimony by the Deputy Coroner

The Medical University has issued a subpoena for Bobbi Jo O'Neal to testify at trial. Ms. O'Neal is the Chief Deputy Coroner for Charleston County who completed the death certificate for Mr. Mikell. She will presumably be asked to give an opinion about the cause of Mr. Mikell's death and her testimony may be used as a foundation for offering the death certificate into evidence. Plaintiff objects to this.

First, Ms. O'Neal has a bachelor of science in nursing degree. She is not a medical doctor. She therefore is not qualified to render medical opinions about the cause of Mr. Mikell's death.

Second, Ms. O'Neal also lacks a proper factual foundation to render an opinion about Mr. Mikell's cause of death. Ms. O'Neal has reviewed only 41 pages of Mr. Mikell's medical chart, which exceeds 2,100 pages.

Third, one of Mr. Mikell's treating physicians, Michael Zile, MD, disputed the cause of death listed by Ms. O'Neal on the death certificate, testifying at his deposition that several of the conditions she listed are incorrect and should be stricken. Another of Mr. Mikell's treating physicians, Adrian Van Bakel, MD, testified at his deposition that the death certificate merely lists the Coroner's "best guess" as to the cause of death.

In summary, Plaintiff objects to Ms. O'Neal being permitted to present to the jury her "best guess" at what caused Mr. Mikell's death. She is not qualified to render medical opinions; she lacks an adequate factual foundation for her opinion; and two medical doctors who actually treated Mr Mikell have testified her opinion is wrong. Her opinion thus lacks sufficient reliability to merit presentation to the jury. *See,* Nelson v. Taylor, 347 S.C. 210, 553 S.E.2d 488 (Ct. App. 2001)(physicial therapist held not qualified to render opinions on causation).

C. Shon Turner's Criminal Record

At his January 2014 deposition, Shon Turner was questioned about any criminal record he may have. Any such inquiry made before the jury should be strictly limited to

those crimes which the Medical University can show are subject to a conviction meeting the requirements of Rule 609, SCRE.

D. Testimony of Jewell Mikell

Mr. Mikell's mother, Jewel Mikell, gave a deposition in this case on January 7, 2014. Ms. Mikell passed away in September 2015. Portions of her deposition testimony will be offered into evidence via audio recording.

6. Any unusual question or matter which should be brought to the attention of the court.

The Court is familiar with the Plaintiff's contentions about the alteration, loss and destruction of evidence by the Medical University and the apparently false testimony offered by several of its employee witnesses. Regardless of the imposition of discovery sanctions, Plaintiff will offer evidence of this misconduct for the jury to weigh in assessing the credibility of the Medical University's witnesses and defense narrative:

- loss of the chart copy of the Mayday record
- destruction of the Risk Management copy of the Mayday record
- alteration of the anesthesia narrative
- destruction of at least one printed copy of the anesthesia chart
- missing pages from other copies of the anesthesia chart
- providing false testimony about the Mayday record
- late disclosure of a software linkage error and communications to fix it

Plaintiff seeks an adverse inference jury instruction pursuant to Stokes v. Spartanburg Regional Medical Center, 368 S.C. 515, 629 S.E.2d 675 (Ct. App. 2006) in regard to the alteration, loss and destruction of this evidence.

7. A statement that settlement negotiations were attempted before the date of the pre-trial hearing and the status of settlement negotiations.

The parties participated in mediation on August 28, 2014 with Karl Folkens as mediator. Demands and offers were exchanged but the magnitude of disputed issues prevented the parties from reaching an agreement.

After the December 11, 2015 hearing on the Plaintiff's Motion for Sanctions, Plaintiff's counsel approached defense counsel about continuing settlement negotiations, but defense counsel advised the Insurance Reserve Fund is not interested in negotiating.

Respectfully submitted,

By: _____

Robert B. Ransom
LEVENTIS & RANSOM
Post Office Box 11067
Columbia, SC 29201
803-765-2383
803-799-1612 (fax)
bertcone@aol.com

Alex Apostolou
APOSTOLOU LAW FIRM
3443 Rivers Avenue
North Charleston, SC 29405
843-853-3637

ATTORNEYS FOR THE PLAINTIFF

STATE OF SOUTH CAROLINA)) COUNTY OF CHARLESTON)	IN THE COURT OF COMMON PLEAS FOR THE NINTH JUDICIAL CIRCUIT CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER as Personal Representative of the Estate of CHARLES MIKELL, Deceased, Plaintiff, vs. THE MEDICAL UNIVERSITY OF SOUTH CAROLINA, Defendant.	**PLAINTIFF'S SUPPLEMENTAL REQUEST TO CHARGE**

Negligence *Per Se*

Where there is a duty arising from a statute or regulation and the Plaintiff shows the Defendant violated the statute or regulation, the violation is negligence *per se*. That is, negligence in and of itself, as a matter of law.

Negligence *per se* simply means you, the jury, need not decide if the Defendant acted as a reasonable medical care provider under the circumstances. The statute and regulation fix the standard of care required of the Defendant, leaving you merely to decide whether the Defendant breached the statute. If the Defendant did, then his or her failure to take due care is established as a matter of law. The only issue then left for you to determine is whether the Defendant's conduct proximately caused damage or harm to the Plaintiff.

Accordingly, proof of violation of a statute or regulation is, in fact, proof of negligence so that your only concern then would be whether such violation of the statute or regulation so shown was the proximate cause of the injury and harm.

Raplh King Anderson, Jr., South Carolina Requests to Charge - Civil, 2002, §20-6

Norton v. Opening Break, 319 S.C. 469, 462 S.E.2d 861 (1995)(regulations have the force of law; violation of regulation constitutes negligence per se);

Green v. Sparks, 232 S.C. 414, 102 S.E.2d 435 (1958)(violation of an applicable statute is negligence per se)

STATE OF SOUTH CAROLINA)) COUNTY OF CHARLESTON) SHON TURNER as Personal) Representative of the Estate of) CHARLES MIKELL, Deceased,)) Plaintiff,)) vs.)) THE MEDICAL UNIVERSITY OF) SOUTH CAROLINA,)) Defendant.)	IN THE COURT OF COMMON PLEAS FOR THE NINTH JUDICIAL CIRCUIT CIVIL ACTION NO.: 2012-CP-10-7275 **PLAINTIFF'S SUPPLEMENTAL REQUEST TO CHARGE**

Standards of Care

The fact finder may consider relevant standards of care from various sources in determining whether a defendant breached a duty owed to an injured person in a negligence case. The standard of care in a given case may be established and defined by the common law, statutes, administrative regulations, industry standards, or a defendant's own policies and guidelines.

Madison ex rel. Bryant v. Babcock Center, Inc., 371 S.C. 123, 638 S.E.2d 650 (2006)

STATE OF SOUTH CAROLINA	)	IN THE COURT OF COMMON PLEAS
	)	
COUNTY OF CHARLESTON	)	CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased,	)	
	)	
Plaintiff,	)	**VERDICT FORM**
	)	
vs.	)	
	)	
MEDICAL UNIVERSITY OF SOUTH CAROLINA,	)	
	)	
Defendant.	)	
	)	

1. Do you unanimously find, by the preponderance of the evidence, that the Defendant was negligent in its care of Mr. Mikell? Yes ____ No____

If the Answer to Question 1 is No, stop here and have the Foreperson sign this Verdict Form. Your verdict is for the Defendant. If your Answer to Question 1 is Yes, proceed to the next question.

2. Do you unanimously find, by the preponderance of the evidence, that the Defendant's negligence proximately caused injury to Mr. Mikell? Yes ____ No____

If the If the Answer to Question 2 is No, stop here and have the Foreperson sign this Verdict Form. Your verdict is for the Defendant. If your Answer to Question 2 is Yes, proceed to the next question.

3. The amount of damages that Mr. Mikell suffered as a proximate result of the Defendant's negligence is _____ (write a dollar amount out in words). This is your verdict in the Survival Action. Proceed to the next question.

4. Do you unanimously find, by the preponderance of the evidence, that the Defendant's negligence proximately caused Mr. Mikell's death? Yes_____ No_____

5. If the Answer to Question 4 is Yes, then state the amount of damages suffered by Mr. Mikell's statutory beneficiaries as a result of his death:

_____ (write a dollar amount out in words). This is your verdict in the Wrongful Death Action. Proceed to the next question.

6. Do you unanimously find, by the preponderance of evidence, that a licensed physician was negligent and that his negligence contributed as a proximate cause to Mr. Mikell's injury or to his death?

Yes____ No____

_____

Foreperson

Charleston, South Carolina
April _____, 2016

STATE OF SOUTH CAROLINA	)	IN THE COURT OF COMMON PLEAS
COUNTY OF CHARLESTON	)	CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased, Plaintiff, vs. MEDICAL UNIVERSITY OF SOUTH CAROLINA, Defendant.	)	**DEFENDANT'S MOTION TO EXCLUDE TESTIMONY OF DR. W. ANDREW KOFKE**

FILED
2016 APR 18 AM 9:06
JULIE J. ARMSTRONG
CLERK OF COURT
BY

TO: ROBERT B. RANSOM, ESQUIRE, COUNSEL FOR THE PLAINTIFF:

Defendant Medical University of South Carolina ("MUSC"), by and through its undersigned counsel, respectfully files this Motion to Exclude Testimony of Dr. W. Andrew Kofke:

INTRODUCTION

This is a wrongful death and survival action arising from the medical care and treatment that MUSC provided Charles Mikell on October 1, 2010.

Mr. Mikell was admitted to MUSC on October 1, 2010 to undergo a colonoscopy. During the colonoscopy, he experienced an arrest and was resuscitated. He was subsequently hospitalized at MUSC until October 26, 2010 then transferred to Kindred Hospital until November 19, 2010 when he was discharged home. On January 2, 2011, Mr. Mikell was found dead in his home.

In this matter, Plaintiff has sued MUSC alleging that the actions of MUSC proximately caused Mr. Mikell's death. Plaintiff attached to his January 31, 2013 Complaint an affidavit from W. Andrew Kofke, M.D. ("Dr. Kofke"), which stated in relevant part:

> 3. I have reviewed medical records for Charles Mikell from the Medical University of South Carolina (MUSC), where Mr. Mikell underwent

sedation for an elective colonoscopy performed on October 1, 2010. The MUSC chart reveals that due to his body habitus and history of cardiac problems and obstructive sleep apnea, Mr. Mikell was at high risk for hypoxia while undergoing sedation. Moreover, he had a history indicating susceptibility to arrhythmias.

4. With patients like Mr. Mikell, an effort needs to be undertaken by qualified and experienced anesthesia providers to protect and maintain the airway during sedation. A variety of methods are available to do this. The records of the case do not reflect any particular maneuvers to avoid hypoxemia after the sedation was begun other than a nasal airway with the predictable result that Mr. Mikell desaturated, became hypoxic and suffered a cardiac arrest during the colonoscopy procedure. These events were followed by a lengthy hospitalization.

5. In my professional judgment, the hypoxia and cardiac arrest were preventable events which could most probably have been avoided had reasonable care been exercised by the anesthesia team attending to Mr. Mikell.

(*See* Ex. to Pl.'s Compl. ¶¶ 3-5).

On or about April 25, 2013, Plaintiff identified Dr. Kofke as a potential expert witness in this matter, describing the scope of his testimony as follows: "[p]lease refer to the Affidavit of W. Andrew Kofke, MD attached to the Notice of Intent to File Suit, along with Dr. Kofke's CV." (*See* Ex. A, Pl.'s Ans. to Interrogatories ¶ 21). Dr. Kofke did not prepare a formal report containing his opinions in this matter.

The March 7, 2014 Second Amended Consent Scheduling Order required that Plaintiff identify all experts by June 1, 2014.

Defendant MUSC deposed Dr. Kofke on March 4, 2015. In that deposition, Dr. Kofke testified that (aside from an additional opinion he expressed at the deposition), all of the opinions he reached in this case were contained in the Affidavit attached to Plaintiff's Complaint.

Q: And so aside from the opinion that we just discussed, all of your other opinions regarding this case are contained in the affidavit?

A: Yes. Yes. They have to do with airway management and maintaining -- avoiding hypoxemia.

Q: And so I just wanted to be clear. That affidavit that we're talking about, the final affidavit and that's dated January 31st or October -- yeah. January 17th, right?

A: Yes. Yes. That's the final one.

(*See* Ex. B, Depo. of W. Andrew Kofke, at 54:13-23). In reliance on this testimony, MUSC reasonably believed, more than a year ago, that Plaintiff had disclosed every opinion to which Dr. Kofke would testify at trial.

However, on April 11, 2016, Plaintiff's counsel wrote to MUSC's counsel to advise that Dr. Kofke had reached the following paraphrased "main conclusions" "*in addition to* the things Dr. Kofke talked about at his deposition in March 2015" (emphasis added):

1. The anesthesia record has too many discrepancies and internal inconsistencies to be of much use in determining what really happened. The whole purpose of an electronic medical record is to avoid reliance on people's memories, which is what we are left with in this case.

2. If the text messages and phone calls took place before Mr. Mikell desaturated, then that activity probably caused the cardiac arrest because the anesthesia providers were distracted from what was developing.

3. If the text messages and phone calls took place during the desaturation, that is even worse because that activity would have interfered with managing the airway, leading to the cardiac arrest.

4. If the text messages and phone calls had nothing to do with it, then there is no excuse for failing to manage the airway so as to avoid the cardiac arrest entirely.

5. Following his debilitating hospitalization, Mr. Mikell never returned to his pre-event baseline. Several medications which had been used to keep him stable were changed while he was in the hospital. This made him more susceptible to the type of heart dysfunction described as being the likely cause of his death. So the cardiac arrest, physical injuries, hospitalization, debilitation, medical management, etc. all contributed to his death.

(*See* Ex. C). This letter also enclosed Dr. Kofke's additional notes "which are sort of his electronic cutting and pasting of the record as he goes through it." (*See id.*).

For the reasons that follow, this Court should exclude any opinions by Dr. Kofke at the trial of this matter.

ARGUMENTS

A. The Court Should Not Permit Dr. Kofke to Testify Concerning Any Opinions First Disclosed on April 11, 2016

South Carolina law permits, in appropriate circumstances, the exclusion of expert testimony that is not disclosed to the opposing party in a proper manner.

> In determining the appropriate sanction for late disclosure of an expert witness, this Court has stated, "it lies within the discretion of the trial judge to decide what sanction, if any, should be imposed. The rule is designed to promote decisions on the merits after a full and fair hearing, and the sanction of exclusion of a witness should never be lightly invoked." *Jackson v. H & S Oil Co., Inc.*, 263 S.C. 407, 411, 211 S.E.2d 223, 225 (1975) (*quoting Carver v. Salt River Valley Water Users' Ass'n.*, 8 Ariz. App. 386, 446 P.2d 492, 496 (1968)). In *Orlando v. Boyd*, 320 S.C. 509, 466 S.E.2d 353 (1996), we addressed the trial court's exclusion of the plaintiff's expert witness for failing to abide by a pre-trial scheduling date for taking depositions, stating, "[w]hatever sanction is imposed should serve to protect the rights of discovery provided by the rules. A sanction of dismissal is too severe if there is no evidence of any intentional misconduct." 320 S.C. at 511-512, 466 S.E.2d at 355.
>
> In *Jumper v. Hawkins*, 348 S.C. 142, 558 S.E.2d 911 (Ct.App.2001), the Court of Appeals addressed the authority of a trial court to exclude the testimony of an expert. The *Jumper* court held a trial judge is required to consider and evaluate the following factors before imposing the sanction of exclusion of a witness: (1) the type of witness involved; (2) the content of the evidence emanating from the proffered witness; (3) the nature of the failure or neglect or refusal to furnish the witness' name; (4) the degree of surprise to the other party, including the prior knowledge of the name of the witness; and (5) the prejudice to the opposing party. 348 S.C. at 152, 558 S.E.2d at 916.

Barnette v. Adams Bros. Logging, 355 S.C. 588, 592, 586 S.E.2d 572, 574-75 (2003).

Plaintiff timely designated Dr. Kofke as an expert. However, the only information provided to MUSC regarding the *scope* of Dr. Kofke's opinions was contained in the affidavit attached to the Complaint and in Dr. Kofke's deposition, which was taken more than a year ago. As of March, 2015, MUSC was led to believe that it had learned *all* of Dr. Kofke's opinions. However, on April 11, 2016, only days before trial was set to begin, Plaintiff identified additional opinions to which Dr. Kofke may testify. These opinions come from an extremely

important expert, who will testify on key issues of liability. Certainly these opinions could, and should, have been disclosed *much* earlier to MUSC.

Plaintiff responded to MUSC's discovery requests and identified Dr. Kofke as an expert on April 25, 2013, almost three years ago. Under South Carolina Rule of Civil Procedure 26(e)(2), "a party is under a duty seasonably to supplement his response with respect to any question directly addressed to . . . the identity of each person expected to be called as an expert witness at trial, *the subject matter on which he is expected to testify, and the substance of his testimony.*" (Emphasis added). MUSC respectfully posits that an update on the eve of trial is not a "seasonabl[e]" supplementation to Plaintiff's discovery requests.

Plaintiff claims that he just recently learned new information regarding the electronic medical record and the Mayday Card when he deposed Donna Embrey, CRNA for a second time on February 22, 2016. However, Plaintiff has known about the issues with the electronic medical record and the reason there is no recorded vital sign data from approximately 7:35 a.m. until 7:48 a.m. since MUSC produced the audit trail on February 27, 2015 in response to Plaintiff's Third Requests for Admission — *prior to Dr. Kofke's deposition.* At the very latest, Plaintiff learned of this more than six months ago, when the reason was discussed by Scott Reeves, M.D. in his September 22, 2015 deposition. Additionally, Plaintiff has known about the Mayday Card since July of 2015 when MUSC disclosed Sheila Scarbrough, RN, MSN as a witness. In any event, Plaintiff has been aware of these facts for months before his April 11, 2016 letter adding to Dr. Kofke's opinions.

Dr. Kofke's new opinions have come as an unfair surprise to MUSC, which has been led to believe for more than a year that it had the entirety of Dr. Kofke's opinions. The prejudice to MUSC is great. The focal point of a medical malpractice case is the expert testimony. Preparation of an adequate defense requires a precise understanding of the plaintiff's expert's opinions and the bases for those opinions. In this case the Defendant was entitled to rely upon Dr. Kofke's deposition testimony and the Plaintiff's duty to seasonably supplement his answers

to interrogatories disclosing the substance and basis of his expert's opinions in order to understand what expert opinions it will be required to defend at trial.

Therefore, for the foregoing reasons, this Court should preclude Dr. Kofke from testifying to any opinions not set forth in either his January 17, 2013 Affidavit or his March, 2015 deposition.

B. The Court Should Exclude Dr. Kofke's Testimony in the Wrongful Death Claim Because He Cannot Testify to the Central Issue in This Case: Causation

Additionally, the Court should preclude Dr. Kofke's testimony because he cannot express any opinion on an essential element of Plaintiff's case, proximate causation. To the contrary, at best, he can only speculate about the cause of Mr. Mikell's death.

The South Carolina Supreme Court in *Sherer v. James*, 290 S.C. 404, 351 S.E.2d 148 (1986), refused to follow *Hamil v. Bashline*, 307 A.2d 57 (Pa. Super. Ct. 1973) and its construction of Restatement (Second) of Torts § 323(a) (which nominally deals with the voluntary assumption of a duty) with respect to causation. The *Hamil* rule used the Restatement to reduce the proximate cause standard in Pennsylvania and permit the issue of causation to reach the jury upon evidence that the defendant's negligence merely *increased the risk* of harm. However, the South Carolina Supreme Court held that Section 323(a) of the Restatement applies *only* to the duty of care and *not* proximate cause and confirmed that "a medical malpractice plaintiff who relies upon expert testimony must introduce evidence that the defendant's negligence *most probably* resulted in the injuries alleged." *See id.* at 150.

In light of the foregoing, the following standards govern the question of proximate causation in a medical malpractice case:

> "In addition to proving the defendant negligent, the plaintiff must also prove that the defendant's negligence was a proximate cause of the plaintiff's injury." *Carver v. Med. Soc'y of S.C.*, 286 S.C. 347, 350, 334 S.E.2d 125, 127 (Ct.App.1985). Our supreme court has articulated the burden of proof borne by plaintiffs in proving proximate cause in medical malpractice cases:

> Negligence is not actionable unless it is a proximate cause of the injury complained of, and negligence may be deemed a proximate cause only when without such negligence the injury would not have occurred or could have been avoided. When one relies solely upon the opinion of medical experts to establish a causal connection between the alleged negligence and the injury, the experts must, with reasonable certainty, state that in their professional opinion, *the injuries complained of most probably resulted from the defendant's negligence*. The reason for this rule is the highly technical nature of malpractice litigation. *Since many malpractice suits involve ailments and treatments outside the realm of ordinary lay knowledge, expert testimony is generally necessary.*

Ellis v. Oliver, 323 S.C. 121, 125, 473 S.E.2d 793, 795 (1996) (citations omitted and emphasis added). Therefore, the expert testimony as to proximate cause must provide a significant causal link between the alleged negligence and the injuries suffered, rather than a tenuous and hypothetical connection. *Id.*

> It is not sufficient for the expert to testify merely that the ailment might or could have resulted from the alleged cause. He must go further and testify that taking into consideration all the data it is his professional opinion that the result in question most probably came from the cause alleged. In determining whether particular evidence meets this test it is not necessary that the expert actually use the words "most probably." It is sufficient that the testimony is such "as to judicially impress that the opinion ... represents his professional judgment as to the most likely one among the possible causes."

[*Baughman v. Am. Tel. & Tel.*, 306 S.C. 101, 111, 410 S.E.2d 537, 543 (1991) (citations omitted)].

See Martasin v. Hilton Head Health Sys., 364 S.C. 430, 438-39, 613 S.E.2d 795, 799-800 (Ct. App. 2005) (emphasis added). "A defendant physician is entitled to put the medical malpractice plaintiff to proof equally as stringent as that required of plaintiffs in other negligence actions." *See Sherer v. James*, 290 S.C. 404, 408, 351 S.E.2d 148, 151 (1986).

Dr. Kofke's testimony makes clear that he cannot testify about what proximately caused Mr. Mikell's death — a *necessary* requirement of proof in this case. For example, Dr. Kofke testified:

> Q: And so with regard to your affidavit says somewhere along the lines of, "These events were followed by a lengthy hospitalization." Do you intend to give any opinions about what might have caused him to be in the hospital or ultimately what caused his death?

A: Well, it's kind of a tricky question, not that you're trying to be tricky, but I think that if he hadn't had the cardiac arrest, none of that would have happened. So that's one arm of that answer.

But the other arm is I'm not exactly sure what caused him to go into renal failure. Why he needed a trach and peg, and you know, all of that except that I'm confident that none of it would have happened if he hadn't had the cardiac arrest. And they chose to cool him afterwards.

(*See* Ex. B, at 116:3-19). He further stated outright that he had no opinions as to the *cause* of Mr. Mikell's death:

Q: Do you have any opinions about the cause of Mr. Mikell's death?

A: *No.* I didn't review his chart carefully for damages, or you know, things like that.

Q: And are you going to be rendering any opinions about whether the cardiac arrest caused any injuries and/or a worsening of his cardiac function?

A: I didn't review his chart carefully for those elements, so I don't think I should comment. I was asked to review the anesthesia management.

Q: And so just to clarify. You're not going to give any opinions about whether the cardiac arrest that occurred on October 1st, 2010, caused or contributed to any alleged damage to his heart or a worsening to his heart function?

A: If his heart got worse after this, I think I have to say that the cardiac arrest contributed to it because it wouldn't have happened without the cardiac arrest. But after the cardiac arrest and the hyperthermia, I didn't focus on any of that stuff.

(*See* Ex. B, at 117:3-24).

At most, he could only opine that the events of October 1, 2010 might have *contributed* to the death of Mr. Mikell; however, he does not (and cannot) opine that Mr. Mikell would not have died "*but-for" those events*:

Q: Do you intend to testify that the events that occurred on October 1st of 2010, somehow caused or contributed to Mr. Mikell's death?

A: I think that they contributed, I'm not sure that they caused.

Q: And when you say you think that they contributed, what factors are you relying on? Do you know what caused his death --

A: No.

Q: -- do you have any opinions as to what caused his death?

A: Nope. All I know is that if the cardiac arrest hadn't happened, he would have gone home that night. But instead, he had a cardiac arrest and ended up with a prolonged ICU stay and trach and peg, and you know.

So I can't help but conclude that the cardiac arrest contributed to this. I don't know or I don't recall what the exact cause of his moment of death was.

(*See* Ex. B, at 119:9-120:4). Dr. Kofke concedes that he cannot opine as to the mechanism that actually caused Mr. Mikell's death:

Q. And when you say that had he not suffered an arrest and that none of this stuff would have happened and so therefore it automatically contributed to his death, what factors about his condition contributed in your opinion to his death?

A. I don't know. Except that he would have gone home that night if he hadn't had the cardiac arrest and wouldn't have undergone the hospitalization and whatever happened after that.

Q. And so is it your opinion that because Mr. Mikell suffered an arrest, that it must have in some way contributed to his death?

A. Yes. That's why I used the word "contributed." I'm not sure about caused.

Q. And, but you're not able to provide any information regarding what factors about his condition or what sequelae the arrest may have caused that contributed to his death, is that correct?

A. That's correct.

(*See* Ex. B, at 123-24).

At most, Dr. Kofke's conclusory opinion about "contributing" to Mr. Mikell's death seeks to bring this case within the rejected *Hamil* rule. Dr. Kofke does not opine as to what, in his professional opinion, most probably caused Mr. Mikell's death. At the very most, his testimony boils down to the opinion that Mr. Mikell's arrest at MUSC might have increased the risk that he might die. But without having an opinion as to the cause of death, and indeed without even knowing whether Mr. Mikell suffered damage to his heart as a result of the arrest, he cannot

possibly state to a reasonable degree of medical certainty that Mr. Mikell most probably would not have died even if he had not suffered the arrest.

Dr. Kofke's testimony fails to establish the necessary causal link between MUSC's alleged negligence and Charles Mikell's death. Dr. Kofke cannot establish that Mr. Mikell's death would not have occurred but for MUSC's negligence. Dr. Kofke would have to opine on that subject for his testimony to be relevant and admissible in the first instance. In fact, there is no reliable evidence whatsoever as to what caused Mr. Mikell's death. In the absence of such evidence, Plaintiff is forced to resort to speculation as to the cause of death. He should not be permitted to bolster his speculation with Dr. Kofke's opinions that do not even address the central issue.

CONCLUSION

For the reasons set forth above, this Court should grant MUSC's Motion to Exclude Testimony of Dr. W. Andrew Kofke.

Barnwell Whaley Patterson & Helms, LLC

By: _____
M. Dawes Cooke, Jr.
Alissa D. Fleming
288 Meeting Street, Suite 200 (29401)
Post Office Drawer H
Charleston, SC 29402
Tel: (843) 577-7700
Fax: (843) 577-7708
Counsel for Defendant Medical University of South Carolina

Charleston, South Carolina
April 15, 2016

Exhibit A

STATE OF SOUTH CAROLINA	)	IN THE COURT OF COMMON PLEAS
	)	
COUNTY OF CHARLESTON	)	CIVIL ACTION NO.:2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased,	)	
Plaintiff,	)	**PLAINTIFF'S ANSWERS TO INTERROGATORIES**
vs.	)	
MEDICAL UNIVERSITY OF SOUTH CAROLINA,	)	
Defendant.	)	

The Plaintiff, through his undersigned attorneys, answers the Defendant Medical University of South Carolina's First Set of Interrogatories to Plaintiff, as follows:

1. **State the full name, addresses, telephone number and relationship, if any, to the parties to this action, of each and every person who has knowledge, information, or evidence related to any facts alleged in Plaintiff's Complaint or Defendant's Answer and set forth a summary sufficient to inform the Defendant of the important facts known to or observed by such witness or provide a copy of any written or recorded statements taken from such witness.**

Shon Turner
1325 5th Avenue
Charleston, SC 29407

Mr. Turner is the stepson of Charles Mikell. He has knowledge of Mr. Mikell's medical history, work history, educational background, the events surrounding the October 1, 2010 colonoscopy and the impact of the resulting cardiac arrest on Mr. Mikell's lifestyle and relationship with his family members. There are no statements from Mr. Turner.

Jewell Mikell
1325 5th Avenue
Charleston, SC 29407

Mrs. Mikell is the mother of Charles Mikell. She has knowledge of Mr. Mikell's medical history, work history, educational background, the events surrounding the October 1, 2010 colonoscopy and the impact of the resulting cardiac arrest on Mr. Mikell's lifestyle and relationship with his family members. There are no statements from Mrs. Mikell.

Luann Arthur
14415 Lusby Ridge Road
Accokeek, MD 20607

Ms. Arthur is the ex-wife of Charles Mikell. She has knowledge of Mr. Mikell's medical history, work history, educational background, the events surrounding the October 1, 2010 colonoscopy and the impact of the resulting cardiac arrest on Mr. Mikell's lifestyle and relationship with his family members. There are no statements from Ms. Arthur.

Madison Michael
14415 Lusby Ridge Road
Accokeek, MD 20607

Ms. Michael is the teenage daughter of Charles Mikell. She has knowledge of the impact of the October 1, 2010 cardiac arrest on Mr. Mikell's lifestyle and relationship with his family members. There are no statements from Ms. Michael.

Dadrian Michael
14415 Lusby Ridge Road
Accokeek, MD 20607

Mr. Michael is the teenage son of Charles Mikell. He has knowledge of the impact of the October 1, 2010 cardiac arrest on Mr. Mikell's lifestyle and relationship with his family members. There are no statements from Ms. Michael.

Deborah Drinkwater
The Canterbury House
175 Market Street
Charleston, SC 29401

Ms. Drinkwater is a representative of The Canterbury House who supplied Plaintiff's counsel with a lost wage verification form.

Jeffrey A. Akhtar, MD
Carolina Family Care
30 Bee Street, Suite 210
Charleston, SC 29413

Dr. Akhar was Charles Mikell's primary care physician. Statements made by Dr. Akhar are contained in Mr. Mikell's medical records.

Michael R. Zile, MD
Medical University of South Carolina
Department of Cardiology
25 Courtney Drive, ART 7042
Charleston, SC 29425

Dr. Zile was one of Charles Mikell's cardiologists. Statements made by Dr. Zile are contained in Mr. Mikell's medical records.

Adrian B. Van Bakel, MD - decedent's cardiologist Medical records
Medical University of South Carolina
Department of Cardiology
25 Courtney Drive, MSC 592
Charleston, SC 29425

Dr. Van Bakel was one of Charles Mikell's cardiologists. Statements made by Dr. Van Bakel are contained in Mr. Mikell's medical records.

Pamela A. Mazyck, Pharm.D.
Medical University of South Carolina
College of Pharmacy
135 Rutledge Avenue
Charleston, SC 29401

Dr. Mazyck was a pharmacologist who helped to manage Charles Mikell's medications. Statements made by Dr. Mazyck are contained in Ms. Mikell's medical records.

Eric W. Nelson, DO
Medical University of South Carolina
25 Courtney Drive, Suite 4200
Charleston, SC 29425

Dr. Nelson was involved in providing anesthesia for the colonoscopy Charles Mikell underwent on October 1, 2010. Statements made by Dr. Nelson should be contained in Mr. Mikell's medical records.

Donna B. Embrey, CRNA
Medical University of South Carolina
Department of Anesthesia
167 Ashley Avenue, Suite 301
Charleston, SC 29425

Ms. Embry was involved in providing anesthesia for the colonoscopy Charles Mikell underwent on October 1, 2010. Statements made by Ms. Embry should be contained in Mr. Mikell's medical records.

Kenneth M. Payne, MD
Medical University of South Carolina
Department of Gastroenterology and Hepatology
25 Courtney Drive, ART 7100A
Charleston, SC 29425

Dr. Payne was the gastroenterologist who was to perform the colonoscopy on Charles Mikell on October 1, 2010. Statements made by Dr. Payne should be contained in Mr. Mikell's medical records.

John T. Huggins, MD
Palmetto Pulmonary & Sleep Medicine
96 Jonathan Lucas Street, Suite 812 CSB
Charleston, SC 29425-6300

Dr. Huggins was one of the attending physicians during Charles Mikell's hospitalization at MUSC following his October 1, 2010 cardiac arrest. Statements made by Dr. Huggins are contained in Mr. Mikell's medical records.

Jennifer R. Matos, MD
Medical University of South Carolina
Department of Anesthesiology
167 Ashley Avenue, Suite 301
Charleston, SC 29425

Dr. Huggins was one of the attending physicians during Charles Mikell's hospitalization at MUSC following his October 1, 2010 cardiac arrest. Statements made by Dr. Matos are contained in Mr. Mikell's medical records.

Sofia Barbosa, MD
326 Calhoun Street
3rd Floor
Charleston, SC 29401

Dr. Barbosa was the attending physician at Kindred Hospital of Charleston, to which Charles Mikell was transferred upon his discharge from MUSC.

2. **State the full name, address, date of birth, place of birth, and social security number of Plaintiff or Decedent and all residence addresses of Plaintiff and Decedent during the ten (10) years preceding October 1, 2010 to present (include the approximate dates in which Plaintiff resided at each such address).**

The Plaintiff objects to this Interrogatory as being overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving this objection, the Plaintiff answers as follows:

Charles Lamar Mikell	DOB: January 25, 1961
1332 Vine Street	SS#: XXX-XX-5199
Charleston, SC 29407	Charleston, SC
Shon Turner	DOB: May 5, 1988
1325 5th Avenue	SS#: XXX-XX-9859
Charleston, SC 29407	Charleston, SC

3. **State the marital history of Plaintiff and Decedent, if applicable, with complete names, addresses, telephone numbers, and dates of marriage of all spouses.**

The Plaintiff objects to this Interrogatory on the grounds that his marital history is neither relevant to this issues in this case nor reasonably calculated to lead to the discovery of admissible evidence.

At the time of his death, Charles Mikell was divorced from Luann Arthur who currently resides at 14415 Lusby Ridge Road in Accokeek, Maryland 20607.

4. **State the full name, address, date of birth, and place of birth of the children of Plaintiff and Decedent.**

The Plaintiff objects to this Interrogatory on the grounds that information about his children is neither relevant to this case nor reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving this objection, Charles Mikell had two children at the time of his death:

Madison Michael
14415 Lusby Ridge Road
Accokeek, MD 20607

DOB: March 28, 1994
Charleston, SC

Dadrian Michael
14415 Lusby Ridge Road
Accokeek, MD 20607

DOB: March 22, 1998
Charleston, SC

5. **Beginning with high school, state the educational background of Plaintiff with the names and addresses of each school, dates of enrollment and degree(s)/certificate(s) received by Plaintiff.**

The Plaintiff objects to this Interrogatory on the grounds that it seek information which is neither relevant to the issues in this case nor reasonably calculated to lead to the discovery of admissible evidence.

6. **Beginning with high school, state the educational background of Decedent with the names and addresses of each school, dates of enrollment and degree(s)/certificate(s) received by Decedent.**

The Decedent graduated from Bishop England High School about 1979 and graduated from Shaw University in Raleigh, North Carolina about 1983 with a degree in radio, television and film.

7. **From ten (10) years prior to October 1, 2010, until the time of trial for the Plaintiff, identify each of his employers with each employer's complete address and as to each employer include street number, street, city or town, county and state; the nature of that employment; the title(s) of each job(s) held; the date of employment; annual income for each year; and the name of Plaintiff's immediate supervisor(s).**

The Plaintiff objects to this Interrogatory on the grounds that it seek information which is neither relevant to the issues in this case nor reasonably calculated to lead to the discovery of admissible evidence.

8. **From ten (10) years prior to October 1, 2010, until the time of trial for the Decedent, identify each of his employers with each employer's complete address and as to each employer include street number, street, city or town, county and state; the nature of that employment; the title(s) of each job(s) held; the date of employment; annual income for each year; and the name of Decedent's immediate supervisor(s).**

At the time of his death, Charles Mikell was working part-time as a driver for The Canterbury House, 175 Market Street, Charleston, SC 29401. Questions about his employment may be directed to Deborah Drinkwater. Mr. Mikell's employment at The

Canterbury House began sometime around 2006.

Mr. Mikell had previously worked as a master controller/sound technician for WCBD/Channel 2 in Charleston, South Carolina, where he began working shortly after graduating from Shaw University in or about 1983. Mr. Mikell also worked part-time at Rick Hendrix and Diamond Imports, both Charleston-area car dealerships, for a few years in the mid- to late-1990s.

9. **If the Plaintiff and Decedent have ever received any medical care or treatment from any doctor, dentist, psychiatrist, therapist, nurse or other type of practitioner of the healing arts as a result of injuries alleged in the Complaint or related to the allegations contained in the Complaint, as to Plaintiff and Decedent, please identify the names and addresses of each practitioner; the date they first received such care or treatment from each; the injuries or complaints for which the Plaintiff and Decedent came in contact with the health care professional; the dates of care or treatment for which the Plaintiff and Decedent saw him or her; the treatment given and the treatment prescribed by each; the name and description of any surgery performed by each; and, if recommended by any doctor or therapist, give that doctor or therapist's name and address.**

The Plaintiff objects to this Interrogatory on the grounds that his medical history is neither relevant to the issues in this case nor reasonably calculated to lead to the discovery of admissible evidence.

In regard to the Decedent, please refer to the records of the medical care providers identified in answer to Interrogatory No. 1, above. Additional information responsive to this Interrogatory may be derived from a review of Charles Mikell's medical records from MUSC as well as the billing statements from MUSC Medical Center, University Medical Associates and Kindred Hospital of Charleston.

10. **If the Plaintiff and/or Decedent has ever received any medical benefits, including health care coverage or insurance, please identify the names and addresses of each healthcare insurance provider; the dates of coverage for which the Plaintiff and/or Decedent received such coverage, and the identification number and/or policy number for each and every health insurance coverage plan in which the Plaintiff and/or Decedent were covered.**

The Plaintiff objects to this Interrogatory on the grounds that his medical history is neither relevant to the issues in this case nor reasonably calculated to lead to the discovery of admissible evidence.

The Plaintiff objects to this Interrogatory as seeking information about collateral source payments which are neither admissible in evidence nor reasonably calculated to lead to the

discovery of admissible evidence.

11. **Had the Decedent been hospitalized for any reason within the ten (10) years prior to October 1, 2010? If so, give the name and address of the hospital, the dates of the hospitalization, and the reason for the hospitalization.**

Please refer to records for Charles Mikell from MUSC and Kindred Hospital of Charleston.

12. **Has the Decedent been hospitalized for any reason within the ten (10) years prior to October 1, 2010, and up to the time of death? If so, give the name and address of the hospital, the dates of the hospitalization, and the reason for the hospitalization.**

Please refer to records for Charles Mikell from MUSC and Kindred Hospital of Charleston.

13. **State the names and addresses of Plaintiff and Decedent's primary care and specialty care doctors, healthcare providers, counselors, psychiatrist, or psychologists, mental health counselors or other counselors, or provider of the healing arts from ten (10) years prior to October 1, 2010 and up to the time of trial as to Plaintiff and the time of death as to Decedent.**

The Plaintiff objects to this Interrogatory on the grounds that his medical history is neither relevant to the issues in this case nor reasonably calculated to lead to the discovery of admissible evidence.

As for the Decedent:

Jeffrey A. Akhtar, MD - decedent's primary care physician
Carolina Family Care
30 Bee Street, Suite 210
Charleston, SC 29413

Richard W. Browder, MD - decedent's kidney doctor
Charleston Nephrology Associates
3815 Faber Place Drive
North Charleston, SC 29405

Michael R. Zile, MD - decedent's cardiologist
Medical University of South Carolina
Department of Cardiology
25 Courtney Drive, ART 7042
Charleston, SC 29425

Adrian B. Van Bakel, MD - decedent's cardiologist
Medical University of South Carolina
Department of Cardiology
25 Courtney Drive, MSC 592
Charleston, SC 29425

Pamela A. Mazyck, Pharm.D. - decedent's clinical pharmacologist
Medical University of South Carolina
College of Pharmacy
135 Rutledge Avenue
Charleston, SC 29401

14. **Have any of the doctors or medical personnel who attended, treated, examined or consulted with Plaintiff and Decedent made written reports to Plaintiff and Decedent, any family member, attorneys, or to anyone acting on their behalf relating to Plaintiff and Decedent? If yes, state the date of each such report, including drafts, the addressee of each such report, the name of each doctor or medical personnel making each such report, and the present custodian(s) of each report.**

Please refer to the medical records for Charles Mikell. The Plaintiff objects to this Interrogatory to the extent it seeks disclosure of information beyond the scope of Rule 26(b)(4), SCRCP.

15. **If any doctor has advised the Plaintiff and/or Decedent, Plaintiff's attorney, or anyone acting in or on the Plaintiff and/or Decedent's behalf as to the cause or causes of the injuries to Decedent, please state the diagnosis made, the name and address of the doctor making it, and the date thereof.**

The Plaintiff objects to this Interrogatory to the extent it seeks disclosure of information beyond the scope of Rule 26(b)(4), SCRCP.

Subject to and without waiving this objection, the Plaintiff refers the Defendant to the medical records for Charles Mikell, including the Death Certification completed by Deputy Coroner Bobbi Jo O'Neal.

16. **Within ten (10) years prior to October 1, 2010, if Plaintiff or Decedent suffered any type of physical or mental injuries, illnesses, or other complaints, then state the following:**

a. **List fully all such prior injuries, illnesses, complaints and symptoms stating to which area or areas of the body they are related, the dates and causes or cause of origin, and the date or dates when complaints and symptoms were no longer noticed.**

b. **State when, where and the nature of medical treatment, if any, received for each**

such prior injury, illness, or complaint including the name of the medical practitioners providing such care.

c. **Describe fully any accident or occurrence that gave rise to each of these injuries, complaints, or illnesses giving the date of each such accident or occurrence, where it occurred, and the nature of the event.**

d. **If a claim was made arising out of the injury, give the name of the person against whom the claim was made, the name of his or her insurer, the full caption and action number of any suit that was filed, and the disposition of the claim.**

The Plaintiff objects to this Interrogatory on the grounds that his medical history is neither relevant to the issues in this case nor reasonably calculated to lead to the discovery of admissible evidence.

As for the Decedent, please refer to the medical records for Charles Mikell from MUSC.

17. **Set forth an itemized statement of all damages claimed to have been sustained by the Plaintiff and Decedent, as a result of the occurrence set forth in the Amended Complaint. If there has been a specific amount of money incurred for any item, specify the amount of money incurred.**

The Plaintiff is currently able to identify the following:

Medical expenses:

Medical University Hospital Authority	$191,998.83
Kindred Hospital of Charleston	$ 986.00
University Medical Associates	$ 40,588.00
Charleston Pulmonary Associates	$ 285.00
Charleston Nephrology Associates	$ 1,697.00
Carolina Family Care	$ 180.00
Palmetto Mortuary	$ pending
Lost earning capacity:	$ pending
Physical pain and suffering	$ unquantified
Loss of enjoyment of life	$ unquantified
Alteration of lifestyle	$ unquantified
Mental anguish	$ unquantified
Psychological trauma	$ unquantified
Embarrassment and humiliation	$ unquantified

The decedent's surviving beneficiaries have each sustained the following losses:

- Mental shock and suffering
- Wounded feelings
- Grief and sorrow
- Loss of companionship
- Loss of decedent's comfort, society, experience, knowledge, and judgment in managing his own affairs and the affairs of his beneficiaries
- Loss of decedent's ability to earn money for the support, maintenance, care and protection of his beneficiaries and the education and training of his children
- funeral expenses

18. **If any insurance company, union, or any other person, firm, or corporation has paid on behalf of or reimbursed the Plaintiff and Decedent of this action, or become obligated to pay on behalf of or reimburse the Plaintiff and Decedent or anyone on the Plaintiff and/or Decedent's behalf, for any medical or hospital expense or other expense that is being claimed as part of the damages in this case, that arose or was incurred in any way as a result of the occurrence that gives rise to this lawsuit, list such payment or expense, itemizing dates incurred, the nature of each expense, and the name and address of the insurance company, union, or other person, firm, or corporation who or which has paid, or is obligated for the payment of, or reimbursement for, said expense, and the amount paid by each.**

The Plaintiff objects to this Interrogatory as seeking information about collateral source payments which are neither admissible in evidence nor reasonably calculated to lead to the discovery of admissible evidence.

19. **List and describe each and every document, drawing, map, diagram, model, or other documentary material or tangible object that Plaintiff intends to rely on to support Plaintiff's allegations in this action, regardless of whether you intend to offer the same into evidence or use as a demonstrative aid at the trial of this action.**

The Plaintiff objects to this Interrogatory as seeking information beyond the scope of Rule 26, SCRCP and protected from disclosure by the attorney work-product doctrine.

20. **List and describe each and every document and other tangible object, not listed above, that relates to the claims or the defenses of this action.**

Please refer to the Plaintiff's Response to Request for Production.

21. **List the names, addresses, and telephone numbers of any individual whom you propose to use as an expert witness at the trial of this action and for each state in detail their qualifications to testify and the substance of their opinions and the grounds for his or**

her opinions.

W. Andrew Kofke, MD
Professor, Director of Neuroanesthesia
Co-Director Neurocritical Care
Department of Anesthesiology and Critical Care
Department of Neurosurgery
University of Pennsylvania
7 Dulles Building
3400 Spruce Street
Philadelphia, PA 19104-4283

Please refer to the Affidavit of W. Andrew Kofke, MD attached to the Notice of Intent to File Suit, along with Dr. Kofke's CV.

The Plaintiff may seek to elicit expert opinion testimony from any of the decedent's treating medical care providers, including those listed or otherwise identified in the Plaintiff's Answers to Interrogatories.

22. **As to each expert listed in response to the Interrogatory above, list the caption, jurisdiction, and year of filing any suit in which he or she has given court or deposition testimony.**

W. Andrew Kofke, MD

Grant Belton v. Mary Dalton *et alia*, Richland County Court of Common Pleas, 2003-CP-40-2220

Robert Dickey *et alia* v. Palmetto Health Alliance *et alia*, Richland County Court of Common Pleas, 2006-CP-40-6252

Additional information responsive to this Interrogatory is not in the possession of Plaintiff or his counsel.

23. **Identify by date, author, location, and citation, where appropriate, each and every code, regulation, statute, custom, standard or test which you contend the Defendant MUSC violated, and state with particularity the facts upon which you rely to allege such violations.**

Please refer to the Affidavit of W. Andrew Kofke, MD. No other information responsive to this Interrogatory is in possession of the Plaintiff or his counsel.

24. **List all medications or drugs which Decedent was taking for the last ten (10) years, and up to the time of his death, along with whether each was over the counter or prescription, the dates taken, and the name, address and title of the person who recommended or prescribed the drug or medication.**

Please refer to the decedent's medical records for an accurate and complete answer to this Interrogatory.

25. **List all medications or drugs which Plaintiff was or is taking for the last ten years, and up to the time of trial, along with whether each was over the counter or prescription, the dates taken, and the name, address and title of the person who recommended or prescribed the drug or medication.**

The Plaintiff objects to this Interrogatory on the grounds that his medical history is neither relevant to the issues in this case nor reasonably calculated to lead to the discovery of admissible evidence.

26. **List all herbal and/or dietary supplements including the brand and dosage which the Decedent was taking prior to October 1, 2010, and up to the time of his death, along with whether each was over the counter or prescription, the dates taken, and the name, address and title of the person who recommended or prescribed.**

None of which the Plaintiff is currently aware. Please refer to the Decedent's medical records for a full and complete answer to this Interrogatory.

27. **State the full name and address of each and every pharmacy or business that filled any prescription for the Plaintiff and/or Decedent during the ten (10) years prior to October 1, 2010, and up to the time of trial.**

The Plaintiff objects to this Interrogatory on the grounds that his medical history is neither relevant to the issues in this case nor reasonably calculated to lead to the discovery of admissible evidence.

As for the Decedent, the Plaintiff believes the decedent filled prescriptions at an Eckerd Pharmacy on Ashley River Road in the West Ashley area of Charleston. Plaintiff believes this may now be a Rite Aid Pharmacy.

28. **Give the names of all persons who were living at the residence of the Decedent at the time of occurrence set forth in the Amended Complaint, and as to each describe their relationship to the Plaintiff and Decedent.**

Charles Lamar Mikell - the decedent
1332 Vine Street

Charleston, SC 29407

29. **Have the Plaintiff and/or Decedent ever been arrested? If so, for each provide:**
   a. **The date of the arrest;**
   b. **The name of the jurisdiction conducting the arrest;**
   c. **The nature of the charges; and**
   d. **The disposition of the charges.**

The Plaintiff objects to this Interrogatory on the grounds that it seeks information which is neither admissible in evidence nor reasonably calculated to lead to the discovery of admissible evidence. The decedent will not be testifying so that his criminal record, if any, is irrelevant.

The decedent has never been arrested.

30. **Give the title, author, date, volume and page, where appropriate, of any periodical, journal, text, paper, or other publication of any kind, to which counsel for Plaintiff intends to refer, or about which he or she intends to ask any questions, during the examination or cross-examination of any witness at trial or during any deposition.**

Any witness in the case may be questioned about any and every document, item or thing identified, produced or obtained by any party or witness to this case.

31. **Identify each individual, whether the individual cared for the Decedent, or not, who deviated from the standard of care, and the dates and times that such deviations occurred. If unable to identify employee, produce page of record with the documentation identified in the record.**

Please refer to the Affidavit of W. Andrew Kofke, MD attached to the Notice of Intent to File Suit. Upon information and belief, Eric W. Nelson, DO, Donna B. Embrey, CRNA and Kenneth M. Payne, MD were responsible for the decedent's safety during the October 1, 2010 colonoscopy. Additional information responsive to this Interrogatory may become available as discovery progresses.

32. **If any claim has been made against any person or entity other than the Defendant herein arising out of the injuries described in the Plaintiff's Complaint, please give, as to such claim or claims, the name of the entity against whom they were made; the name and address of any insurance carrier for the person or entity; the amount of any settlement or judgment; and an itemization of all documents pertaining to such claims, including legal pleadings, releases, or other correspondence. If Plaintiff is unable to identify the name(s) of the employee(s) who Plaintiff contends deviated from the standard of care, produce the page of the medical record or otherwise containing the documentation identified in the record supporting the alleged deviation(s).**

None.

33. **Set forth the full name of all persons related to Plaintiff and Decedent (by blood or by marriage), over the age of eighteen (18), residing in Charleston County.**

Shon Turner - stepson
Jewell Miller Mikell - mother
Addie Miller Wright - aunt

34. **Has Decedent ever applied for Medicare or received Medicare? If so, please state the date in which the application was made and the reason for such application.**

Upon information and belief, Charles Mikell was both eligible for and receiving Medicare at the time of the events in question. No other information responsive to this Interrogatory is known to the Plaintiff.

35. **State whether Medicare provided payment to any medical providers, healthcare professionals, physicians, or supplies of medical equipment for any treatment for any medical or health condition and/or injuries that allegedly occurred as a result of the injuries to Decedent alleged in the Complaint.**

Yes.

36. **State whether Plaintiff and or Decedent or counsel reported a claim at issue in this case to the Coordinator of Benefits Contractor for the Center for Medicare and Medicaid Service (CMS) or any other Medicare related agency? If so, state the reason for reporting the claim.**

No.

37. **Has Plaintiff and/or Decedent received notice of a Medicare lien against any recovery Plaintiff may receive in this action?**

No.

BY: _____

Robert B. Ransom
LEVENTIS & RANSOM
Post Office Box 11067
Columbia, SC 29211
(803) 765-2383
(803) 799-1612 (fax)
Bertcone@aol.com

Alex Apostolou
215 East Bay Street, Suite 505F
Charleston, SC 29401
(843) 853-3637
Alexapostolou@bellsouth.net

ATTORNEYS FOR THE PLAINTIFF

CERTIFICATE OF MAILING

The undersigned hereby certifies that a true copy of the Plaintiff's Answers to Interrogatories has been served upon opposing counsel by depositing in the United States mail a copy of same properly addressed with sufficient postage affixed thereto this 25 day of April, 2013.

Robert B Rawson

FILED
2013 JAN 31 PM 4:56
JULIE J. ARMSTRONG
CLERK OF COURTS
BY

STATE OF PENNSYLVANIA)
) **AFFIDAVIT OF W. ANDREW KOBKE, MD**
COUNTY OF PHILADELPHIA)

PERSONALLY APPEARED BEFORE ME, the undersigned who, being duly sworn, deposes and states as follows:

1. I am over the age of eighteen (18) years, am legally competent to make this affidavit, and have personal knowledge of the matters set forth herein.

2. I am a medical doctor licensed by the State of Pennsylvania. I received my medical degree from the University of Pittsburgh School of Medicine in 1978. I received fellowship training in Critical Care Medicine and Neuroanesthesia at Massachusetts General Hospital. In the past, I have held teaching positions in anesthesia at Harvard Medical School, Pennsylvania State University, the University of Pittsburgh and West Virginia University. I am currently a Professor in the Department of Anesthesia at the University of Pennsylvania. I have been Board Certified in Anesthesiology since 1983 and in 1986 I received Sub-Specialty Certification in Critical Care Medicine. I am quite familiar with the standards of care applicable to all aspects of the practice of anesthesia including sedation during endoscopic procedures.

3. I have reviewed medical records for Charles Mikell from the Medical University of South Carolina (MUSC), where Mr. Mikell underwent sedation for an elective colonoscopy performed on October 1, 2010. The MUSC chart reveals that due to his body habitus and history of cardiac problems and obstructive sleep apnea, Mr. Mikell was at high risk for hypoxia while undergoing sedation. Moreover, he had a history indicating susceptibility to arrhythmias.

4. With patients like Mr. Mikell, an effort needs to be undertaken by qualified and experienced anesthesia providers to protect and maintain the airway during sedation. A variety of methods are available to do this. The records of the case do not reflect any particular maneuvers to avoid hypoxemia after the sedation was begun other than a nasal airway with the predictable result that Mr. Mikell desaturated, became hypoxic and suffered a cardiac arrest during the colonoscopy procedure. These events were followed by a lengthy hospitalization.

5. In my professional judgment, the hypoxia and cardiac arrest were preventable events which could most probably have been avoided had reasonable care been exercised by the anesthesia team attending to Mr. Mikell.

BY: _____
W. Andrew Kofke, MD

FURTHER AFFIANT SAYETH NAUGHT

SWORN TO BEFORE ME this
17th day of January, 2013.

Tiffany M. Pinkney
Notary Public for the State of Pennsylvania

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Tiffany M. Pinkney, Notary Public
City of Philadelphia, Philadelphia County
My Commission Expires Oct. 7, 2015
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

My commission expires:

10/7/2015

Exhibit B

STATE OF SOUTH CAROLINA
IN THE COURT OF COMMON PLEAS OF
THE COUNTY OF CHARLESTON

- - -

SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased
Plaintiff

vs.

MEDICAL UNIVERSITY OF SOUTH CAROLINA
Defendant

:CIVIL ACTION NO.
:2012-CP-10-7275

- - -

Wednesday, March 4, 2015
Media, Pennsylvania

- - -

Videoconference deposition of WILLIAM A. KOFKE, M.D., MBA, FCCM., taken pursuant to notice at the offices of Penn State University, Brandywine Campus, 25 Yearsley Mill Road, Room 111G, Media, Pennsylvania 19063, on the above date, beginning at approximately 2:03 p.m., before Joanne H. Gusler, Registered Professional Reporter and Notary Public for Pennsylvania.

MEDIA COURT REPORTING
216 West Front Street
Media, PA 19063
610.566.0805 fax 610.566.0318
www.mediacourtreporting.com
mcr@mediacourtreporting.com

APPEARANCES:

ROBERT B. RANSOM, ESQUIRE
Levantis & Ransom
1913 Bull Street
Columbia, SC 29201
Counsel for the Plaintiff

ALISSA D. FLEMING, ESQUIRE
Barnwell, Whaley, Patterson & Helms, LLC.
288 Meeting Street, Suite 200
Charleston, SC 29402
Counsel for the Defendant

(INDEX at end of transcript.)

WILLIAM A. KOFKE, M.D., MBA, FCCM., having been duly sworn, was examined and testified as follows:

- - -

---DIRECT EXAMINATION---

BY MS. FLEMING:

Q. Dr. Kofke, could you please state your full name for the record.
A. William Andrew Kofke, K-O-F-K-E.
Q. And what is your current address.
A. 3400 Spruce Street, Philadelphia, 190 -- 19104.
Q. And I understand that you're actually in Media, Pennsylvania, today?
A. Yes.
Q. And why did you select the location, the Media location for your deposition?
A. It's close to my residence.
Q. And would you please tell us your date of birth.
A. February 4th, 1952.
Q. And where are you currently employed?
A. University of Pennsylvania.
Q. And what is your position at the University of Pennsylvania?

Dr. Kofke - Direct

A. I'm a professor in anesthesiology and critical care.
Q. And just to back up a minute. Have you had your deposition taken before?
A. Not in this case but in previous cases.
Q. And when's the last time that you were deposed as an expert witness in a case?
A. Probably the latter half of last year I guess. I don't remember the specific case.
Q. Have you given deposition testimony in South Carolina before?
A. Yes. Well, for South Carolina cases, yes.
Q. Just a few ground rules. If you at any point in time need to take a break, just please let me know.

If you don't understand one of my questions, I'd ask that you direct your question to me or tell me that you don't understand your question rather than directing any questions to Mr. Ransom. If you don't tell me that you don't understand the question, I'll assume that you do understand it.

And I'd also ask that you avoid nodding your head. Just make sure that you answer

Page 5

Dr. Kofke - Direct
verbally so that the court reporter can accurately transcribe the testimony. Okay?
A. Okay.
Q. Thanks. So when was the last time that you testified in South Carolina?
A. I honestly don't remember. A couple, three, five years perhaps.
Q. And were you testifying on behalf of a plaintiff in a medical malpractice case?
A. I think so. But I don't remember a specific case that it was most recent.
Q. Have you reviewed cases for Mr. Ransom before?
A. Yes.
Q. Approximately how many cases have you reviewed for him?
A. There's been maybe three or four which were look at the chart and tell him he didn't have a case. And there may be four or five that progressed into this stage or some sort of negotiation I guess.
Q. And so how many cases have you been involved with him where you've actually given deposition testimony?

Page 6

Dr. Kofke - Direct
A. About four or five I guess.
Q. And do you keep a record of those cases?
A. Yeah. But not in my head.
Q. Have you produced a list of your cases that you either review, have reviewed on behalf of -- let me back up. Do you keep a case list?
A. Yes. I have a directory where I put all -- I do everything electronically; I have since about 2000. And I have -- so I have a directory full of cases.
Q. And are those cases that you've reviewed or just cases that you've actually given testimony in?
A. Oh, it's everything. If they just send me a record to review, it gets put in there. If I get deposed, it's put in there. If I go to trial, it gets, you know. They're all -- I don't have something which can help me readily segregate one versus -- one type versus the other.
Q. And have you testified on behalf of defendants in cases?
A. Yes.
Q. And I guess if I could ask you, what percentage of your expert work is designated to

Page 7

Dr. Kofke - Direct
plaintiff versus defense work?
A. I'd say plaintiff is 50 to -- 50 to 70 perhaps and defendant is 30 to 50. It's roughly half and half but I'd say a little bit more weighted towards plaintiffs.
Q. And do you advertise your services anywhere?
A. No.
Q. Do you sign up for any kind of expert directory or anything like that?
A. No.
Q. Have you ever done that?
A. About ten years ago maybe I've -- someone approached me to be on a list, and you know, so I assented to that but it wasn't on my initiative.
Q. And what list was that; do you remember?
A. Oh, I have no idea. Nothing's come of it and I haven't heard anything since.
Q. And what is your average or what is your charge to review a case?
A. It's $500 an hour.
Q. And is that your fee for giving deposition testimony as well?
A. Yeah. It's just straight time.

Page 8

Dr. Kofke - Direct
Q. Straight time? Okay. And so do you charge $500 an hour regardless of what you're doing in a case?
A. Right. That's correct. Whether it's testifying, deposing, reviewing records, traveling, anything.
Q. And do you have a record of how much time you've actually spent on this case to date?
A. Yeah. But I don't have it with me. Twenty hours maybe. That's my guess.
Q. And you said that you do keep a record or like an invoice or something like that of your time?
A. Yes.
Q. Do you agree to provide that to Mr. Ransom so that he could produce that to us?
A. Well, I mean since I've sent the invoices to him, I guess I've already provided it to him.
Q. Sure. Okay.
A. So it's on Mr. Ransom to provide it then.
Q. So Dr. Kofke, just to back up. You mentioned that your current position is professor of anesthesiology and critical care at University of Pennsylvania. And how long have you been, how

Page 9

Dr. Kofke - Direct
long have you held that position?
A. Since 2000.
Q. And what was your position prior to 2000?
A. I was a professor at West Virginia University for four years.
Q. And where were you before that?
A. University of Pittsburgh for eight years.
Q. And why did you leave West Virginia in 2000?
A. They made an offer and then they didn't -- an offer to develop an academic program and it was clear that it was a bait and switch and I couldn't stay there.
Q. And what do you mean by, "it was clear that it was a bait and switch"?
A. They offered me $400,000 of funds to support development of an academic program and what was previously had no academic activities and whenever it came time to use those promised funds after I had moved my family and my kids out of high school, they said, oh, we've already spent it. So I couldn't stay there.
Q. What academic program was that, that you were supposed to help establish?

Page 10

Dr. Kofke - Direct
A. I was going to develop a research and educational program. So we started with a simulation program and I managed to get that started and then when it came time to start a research program, I had developed a strategic plan to develop a pain research enterprise and that would have required recruiting some scientists and some startup money for them and the money was gone.
Q. And you said that was a pain, like a pain research project?
A. It was going to be a program. A pain research program is what I wanted to -- was what my strategic planning said was where the -- would have the most bang -- most value for the department.
Q. And is pain research or pain management part of your current practice?
A. Only in the sense that it's an area of neuroscience which I'm interested in and pain is the number one chief complaint for every physician in medicine. So I have to say it's a part of my practice because pain is a major element of my patient's problems.

Page 11

Dr. Kofke - Direct
Q. And let's talk a little bit about the number of cases that you review. I guess if you could tell me what percentage of your total work, and when I say, "work," I mean the practice including the practice of medicine and everything, what percentage of the time you've spent working constitutes expert review or involvement in a case in an expert capacity in some fashion?
A. About ten percent.
Q. And what does the other 90 percent of your time include?
A. Well, that ten percent is all off-hours time except for days like this which I otherwise would be at work, so it's done like at the evenings and stuff. So anyway, my professional time is -- it varies some from year to year but generally it's been about 30 percent nonclinical administrative research, about 25 or 30 percent intensive care, and about 25 or 30 percent anesthesia. And it may vary.
The nonclinical time may vary from 30 percent to 60 percent from year to year. But that's kind of my estimate of what I've done over the years.

Page 12

Dr. Kofke - Direct
Q. Sure. And how many cases do you review on average per year on behalf of lawyers?
A. Fifteen maybe. With varying degrees of involvement so.
Q. Have you ever reviewed a case that was factually similar to this one?
A. You know, there's a couple that I reviewed in GI endoscopy. One was a, it was clearly a bad Propofol case because they had two arrests at the same time. That may have been in South Carolina or somewhere's down South, I don't remember.
And then there was I -- there's one recently which was for the defense. I think that may have been a cardiac arrest too but I don't remember the details.
Q. Now, tell me a little bit about where you obtained your education and did your training.
A. Starting where? Starting at what level?
Q. You can start with your undergraduate degree.
A. So I got a Bachelor's of Science in Chemistry from Bucknell University in Lewisburg, Pennsylvania. And then University of Pittsburgh for medical school.

Page 13

Dr. Kofke - Direct
Q. And when did you finish medical school?
A. 1978.
Q. And are you originally from Pennsylvania?
A. Yes.
Q. Where in Pennsylvania are you from?
A. I was born right near here in Drexel Hill, Pennsylvania. Lived here till I was 10 and then I basically grew up out in Pittsburgh.
Q. And now after you finished medical school, where did you complete your training?
A. Internship at Mercy Hospital in Pittsburgh. Anesthesiology residency at Massachusetts General Hospital in Boston.
And then a year of critical care fellowship at Mass General.
Q. And what was the purpose of that? When did you finish that fellowship in critical care medicine at Massachusetts General?
A. 1983.
Q. And what was the purpose of or why did you pursue a critical care fellowship following your anesthesia residency?
A. Critical care was a major element of my education in medical school. It's kind of where

Page 14

Dr. Kofke - Direct
much of it began. So I was imprinted by some of the great legends in critical care in medical school. And they sent me off to Mass General as the best -- one of the best hospitals in the country for learning critical care.
So the reason I went into critical care is, well, it was interesting. It was exciting, you know. It was a subspecialty of anesthesiology that I enjoyed and still do.
Q. Sure. And when you finished your fellowship, where did you work?
A. Hershey Medical Center in Penn State. Hershey Medical Center for five years.
Q. And what years were you at the University of Pittsburgh?
A. '88 to '96. And also medical school.
Q. Right. So you left University of Pittsburgh to go to the University -- to go to West Virginia University?
A. Yes.
Q. And then from there, you went to the University of Pennsylvania?
A. Yes.
Q. Are you board-certified?

Page 15

Dr. Kofke - Direct
A. Yes.
Q. And what are you board-certified in?
A. Anesthesiology and critical care. Critical care medicine and neurocritical care.
Q. And you mentioned earlier that on average, approximately 25 to 30 percent of your clinical time is spent in the ICU. What percentage of that is designated towards neurology, neurocritical care patients?
A. All of it.
Q. All of it? Okay.
A. Presently. Presently. As I say, since 2000, all of my critical care has been neurocritical care and before that, it varied.
Q. And what I wanted to ask you was that at the University of Pennsylvania, is there a specific neurocritical care unit that you spend your time in?
A. Yes.
Q. Just like, you know, ICU or what do you call it there?
A. Neuro ICU.
Q. Neuro ICU? Okay. And how many beds does that neuro ICU have?

Page 16

Dr. Kofke - Direct
A. Twenty-two.
Q. And then as far as have you ever actually been a defendant in a lawsuit or involved in a lawsuit where your care has been questioned?
A. Yes.
Q. And how many times?
A. Twice.
Q. When were those lawsuits?
A. Once I got named at the University of Pittsburgh for a patient who came in already with a broken neck and quadriplegia, we put the breathing tube in and then they cited everybody on the chart. Every physician on the chart got sued.
So my name quickly got taken off of that because the patient already had a neurological deficit before I even laid eyes on them. And then the second one was a case which got settled on the plaintiff's behalf when I was at the University of Pennsylvania in 2006. Do you want to hear the details of the case?
Q. I'd like to just hear what that case was about, please.
A. It involved a patient who'd had a pituitary resection and had a lot of cardiac comorbidities

Page 17

Dr. Kofke - Direct

and myocardial ischemia issues. I came on as a consultant only and he'd already had the breathing tube taken out and he was throwing up. He was postop day, I don't know, two or three and he was having unremitting emesis.

Ordinarily the treatment of that is to put a nasogastric tube in, but since he'd had surgery in his nose, putting a nasogastric tube in risked putting the tube into his brain. So I did not do that.

And then after I left that evening, he went on to develop an MI while throwing up, aspirated, and they had trouble intubating the patient. Now, since they had already come to the deadline for who all they could sue and discovery, they discovered that it was -- that I wasn't even present whenever the event happened.

They sued me for the practices of the people who were on-call and I lost.

Q. And that case was settled on behalf of the plaintiff you said?

A. Yes. It was, in my view, it was just tactics by the University of Pennsylvania.

Q. And were you named personally in that suit

Page 18

Dr. Kofke - Direct

or was it just the University of Pennsylvania that was named as the defendant?

A. We split the responsibility after some negotiation.

Q. So I'm sorry. Just to clarify. Were you named personally in that suit?

A. Yes.

Q. And have you ever been reported to a state licensing board that you're aware of?

A. No.

Q. Have you ever had your privileges to practice medicine altered, suspended, revoked or anything like that?

A. No.

Q. Have you ever been disciplined by an employer?

A. No.

Q. Have you ever been terminated?

A. No.

Q. Now, I understand that you said that you covered the position of professor in anesthesia and critical care and you did provide us with your most recent C.V. Do you currently fulfill the position as codirector or director of the neuro

Page 19

Dr. Kofke - Direct

ICU at the University of Pennsylvania?

A. Yes.

Q. And what does that role entail?

A. Dealing with problems that come up in the day-to-day function of the unit; although, I share a lot with my codirector Josh Levine. Developing educational programs and research programs and recruiting fellows.

Q. And do you hold any other clinical positions at the University of Pennsylvania?

A. I'm the director of the clinical research program within the department. A codirector. I'm sorry.

Q. And what does that mean: Codirector of the clinical research program?

A. Well, we've just started last July and my mission is to be a rainmaker, that's a legal term. To be a rainmaker for a bringing in industry to support research in the department.

Q. Are you currently engaged in any type of clinical trials or anything like that?

A. There's a cerebral blood flow trial that we're doing with Ornim, an Israeli company, and there's others that are being negotiated. But

Page 20

Dr. Kofke - Direct

that's the only one that's active. And then I have an NIH grant looking at optical monitor -- efficacy of an optical monitor in the neuro ICU.

Q. And then the other, the Ornim project that you talked about, what does that involve?

A. The main part of it has just been completed and that involved measuring cerebral blood flow on induction of anesthesia to see if it actually measured -- if it actually detected the changes that we know occur.

And then there's another study which is still ongoing but it's sporadic and that's looking at blood flow for stroke patients who come in and they get their -- they get revascularized in interventional radiology after a stroke.

Q. Now, the one that talks about the measurement of cerebral blood flow following induction of anesthesia, what is the purpose of that study?

A. It's based -- well, we know what happens to cerebral blood flow with induction of anesthesia. This is to new monitor.

So I wanted to see if the monitor detected what we know happens already after

Page 21

Dr. Kofke - Direct
anesthesia-induced, which is the blood flow drops and then there's an increase after the endotracheal tube's put in.
Q. So you're actually testing a product, a monitor?
A. Yes. It's FDA-approved and we're just providing some validation that the numbers are -- have some meaning.
Q. And the NIH grant is -- I'm sorry. Can you remind me of what that was, involved?
A. That's evaluating an invention by some physicists at the University of Pennsylvania, so the optical monitor which goes on the head and measures cerebral blood flow, cerebral and cerebral metabolic rate and we're comparing that against standard of care invasive monitors that go into the brain itself to see if the optical monitor can detect bad conditions in the brain.
Q. And as the, I guess, the director of clinical and research program, are you currently seeking any other research projects or grants?
A. Well, when I went to the ASA, ASA, I must have visited 60 companies, you know, telling them, you know, that -- they thought they were selling

Page 22

Dr. Kofke - Direct
me stuff when, in fact, I was selling them stuff which was our services for a place to do research. And of that, about -- I've gotten about six nibbles right now which are being negotiated as to whether they want to work with us or not. But nothing's final.
Q. I'm sorry. I didn't hear you.
A. Nothing's final. There's just a courtship dance that's going on right between Penn and these companies.
Q. And so is there an actual clinical research lab that you use?
A. No.
Q. So what is the research? Where do you do the studies?
A. Oh, they're on patients in the O.R. and the ICU.
Q. I got it. And you said that on any given year, the percentage of your time that is spent, would you consider that research time to be clinical or nonclinical time?
A. Nonclinical.
Q. Nonclinical? Okay. And you said that on any given year, you estimated that you spent

Page 23

Dr. Kofke - Direct
approximately 30 percent of your time designated to nonclinical matters but that that could vary up to 60 percent. Currently what is your load?
A. So right now I'm at 40 percent this year is 40 percent nonclinical; 25, ICU; the rest, O.R. Next year, NIH grant is going to support more of my time and I'll be basically, I think, 30 percent clinical and the rest research and administration.
Q. And then how about last year, what was your?
A. Last year, I had no funding. I must have been 30 percent nonclinical. And then I'm always 25 ICU and then the rest fills in with O.R.
Q. What about in 2010, do you remember?
A. It was either of 30 or 40 percent, nonclinical; 25, ICU, and then the rest O.R.
Q. Now, in the O.R., do you have a specific specialty or anything like that in terms of cases that you staff?
A. Neuroanesthesia primarily and then as a part of the general O.R. group, I may do anything else that comes up in the course of a day that I'm assigned to work in the O.R.
Q. And what percentage of your O.R. time is

Page 24

Dr. Kofke - Direct
spent doing neuroanesthesia cases?
A. I'd say 80 percent.
Q. And the other 20 percent of the cases that you do, what do those typically involve?
A. Interventional radiology cases which may not -- which are not neuro. And if there's no neurosurgery assigned to the neuro room, I'll do whatever general surgery case gets put in there.
And in the evening, I'll be assigned to anything, from working in the cardiology lab to working in the O.R.'s to going to GI to do cases like we're talking about today, you know. It's very general in the evening.
Q. And so evening being like after-hours or how do you distinguish after-hours?
A. After 5:30 p.m.
Q. And then is that a call or is that a specific shift that you work?
A. We call it, "Evening clinical commitment." There's eight of us --
Q. How many --
A. There's eight of us assigned to it a day. Eight or ten of us assigned to clean up the O.R. schedule from the day.

Page 25

Dr. Kofke - Direct
Q. And actually, how many anesthesiologists does the University of Pennsylvania employ?
A. Well, there's two hospitals, I don't know, six ICUs, the pain service. It's somewhere's between 70 and 100, I'm not sure exactly.
Q. And so the evening clinical commitment that you are assigned to after 5:30 p.m., how many days per week do you take that assignment, are you assigned that evening clinical commitment?
A. It's like 60 nights a year or 40 to 60 nights a year. It's not a weekly thing because if I'm in the ICU, for example, I don't do any of it. But I'm doing it tomorrow night.
Q. And tomorrow night, you know what kind of cases you'll be staffing?
A. During the day, I'll be doing -- I'm assigned to do neuro and whatever comes up at 5:30, I'll do whatever is best for the team whatever -- you know.
Q. And so just to clarify. After 5:30, do you not -- do you always know what you're going to do or does it just depend on what the needs are?
A. All I know is that it's not going to be a cardiac case.

Page 26

Dr. Kofke - Direct
Q. Right, right. Okay. And so I'm just trying to understand, you know, how do you know so it's not going to be a cardiac case. Could it be a neuro case?
A. Right. So if my -- if I'm doing a craniotomy tomorrow and it's not done at 5:30, I'll be left to finish it. If my neuro cases are done at 5:30, then I'll be assigned to relieve someone who is not on the evening list and that could be anything.
Q. The last time that you covered evening clinical commitment, what kind of cases did you staff?
A. It was last week and I honestly don't remember.
Q. That's fine. I just --
A. I know how late I stayed but I don't remember what I did.
Q. Yeah. Actually how late did you stay?
A. That night was a 9:30. I was on the later time.
Q. When you do stay onto the evening clinical commitment, do the hours that you end up staying after 5:30 vary depending on the type of case that

Page 27

Dr. Kofke - Direct
you do?
A. No. They have a departure list. So like tomorrow, I'm on the early leave list. Last week, I was on the late leave list.
Q. So if you're on the early leave list, what time do you end up leaving?
A. Well, tomorrow I expect, discounting any effects of a major snowstorm that's going to keep him (indicating) here --
Q. Right.
A. -- till Friday --
Q. Right.
MR. RANSOM: No. (Indicating.)
THE WITNESS: -- I'd expect to stay till like 6:30, 6:30 probably tomorrow.
BY MS. FLEMING:
Q. So like an extra hour?
A. Yes. Yes. It's a continuous function because we call it an ECC-A, B and C. If you're EEC-A, you might stay till between 9:00 and 11:00. If you're ECC-C, you're usually gone by 7:30.
Q. Now, at the University of Pennsylvania, do you have, is there a designated endoscopy suite?
A. Yes.

Page 28

Dr. Kofke - Direct
Q. And where is that located?
A. It's on the same floor as all the other O.R.'s.
Q. And is that in the main hospital?
A. Well, there's one in the main hospital and I think they're starting one over in the ambulatory care center but I'm not that sure about that. I've never been involved with that.
Only on the fourth floor adjacent to the main O.R.'s have I ever gotten involved.
Q. And so how do you know that the -- what do they call it there?
A. GI. GI endoscopy, you know. Various names.
Q. And do all of the patients that undergo some type of GI procedure, are they assigned an anesthesiologist to their case?
A. It varies. So no, they aren't. And to be perfectly honest with you, I'm not sure what criteria they use to decide who has an anesthesiologist and who doesn't.
I assume it's other medical issues or a patient request whether they're going to have anesthesia or not.

Page 29

Dr. Kofke - Direct
Q. And is there some type of like preop or preanesthesia testing area?
A. Actually at the University of Pennsylvania, we don't have a preop -- a preanesthesia clinic where they come. They go to the surgeon or the procedure list office and with guidance from anesthesia, they get the testing and stuff that they need.
If it's a complicated case, then there will be a specific anesthesia consult. And then we have a preanesthesia area then where their records will be reviewed and they'll meet their anesthesiologist.
Q. When does that typically happen? Like the timing in relation to the procedure.
A. I'd say an hour. An hour before the procedure. Hour half to hour before the procedure.
Q. Now, approximately how many GI cases do you staff per year, you personally?
A. About a dozen.
Q. A dozen, okay. And when is the last time that you actually staffed a GI case?
A. I don't recall specifically. Perhaps a few

Page 30

Dr. Kofke - Direct
months ago.
Q. Do you recall what that case involved?
A. Nope. No.
Q. Have you ever staffed a colonoscopy?
A. Yes.
Q. And do you remember why you were asked to -- why an anesthesiologist was assigned to that case?
A. Since I don't remember the case, I can't recall why. All I can tell you is the generic that's because they have a lot of medical comorbidities or it's a patient request.
Q. Do you remember the last time that you -- did I already ask you this? If I did, then just let me know. Do you remember the last time that you provided anesthesia care during a colonoscopy?
A. I think I answered that. I think probably a few months ago.
Q. And now every time, this 12, approximately 12 GI cases that you do per year, are all of those colonoscopies or do they vary depending on what is going on in an endoscopy on any given day?
A. It varies. I have an impression that's more upper endoscopy involvement than lower but

Page 31

Dr. Kofke - Direct
I've done both.
Q. And in terms of those endoscopy cases, are those cases that you have generally been assigned to you in that evening clinical commitment shift that you talked about?
A. It's a combination of the evening shift or if it's -- if my room finishes and there's nothing else to put in there, they may put me in GI.
Q. So are there anesthesiologists at the University of Pennsylvania who strictly provide anesthesia for or strictly who are generally assigned to the endoscopy area?
A. I think that's the proper description is generally assigned, yes. But not strictly.
Q. So generally assigned, you know, how would you define that?
A. I suppose 80 percent of their assignments.
Q. Would be designated to that endoscopy suite?
A. Yes.
Q. Now, I probably should have done this before we started but I had some documents for the court reporter, I believe Monday or yesterday and I'd like to go ahead and just mark those as

Page 32

Dr. Kofke - Direct
Exhibit 1 to the deposition.
(Document marked for identification as Kofke-1.)
BY MS. FLEMING:
Q. Dr. Kofke, the anesthesiologists at your facility who are generally assigned to the endoscopy suite, do they have any special training or certifications that make them qualified to work in that area?
A. No. Just that they're board-certified in anesthesia.
Q. And does somebody keep a list or like a record of -- I'm assuming you would have records of patient cases that you've been involved with over the last umpteen years for billing purposes?
A. Yeah, yeah. Of course.
Q. And so those records likely exist and would tell us, you know, what kind of cases you've been involved in and what kind of cases you staffed?
A. Right. They have detailed records, yes.
Q. Now, how do you know that at Penn, at the University of Penn, how do you know that the specific area is endoscopy? You said it says, "Endoscopy," on it?

Page 33

Dr. Kofke - Direct
A. There're designated rooms that are used just by the GI endoscopists and they're equipped just for endoscopy. I don't think there's a sign, but you know, it's -- everyone knows where it is.
Q. And do you, at the University of Penn, do you work with CRNAs?
A. Occasionally.
Q. And when you say, "Occasionally," approximately how often do you work with them?
A. I personally work with CRNAs at Penn ten percent of the time or less probably.
Q. And is there a reason that you don't -- that you work with them, I would characterize that as sort of an infrequent basis; would you agree --
A. Yes.
Q. -- with that?
A. Yes.
Q. Is there a reason why you work with CRNAs on an infrequent basis?
A. Usually where I work is a major area for training for residents, so that's usually residents or fellows in the ICU or in the O.R. for neuro. I'll work with CRNAs in radiology and I'll run across them if I'm in GI actually.

Page 34

Dr. Kofke - Direct
Q. But in the neuro O.R. sort of setting, you work mainly with fellows and residents?
A. Yes.
Q. Do you ever supervise CRNAs?
A. Yes.
Q. And when's the last time that you supervised a CRNA?
A. Within the past month, I'd say I worked with a CRNA in interventional radiology.
Q. And is your role different in those circumstances or do you view it as being the same as when a CRNA is not involved?
A. Well, I'm still responsible for the case, for the plan and to, you know, solve problems, get called whenever there's any issues. So that's similar to the residents.
I don't feel I have obligation to teach necessarily the CRNAs like I do with the residents, so that's a marked difference. And the CRNAs are, they've got more experience so I can trust them more in terms of being able to be a little bit further away or to do other things while they're managing the case.
Q. And actually when you're working with

Page 35

Dr. Kofke - Direct
CRNAs, for instance, the last time you said you worked with one was in interventional radiology. How many different cases were you responsible for at that time?
A. Well, you know, it's two. We've just actually changed our practice paradigm in radiology so that we can cover two rooms and then we bring down two CRNAs. So I think that day I had a CRNA in interventional radiology and a CRNA in neuroradiology I think.
Or maybe at one point I had two CRNAs in regular interventional radiology, it was a busy day, and I had two CRNAs. So I was deploying here and there to get the day done.
Q. And when you are supervising a CRNA, are there any regulations that require you to be within a certain, one, that limits the number CRNAs that you can supervise, and two, that require you to be within a certain proximity of the cases?
A. Well, I can supervise up to four CRNAs, I believe. But if one room is a resident, then I can only supervise one because when I'm taking care of a resident, I can do no more than two

Page 36

Dr. Kofke - Direct
rooms. And in terms of -- I don't know that there's a regulation for how far away one has to be but I'd say that the commonly accepted metric is two minutes.
Q. And where do you derive that from or what is that based on?
A. It was what somebody who read to -- who knows the rules better than me said years ago and I -- it's kind of been followed ever since. Kind of made sense --
Q. A colleague of yours?
A. Or a manager of some sort; I don't remember. I mean it's been 20 years probably since I first adopted that metric.
Q. Have you ever had any problems supervising a CRNA?
A. Not at Penn. There were some CRNAs back at Hershey who were a little -- tried to be independent and sometimes were a little tricky to manage especially since I just finished my training. But more recently, I've had no issues.
Q. And I guess if you could just tell me today prior to starting your deposition, I got an e-mail from you that had a lot of documents attached to

Page 37

Dr. Kofke - Direct
it. Could you tell me what information you reviewed prior to rendering your opinion in this case?
A. I didn't review any literature, I just I reviewed the chart, depositions of the CRNA, the physician and the preop doctor. I don't have the list in front of me but I think that was what I -- yeah. I think that's all that I reviewed for this case.
Q. And does it, I sort of looked through a couple -- some of the things that you provided. Is there a list of depositions that you've been provided?
A. Right. There's -- I sent you screen shots of the directory --
Q. Right.
A. -- which is my legal consultation directory with names of the -- one of the people on the case, either the defendant or the plaintiff, their last name, sometimes the hospital. I'm not that obsessive about having the same nomenclature for every case.
But it's got the name of someone who, probably if you did a legal search, if it's a case

Page 38

Dr. Kofke - Direct
that made it into the public record, you'd find. If it's a case I just reviewed a record and I told them to don't bother or whatever and it never made it into the public record, then you won't be able to find it.
You know, there's HIPAA stuff. I mean I don't think I can send you records from other patients but those are the names. I don't have docket numbers, I don't have anything like that.
Q. No. And I think we're talking about two different things and I apologize for the confusion. The information that you reviewed prior to today, that includes the medical record from MUSC, the deposition of the CRNA Donna Embrey, the deposition of the anesthesiologist, Dr. Eric Nelson, and the deposition of the preop doctor.
You said preop doctor, I'm assuming you mean Dr. Inabinet, the one that performed the preanesthesia evaluation?
A. Correct.
Q. Have you reviewed any other medical records or depositions in the case?
A. No.

Page 39

Dr. Kofke - Direct
Q. Is there any information that you or documents that you don't have that you feel like you need or want that would help you in formulating opinions regarding this case?
A. No.
Q. Do you think that you have all of the information that you need in order to give your full opinion regarding the case?
A. The only information that might affect the information, and that would only be to help your side, I think, would be to have a detailed summary of the digital record that's behind the anesthesia record. Because I know that every electronic record has a database behind it and maybe if I had something which was every ten seconds of pulse oxes or every ten seconds of EKG that could be reviewed, that would be more helpful.
I'm not sure it would change my opinion but I don't know unless I see it.
Q. And actually what type of anesthesia software does University of Penn use?
A. We use Epic.
Q. Epic, okay. And have you ever used PISCES?
A. No.

Page 40

Dr. Kofke - Direct
Q. Are you familiar with PISCES?
A. Not at all.
Q. And have you reviewed the anesthesia record in this case?
A. Yes.
Q. And which record did you review? There was one that was --
A. Well, the records that were in that admission. So there's an anesthesia -- the main one that I focused on was the anesthesia record for the colonoscopy but I think there was an anesthesia record for two intubations and for another procedure: Maybe a trach and peg, I'm not sure.
Q. And just to clarify. With regard to the anesthesia record, do you recall reviewing the record that was delineated into intervals of every one minute?
A. The record I've got has 15-minute boxes with 15-minute separations into which numbers are applied. And then there's a record which has a continuous graphic output and I can't tell how often it was, you know. The pulse ox is just a continuous line. So I can't ascertain the

Page 41

Dr. Kofke - Direct
frequency.
Q. And could you tell me, are those the records that you're looking at right now that you've reviewed --
A. Yes.
Q. -- anesthesia? Could you -- I'd like to just go ahead, and I'll let you keep that, but I'd like to mark those, that set of records that's before you as Defendant Exhibit 2, please.
A. And I just brought this because it's derived from the stuff to help me answer your questions. But are you going to?
Q. Sure.
THE REPORTER: Yeah. I have to do it while you're --
MR. RANSOM: She can't do it while you're talking.
(Document marked for identification as Kofke-2.)
THE WITNESS: So it's just excerpts from my notes and from the record.
BY MS. FLEMING:
Q. And tell me when you say excerpts from your notes and not the record, are those actual pages

Page 42

Dr. Kofke - Direct
from the medical record or are they things that you've cut and pasted into a summary format of some form?
A. No. So there are -- I have notes on the case which I created a file which was sent to you which has -- you know, I just type everything, instead of writing things. And so that's how I do notes on a case.
And then I'll copy stuff from the record and put it into the notes sometimes. So I basically got my summary of events from my notes and then I have just the exact copies of the anesthesia record from, I think it was from October 1. And then I've got the intubation records from October 11 and October 8th.
Q. And just to clarify. Did those pages have numbers on the bottom that are numbered number one through 34?
A. No. But I could --
MR. RANSOM: Alissa, let me help you out here. He does have some document control numbers on the actual anesthesia charts and he's got page 494 of 2,115 through page 507 of 2,115.
MS. FLEMING: Great.

Page 43

Dr. Kofke - Direct
BY MS. FLEMING:
Q. And then as far as your notes, can you look at Exhibit 1 and just tell me if the documents behind Exhibit 1 are what you're talking about?
A. (No response.)
MR. RANSOM: I, again to try to help you out. I think that it's different.
THE WITNESS: Let me...
MR. RANSOM: Yeah.
THE WITNESS: This is it.
MR. RANSOM: Well, those are the notes that you made.
THE WITNESS: Yeah. My notes. My notes. The file of my typed notes are in this exhibit. The complete file.
MR. RANSOM: But that's different than what's Exhibit 2?
THE WITNESS: Correct.
MR. RANSOM: That's what she's asking you.
THE WITNESS: Yeah. Exhibit 2 is copied from my notes. (Indicating.) It's not separate.
BY MS. FLEMING:

Page 44

Dr. Kofke - Direct
Q. Now, the documents that are on Exhibit 1 and Exhibit 2, do those represent all of the notes that you've made about this case?
A. Yes.
Q. And as you reviewed any of the materials that you were provided regarding this case, did you make any notes or highlight in those materials?
A. I've actually, the stuff that I got today to guide my testimony, I circled some stuff but other than that, if I want to emphasize a point in the chart, I copy it, I paste it into my typed notes.
Q. And so the anesthesia record that you've reviewed regarding this case is in increments of every 15 minutes; is that true?
A. Well, there's boxes that are every 15 minutes into which observations and data are recorded but then there's a continuous graphical chart which I mean since nonevasive blood pressure is not continuous, it looks like there's three recordings in every 15-minute box.
There's three mean -- yeah. Three blood pressures but the sats listed are marked as

Page 45

Dr. Kofke - Direct
continuous measures; it's just a straight line. And then I think when the -- yeah so. So it doesn't have like a heart rate number that's continuous, even though I know that the EKG is continuous, it's just a pulse ox.
Q. I just want to understand what you're looking at and what I'm looking at to make sure we're looking at the same thing if that makes sense. Okay. And I understand that you provided an affidavit. Oh, I'm sorry.
Have you requested any additional information from plaintiff's counsel that you don't have that you think would be helpful here or in any way changes your opinions in this case?
A. I have requested but I haven't received the electronic database files.
Q. When you say, "electronic database files," what do you mean by that?
A. Well, my background for believing that that exists is that every electronic record that I've been involved with which has been CompuRecord, Dragon, there's another one we used at Penn and then now Epic, the people who run that have always said that all of the data, even though there's an

Page 46

Dr. Kofke - Direct
electronic -- there's a paper record printed out that all the data is stored in much higher fidelity in some computer somewhere. I've never had to look into it or anything but I've just always been told that it existed.
Now, I don't know for a fact that it exists for PISCES but I assume that it does and thus I asked the attorney to look for it.
Q. And when you talk about Epic, how is Epic -- how does Epic work? I mean do you set the parameters with which you capture information or the data that you capture?
A. All of the physiologic data comes out of the monitor and goes to a thing called Capsule which is sort of a data-parsing computer. And the people who set up Epic had parsed that.
Had does -- set that up so that, I don't know, four data points a minute, maybe, I'm not sure exactly, goes into the Epic record and of that, somehow they decide what actually gets printed out. And I don't know the details of that.
I know that like the monitors collect data at like 300 data points a minute and that

Page 47

Dr. Kofke - Direct
gets broken down into a manageable amount for Epic. And then it's further parsed according to the needs of what we can print out on the paper record. So something like that, you know, I can't -- you know, the exact details might be a little bit different but along those lines is what I think happens with most anesthesia records. But I know that's what happens with Epic at Penn.
Q. Now Dr. Kofke, I understand that you've provided an affidavit in this case?
A. Yes.
Q. And I believe I've marked a copy of your affidavit in Exhibit 1. In the materials that were provided here, there was another copy of an affidavit.
Did you prepare, did you actually draft the affidavit that you signed or was that drafted by Mr. Ransom --
A. There's a draft proposed to me and then I edited it to fit my opinion. And I actually don't have the final. The final is in this pile. (Indicating.)
I actually didn't have the final in my computer. But maybe it's in an e-mail somewhere

Page 48

Dr. Kofke - Direct
but I never saved it.
Q. What edits you made to the affidavit?
A. Pardon me?
Q. Do you recall what edits you made?
A. Yeah. They were -- I mean what I had in my files that I don't know if you've had time to look at them, it was using the Word, you know, the Word computer programs system for recording changes and they were all apparent.
Q. And so any changes to the affidavit would be contained in the materials that you've provided?
A. Yes. My changes from what was presented to me. This --
Q. Do you recall receiving an affidavit, a proposed affidavit from Mr. Ransom, have you had a telephone conference where you discussed your opinions?
A. I don't remember specifically. I assume yes but I don't know yes.
Q. Would you ordinarily sign an affidavit without reviewing medical records or conferring with a lawyer about the records in a case?
A. Typically the affidavit or not typically.

Page 49

Dr. Kofke - Direct
Always an affidavit is based on medical records provided to me by the attorney and typically it's associated with some phone calls.
Q. Now, did the affidavit that you provided all opinions in this case or had you developed additional opinions based on any of the other information that you reviewed?
A. Okay. What was the question again? Now that I've reread it.
Q. Have you developed or docs the affidavit contain all of your opinions in this case or have you developed other opinions?
A. The affidavit does not reflect what I've come to believe is that the standard monitors were applied after anesthesia was induced or anesthesia was started, and I didn't mention that in the affidavit.
Q. The standard monitors were --
A. Yeah. Yes. The pulse oximetry data and the EKG data and everything in the anesthesia record, the first recording of them on the anesthesia record occur after Propofol and Midazolam were given.
Q. And so it's your opinion that based on what

Page 50

Dr. Kofke - Direct
you can glean from the medical records that the monitors were not applied to the patient until after anesthesia was induced?
A. Yes. Although it wasn't actually an induction, it was a slow, you know -- after anesthesia was started; let's use that word. Because induction implies a bolus of Propofol and that wasn't what happened.
It was just started with an infusion of Propofol and Midazolam were given between 7:30 and 7:45, and then at 7:45, the monitors were placed.
Q. I'm sorry. So what time do you think the Propofol was given?
A. It started sometime between 7:30 and 7:45.
Q. And what do you rely on insofar as that opinion?
A. Page five of the anesthesia record or the MUSC page 496, in the box from 7:30 to 7:45, it says, "Propofol 75," and it says, "Midazolam, two."
And then looking at the physiology record on MUSC record page 499, the first physiologic data appears at around 7:46 and it's

Page 51

Dr. Kofke - Direct
abnormal. The very first numbers.
Q. And is that the only additional opinion that you have that's not contained in the affidavit?
A. Yes. I think so. And it may be in the course of this deposition, we'll uncover something else but I think that's the only other thing.
Q. And it's your opinion that the monitors were not applied to the patient until after the Propofol was started?
A. Yes. It's not an opinion, it's in the record.
Q. And what time do you think the Propofol was started?
A. Well, this is where we get into that issue with the boxes. So the boxes indicates between 7:30 and 7:45. So I can't say exactly when except that it's before the monitors were placed.
Midazolam, two milligrams was given -- actually that might be documented more precisely in the typed -- wait a minute. No. All that tells me is that it's between 7:30 and 7:45.
Q. Now, when do you believe the monitors should have been applied?

Page 52

Dr. Kofke - Direct
A. Oh, before any anesthetic drugs were given.
Q. And if the monitors were, in fact, applied before any anesthetic drug was given, would you still hold the opinion that the monitors were not applied prior to the time anesthesia was started?
A. (No response.)
Q. If there's evidence -- let me back up. Clarify that. If there's evidence in the medical record showing that the monitors were in fact applied to the patient prior to receiving -- let me ask you.
Do you think that the monitors should have been applied prior to the patient receiving the Midazolam?
A. Yes.
Q. And then I'm assuming you take the opinion that the patient should have been continuously monitored between the time that he received the Midazolam and the Propofol?
A. Yes.
Q. And if there's evidence in the medical record suggesting that the monitors were, in fact, applied to this patient during this time, would you agree that that opinion would be -- would you

Page 53

Dr. Kofke - Direct
hold that opinion?
A. Right. That's why I suggested if the electronic record that's behind this paper record, maybe that will erase what I just said.
Q. Have you reviewed any testimony from either the CRNA or the anesthesiologist or any other witnesses in the case about the time that the monitors were applied to this patient?
A. Yes. I think that they, I'm not sure which one -- I think the CRNA said that the monitors were placed before and indeed there's statements that, you know, the check and so on that says the monitors were placed beforehand.
But if they were placed, why aren't the results of the monitoring in the record? Thus, I think that those are likely honest misstatements or misrecollections.
Q. But if there's a record that shows that the monitors were -- if there's value in the record that show the patient was being monitored, then that opinion would be -- you wouldn't take the position that MUSC failed to apply monitors prior to anesthesia being --
A. Yes. As long as it was objective

Page 54

Dr. Kofke - Direct
information and not someone's memory.
Q. Right, okay. And now as far as your affidavit, the final affidavit goes, that's dated on January 17, 2013 I believe; is that correct?
A. I've lost my page.
MR. RANSOM: We're trying to get it. Here you go.
MS. FLEMING: Okay. Sure.
THE WITNESS: So I took this to a notary on January 17th, that's right, 2013.
BY MS. FLEMING:
Q. 2013, okay. And so aside from the opinion that we just discussed, all of your other opinions regarding this case are contained in the affidavit?
A. Yes. Yes. They have to do with airway management and maintaining -- avoiding hypoxemia.
Q. And so I just wanted to be clear. That affidavit that we're talking about, the final affidavit and that's dated January 31st or October -- yeah. January 17th, right?
A. Yes. Yes. That's the final one.
Q. Good. Now Dr. Kofke, you told me about the medical records and the depositions that you've

Page 55

Dr. Kofke - Direct
reviewed regarding this case. Have you reviewed any other, any medical articles, journals or texts that you believe are relevant to the issues in this case?
A. No. Not specifically for this case anyway. I mean I read, you know...
Q. Yeah. Sure.
A. Stuff comes up.
Q. Sure. Have you relied upon any articles, journals or texts in rendering your opinions?
A. No.
Q. And what journals do you generally read?
A. Anesthesiology. Anesthesia and Analgesia. New England Journal of Medicine. Neurocritical Care. Journal of Neurosurgical Anesthesiology.
Q. And just to back up. The times that you've worked in endoscopy, the procedures that you've performed in endoscopy, have you ever intubated a patient for any of those procedures, like before the procedure started?
A. I can't remember an exact procedure but I know that I have because if someone has problems with their stomach or if they have a full stomach, they'll get intubated.

Page 56

Dr. Kofke - Direct
Q. And do you remember approximately how many times you've intubated a patient for an endoscopic procedure?
A. I can't say that I -- I mean it's unusual. Usually for upper endoscopy procedures, we provide support through bilateral nasal airways hooked up to an anesthesia circuit to provide CPAP. And they're on -- they're usually in the lateral position which helps.
And for colonoscopies, it's seldom, seldom that they need to be intubated. The intubation is primarily for patients who need upper GI stuff.
Q. And do you take the position that Mr. Mikell should have been intubated prior to his colonoscopy?
A. No.
Q. And just are you doing okay? We've been going on for a little over an hour now. Do you want to take a break or no?
A. I'm fine if you are.
Q. I'm fine. I just wanted to make sure --
A. All right.
Q. -- sometimes people like to get up and

Page 57

Dr. Kofke - Direct
stretch a little bit. Do you have any criticisms of the medications or anesthetics chosen for Mr. Mikell?
A. No. I think that there was a reasonable plan that they had which was not to give him a bolus of Propofol and rather just start an infusion and let it gradually build up on him with the Midazolam. It's a reasonable plan which, you know, to start with.
And in anesthesia, you know, we adjust our plans according to how the patients respond.
Q. And when you say that it was a reasonable plan, do you have any criticisms of the dosages that were given?
A. No. I think it was a perfectly reasonable dosing scheme because, as they said in their depositions, it was about half of what you might ordinarily have given in a patient who has cardiac and weight issues and obstructive sleep apnea and all that stuff, it was a perfectly reasonable plan.
Q. And you mentioned to me earlier that you reviewed Mr. -- Mr. You reviewed the deposition of the physician who performed the preanesthesia

Page 58

Dr. Kofke - Direct
evaluation on Mr. Mikell. Do you have any criticisms of the preanesthesia evaluation that was performed on Mr. Mikell?
A. No.
Q. And just to clarify further. When I ask you that question, you understand that there was a preanesthesia evaluation performed a day or two before the colonoscopy?
A. Yes. By the "Dr. I" or you know, that other doctor. And there was argument about whether he actually saw the patient. But I believe that he did see the patient --
Q. Yeah.
A. -- you know, because he said he did and it kind of made sense, you know, what he had put in his notes.
Q. And do you have any criticisms of the evaluation performed by Dr. Nelson, the anesthesiologist who was involved in this case?
A. I think his evaluation consisted of reviewing what had already been evaluated and agreeing and yeah. So I have no problem with it.
Q. Good. Do you consider a colonoscopy to be a, I mean, a relatively high- or a low-risk

Page 59

Dr. Kofke - Direct
procedure?
A. Generally it's a relatively low-risk procedure.
Q. And how long does it take to do a colonoscopy generally?
A. Ten to 30 minutes I'd say.
Q. And do you have any opinion about whether Mr. Mikell should have undergone a colonoscopy on October 1st of 2010?
A. Well, I don't feel like I know that much about gastroneurology to have a proper understanding of the urgency of the indications. It was for -- you know, I can offer no opinion. No qualified opinion really.
Q. And so just to clarify that. You're not going to testify that the colonoscopy wasn't indicated or that it should not have been performed?
A. No. I'm not going to argue that.
Q. And are you going to argue that from an anesthesia standpoint at all?
A. No. He was functional. He was, you know, he was up and about. I mean all the indicators were that he would be a reasonable risk for

Page 60

Dr. Kofke - Direct
anesthesia.
Q. And when you say, "a reasonable risk for anesthesia," what does that mean?
A. Well, he's an ASA III to begin with but as I recall, the preop evaluation indicated that, you know, he was able to live his life and up and about, he wasn't bedridden or chair-ridden or anything like that.
You know, I don't recall if he could -- if there was a question about climbing steps or shortness of breath or so on, but he did have nonetheless, a laundry list of medical comorbidities that did increase his risk.
But it's a very important question for the anesthesiologist to ask about what a patient's day-to-day activities are. Is it life-limited, are they living their lives. And in general the answer to that for him was yes.
And I don't know if that's evidence-based but I can tell you it's experienced-based and it was, I think, a crucial question to ask patients.
Q. And what does that ASA classification tell you about a patient and then a patient, their

Page 61

Dr. Kofke - Direct
relationship to the risk for anesthesia?
A. I can't quantitate it for sure but ASA I is perfectly healthy. ASA II is, you know, mild systemic illness which doesn't impact on the patient's life at all.
ASA III is disabling and ADA -- disabling medical illnesses. And ASA IV is basically bedridden from your systemic illness.
Q. And so do you agree with the classification that was given to him which was ASA III?
A. Yeah. It was ASA III, right? And I agree with that.
Q. And then when you talk about he presented reasonable risks for anesthesia, can you explain what you mean by what -- I guess what were -- if you look at this patient and his classification, what were the risk factors that you can identify as they pertain to anesthesia?
A. Well, the major risks are, I think he had a cardiac congestive heart failure with a decrease in his cardiac function. And obstructive sleep apnea which is going to make his airway management difficult.
And he had a list of other things but

Page 62

Dr. Kofke - Direct
those are the ones that are in my memory. Hypertension. Oh, he had an arrythmia. Diabetes. An enlarged heart. And he was obese, I think over 300 pounds.
I forget his height but he was a large man. Combined with the obstructive sleep apnea means that he's going to be inclined to obstruct his airway and is going to be a tricky airway issue and he'll desaturate very quickly because -- if only because of his size, but his size plus his obstructive sleep apnea are warning signs that, you know, special care needs to be taken with respect to airway management and maintenance of oxygenation.
Q. And what was, you said you don't remember his size. What was his size?
A. Oh, I think it was 300 pounds. I don't remember his height.
Q. Sorry. Okay.
A. Or what his BMI calculated out to be.
Q. You said that obstructive sleep apnea was a risk factor because he was at risk for obstructing his airway?
A. Yes.

Page 63

Dr. Kofke - Direct
Q. And what was your understanding of his severity or the lack thereof of his obstructive sleep apnea?
A. My understanding was that he had it. I don't...
Q. Now, in looking at your affidavit, I'd like to look at paragraph three if you will.
A. Oh, let's find it again. Paragraph three, yes.
Q. Great. Now in paragraph three, you say that, "The MUSC chart reveals that due to his body habitus and history of cardiac problems and an obstructive apnea, Mr. Mikell was at high risk for hypoxia while undergoing sedation." Correct?
A. Yes.
Q. And you continue to say, "Moreover, he had a history indicating susceptibility to arrhythmias." I'd like to ask you about the arrhythmia issue.
What about his history indicated the susceptibility to arrhythmia?
A. He had an ablation, AV nodal reentrant tachycardia. So that's an atrial problem, not a ventricular arrhythmia problem.

Page 64

Dr. Kofke - Direct
Q. And now, with that AV nodal reentrant tachycardia, did he have ablation for that?
A. Yes.
Q. And I'm going to ask, what is your understanding of the purpose of an ablation?
A. It's to block or burn the pathways which are causing a circuit to arise in the heart which produces a tachycardia or palpitations for the patients.
Q. And so it actually blocks an aberrant pathway to try to eliminate that arrhythmia?
A. Yes.
Q. And after Mr. Mikell had the ablation for his AV nodal reentrant tachycardia, do you know whether he had any other recurrences of that arrhythmia?
A. I don't know.
Q. Would that be important to your opinion about whether he was susceptible to developing arrhythmias?
A. It would be. You know, so perhaps that was an overstatement because it was -- it's purportedly fixed, you know. So I don't know if he continued to have that as a problem. So yes,

Page 65

Dr. Kofke - Direct
that's important to know.
Q. So if the medical records indicate that he did not have a recurrence of that arrhythmia, would your opinion change about whether he was or -- yeah. Would your opinion change about whether he was susceptible to developing arrhythmias?
A. Yes.
Q. Now, with regard to your opinion, your affidavit mentions that his body habitus and history of cardiac problem and obstructive sleep apnea, Mr. Mikell was at high risk for hypoxia while undergoing sedation. What about, you mentioned a little bit about the obstructive sleep apnea and his body habitus.
What about his cardiac history placed him at high risk for hypoxia?
A. If your cardiac output is low, the amount of oxygen that goes -- that is extracted by the body is increased, so that the amount of oxygen in the blood returning to the lungs is lower.
And if you've got a shunt condition in the lung, that will translate into an exacerbation of any hypoxia. It's kind of complex physiology but there's a way that low cardiac output makes

Page 66

Dr. Kofke - Direct
for worse oxygenation if the lungs are abnormal. If the lungs are normal, it doesn't matter. But if you have a problem with the lungs, then it'll make it worse.
Q. So sort of like a mismatch of oxygen that's available versus oxygen that can be used --
A. Well, no. It's more the efficiency of the lung in turning unoxygenated blood into oxygenated blood. So it gets more unoxygenated returned to it when the cardiac output is low. And since the lung is inefficient because the habit -- because of the habitus and there's a -- the mismash that you talk about, in those conditions, the low cardiac output will make the arterial oxygen level lower.
Q. Now, how do we know whether Mr. Mikell had a low cardiac output or not?
A. I think his preop evaluation, and I don't remember the exact numbers, indicated that he had a nonischemic cardiomyopathy. And there's probably an echo on -- echo showed an EF of 42 percent. It's depressed some but it's not normal.
Q. What is a normal ejection fraction?
A. About 60 percent. So it's not that far

Page 67

Dr. Kofke - Direct
depressed but it's depressed.
Q. And you say that the obstructive sleep apnea, we talked a little bit about that, you said that that would make him more inclined to obstruct his airway?
A. Yes.
Q. And when you talked about the risk for developing hypoxia, how do you determine whether a patient is -- your affidavit, you go on to say that he's at higher risk for hypoxia while undergoing sedation.
How do you make the determination or how does one make the determination of whether a patient has a risk for developing hypoxia and then the degree of risk associated with?
A. Well, I can't quantitate it other than to say that it's a, you know -- other than to say that it's increased. I don't know what if he underwent a sleep study, where it was actually quantitated for him specifically.
But if he's -- if you're large, then you can't -- you have difficulty taking deep breaths. If you're large, you tend to have a lot of tissues around your neck and in your pharynx in

Page 68

Dr. Kofke - Direct
your neck, and you may be fine whenever you're up and about and walking around but once you lie down and the contents of your belly presses up against your chest and then you fall asleep, you know, so that you obstruct your airway, you can -- you tend to get hypoxic.
And if you have sleep apnea, that means that someone documented drops in saturation while asleep. If you carry that diagnosis.
Q. Sure. And do you, in your practice, you generally, do you see patients and treat patients, not treat patients, but do you provide anesthesia to patients with sleep apnea?
A. It's unfortunately becoming more and more common.
Q. And is that just because our population as a whole is heavier and has a lot of --
A. I think that, plus more diagnosis. More diagnostic accuracy.
Q. So more people are actually reaching a point where they're diagnosed with the illness?
A. Yes.
Q. And now, in assessing a patient with sleep apnea, how do you -- you said there's no way that

Page 69

Dr. Kofke - Direct
you can quantify the risk; meaning, the risk of whether someone will become hypoxic after undergoing some type of sedation; is that accurate?
A. There might be scales and things out there where people try to predict it. But in my view, if I know that they're at increased risk, all that matters is the patient who's in front of me.
And if they're low risk and their oxygen levels fall, well, then suddenly they're high risk and I treat it or I prevent it, you know.
So if I know that they're at risk for it, then I just know to be more careful about airway management, you know, and to be on-guard.
Q. And when you said that if you know that they're at risk for it, you know to be more careful about airway management, what measures generally should one take to try to lower their risk of developing hypoxia in a patient with obstructive sleep apnea, obesity, and cardiac problems; I'm assuming you're referring to the ejection fraction of 42 percent?
A. So there's a variety of options available

Page 70

Dr. Kofke - Direct
and certainly one is just to give lower doses of medicines that will have you fall asleep. If that turns out to produce an obstructed airway, then you can take measures to reverse the obstruction by putting in nasal airway or an oral airway.
And if that doesn't work, then you have to apply positive pressure, or you know, if the patient is on CPAP at home, which I think this patient was, then you can apply CPAP just with anesthesia machine, and you know, and get by.
You know, those are the, you know...
And then if all that fails, well, then you turn down the level of sedation and it might come to intubation but generally they can be managed manually and just by adjusting the sedative dose.
Q. Now, is hypoxia a known risk or complication of anesthesia?
A. Yes.
Q. Now, you mentioned that there are a few options out there: One, you can give lower doses of medication. Second would be you can put in a nasal airway or an oral airway.
And then if that fails, then you might try positive airway pressure; is that what you

Page 71

Dr. Kofke - Direct
said?
A. Yes.
Q. Now, with regard to your affidavit, can you, in paragraph four you mention, "With patients like Mr. Mikell, efforts need to be undertaken by qualified and experienced anesthesia providers to protect and maintain the airway during sedation."
Do you hold the opinion that the physicians and the CRNA in this case were not qualified or experienced to protect and maintain Mr. Mikell's airway during the procedure?
A. Well, I'm pretty sure the anesthesiologist was and the CRNA certainly has the experience that I would expect that. Not knowing these individuals.
I mean in general, based on their qualifications, I would expect that. I note by the way, that affidavit indicates that all that was put in was a nasal airway and that I know that an oral airway was also placed.
Q. So just to back up. You take their position that the CRNA was not qualified to protect or maintain?
A. Well, she's qualified but she didn't do it.

Page 72

Dr. Kofke - Direct
Q. And do you take the position that she lacks the experience to provide airway protection?
A. No.
Q. And likewise the same question with regard to the anesthesiologist, Dr. Nelson. Do you take the position that he was not qualified or experienced to protect the airway?
A. I do not take that position.
Q. And you go on to say, "A variety of methods are available to do so." I'm assuming you mean to protect and maintain the airway during sedation, correct?
A. Yes.
Q. And you just gave me four examples. One was to give a lower dose of the medication. The second was to put in a nasal airway or an oral airway.
And the third was is if those two fail, to then try positive airway pressure. And if that fails, then turn down the sedation and intubate the patient?
A. Yes.
Q. Are there --
A. Yes.

Page 73

Dr. Kofke - Direct
Q. Are there any other methods that you are referring to?
A. Oh, an LMA would have been an option too. Laryngeal mask airway.
Q. And you go on to say that, "The records of this case do not reflect any particular maneuvers to avoid hypoxemia after the sedation was began other than the nasal airway, the predictable result that Mr. Mikell desaturated, became hypoxic, and suffered a cardiac arrest."
A. What's the question?
Q. I said your affidavit goes on to say that, "The records of the case do not reflect any particular maneuvers to avoid hypoxemia after the sedation was begun other than the nasal airway with predictable result that Mr. Mikell desaturated and became hypoxic and suffered cardiac arrest during the colonoscopy."
A. So that, plus an oral airway, I believe, was placed. There was an attempt to apply positive pressure but it failed and the anesthesia record indicates that a tidal volume of only 72 MLs was achieved during this attempt to do this, which to me, reflects a skill problem or a

Page 74

Dr. Kofke - Direct
technical problem in why was the CRNA unable to ventilate the patient when the anesthesiologist's deposition says the patient was easy to ventilate? And there's intubation notes which says that they were able to do an easy mask ventilation before one of his intubations.
And yet in this case, for whatever reason, and I assume it was a CRNA, was unable to maintain positive pressure to prevent the desaturation. So that the item I'm referring to is on the MUSC page 499 where it has tidal volume and peak respiratory pressure.
Q. Just to back up. When you talk about the risk of developing hypoxia, is there any -- you said you can't really quantify that risk. Is there any way to know whether a patient, to predict whether a patient will become hypoxic during the procedure?
A. Well, I know that if I were to give Mr. Ransom a full dose of Propofol and not support him, he would become hypoxic; however, I would put oxygen on him and ventilate him to prevent it.
So, you know, so it's all in -- it's all context-driven. Everybody can become hypoxic

Page 75

Dr. Kofke - Direct
if they're not ventilated properly and given a high enough dose of stuff. So it's hard for me to answer your question with maybe the quantitation that you want because it's a continuum of risk versus a continuum of doses of drugs that are given and the techniques that are employed to prevent or treat the hypoxia.
Q. And when you say, you know, preventing a risk, would you agree that what you're really doing is trying to lower the chance of that risk occurring by doing preventative or doing -- taking measures like giving oxygen and/or monitoring the patient, things like that?
A. Yes. Of course.
Q. And so we're not really talking about preventing risk, we're talking about lowering the likelihood of a risk occurring?
A. Exactly.
Q. And would you agree that often physicians or care providers can take measures to try to lower the incidence of a risk occurring but still experience the risk?
A. Yes. As my own example illustrated, sometimes you do the right thing and the bad

Page 76

Dr. Kofke - Direct
outcome still happens. It doesn't mean there was malpractice necessarily.
Q. And so a physician can take reasonable or a health care provider can take reasonable methods within the acceptable standards of care and still suffer a bad outcome?
A. Yes.
Q. Now, you talked a little bit about the maneuvers that could have been used to help lower the risk of desaturation and hypoxia and also knowing the cardiac arrest during the colonoscopy. Could you tell me what your understanding is of the events that led to Mr. Mikell developing hypoxia?
A. He came into the preanesthesia area with a documented on room air saturations in the, I don't know, 98 percent or something like hat. Then he came into the colonoscopy suite and was started on his sedative paradigm; I think before he was positioned with the Propofol and the Midazolam, and then the pulse ox is put on.
And the very first measurement is something like 80 percent. Eighty-three or 84 percent. So the very first measurement is low

Page 77

Dr. Kofke - Direct
indicating that the sedatives that were being given were low. And then the -- there's varying -- the CRNA doesn't remember if the anesthesiologist was present for induction but there's notes in the record that says he was. It's kind of irrelevant.
You know, he came in because the sats were low and they got them up into the 90s and that actually -- must have been a brief 90-some percent because it isn't reflected in the record; whereas, it might be reflected in the digital record behind the scenes.
And then he leaves and then the sats continue to fall into the 40s as recorded here. And then the cardiac arrest happens and the anesthesiologist is called back. During this period of the desaturating, the CRNA is trying to reverse it. Puts in a nasal airway, puts in an oral airway.
During -- at some point during that, the anesthesiologist is present but then, as I say, the sats became acceptable and he left. And then after he left, the sats continue to fall into the 40s and that's where I think we see the effort

Page 78

Dr. Kofke - Direct
to try to ventilate the patient and she's -- seems to be incapable of doing that despite the oral airway and the nasal airway with an inadequate tidal volume despite a peak in respiratory pressure being recorded of 30.
Because after the patient was intubated, we had tidal volumes in the 90s. So the patient sustained a cardiac arrest. The anesthesiologist came in, he indicates in his deposition that the patient was easy to ventilate. Perhaps he's the reason that sats came back up into the 80s, I'm not sure.
Then the patient gets intubated at around, between 8 o'clock and 8:15. And the sats gradually improve up into the 90s and the ACLS is successful and they get a rhythm back and then he goes off to the ICU and gets hypothermia -- hypothermia-induced.
Q. Do you have any opinion about whether efforts were made from the start of the case to try to lower the risk of Mr. Mikell experiencing hypoxia?
A. Well, rather than saying lower the risk, actually attenuate the hypoxia might be a better

Page 79

Dr. Kofke - Direct
term because their very first measurement, he was hypoxic.
Q. Attenuate the hypoxia?
A. Right. It started -- their very first measurement, it was in the 80s.
Q. And what case do you refer to?
A. Oh, that's on page 499 of the medical record.
Q. And you're looking at, when we look at 499, you're looking at the pulse ox from what time?
A. The realtime data graph. That dark, black line.
Q. And based on that, his pulse ox was what?
A. It looks to be in the low to mid-80s. And they mention that in their typewritten notes that sats up to normal, you know. It didn't say what they were before but it said, "Sats up to normal."
Although that didn't get into the graphical record here, you know. It must have been a brief normal because it didn't make it into that -- onto that black line.
Q. What you're saying is that at approximately 7:48 a.m., there's a note in the anesthesia record that says, "Nasal airway and O2 sat up to 94

Page 80

Dr. Kofke - Direct
percent"?
A. Yes. That sounds right. Now, those times, of course, are human recollections or human, you know, put in at some point, you know. It's not -- it can't be -- I mean you're busy taking care of the patient, so how can you be busy typing at the same time, you know.
You're putting in a nasal cannula and you're typing, you know. So there's a little bit of -- there's got to be inaccuracy in what is manually recorded. So it's roughly about the time you said but I'm not confident that it's exactly that time.
Q. Sure. And I understand. I understand what you mean. But would you agree that the O2 sat did increase after the nasal airway was put in?
A. That's what they said, so it must be true.
Q. Now, with regard to the pulse ox prior to the procedure starting if the medical record, if there's evidence in the medical record that prior to starting a procedure, his pulse oximetry was normal, would that change your opinion in any way? Normal meaning 90 percent or more.
A. Yeah. Normal in the anesthesia record. I

Page 81

Dr. Kofke - Direct
have a normal sat before sedation was started in the preop area, you know, written by -- documented by the sedation nurses or the GI nurse. Someone documented it, documented normal sat on room air. And then after sedation, all the trouble started.
Q. And when you talk about what you're referring to as, "the trouble started," you were looking at that graphic line on page 499?
A. Yes. Well, that -- yes. And the trouble started sometime before that but we don't know when because the sats aren't recorded. And we need to remember that the pharmacology of Propofol is it started sometime between 7:30 and 7:45 and if you're getting an infusion and the blood levels are just, are continuing to rise, you know.
So even though they got the sats normal and everything seemed fine, if the Propofol dose is staying the same, the blood level is going to continue to rise and it will get more and more respiratory depression.
Q. And you're looking at with regard to the pulse ox before the Propofol was initiated, you're looking at the realtime graph data on page 499?
A. Page 499 doesn't have the Propofol data on

Page 82

Dr. Kofke - Direct
it but the realtime graph data has the pulse ox, and the very first pulse ox reading is maybe 7:46, I'm not sure. Right after 7:45.
Q. And what was that reading?
A. It's in the low 80s it looks like. Eighty-three maybe.
Q. And are you looking at the graph?
A. Yes.
Q. I just want to be clear because I'm not there, I can't see what you're looking at. You're looking at the graph that's in the middle of the page and it's a solid black line that traces sort of a trend?
A. Yes.
Q. And you're saying that based on that graph, that graphical information, you take the position that the patient's pulse oximetry or oxygen saturation prior to the Propofol being started was inadequate; was low?
A. It was not recorded. I don't know what his baseline pulse ox was in the procedure room. It's just not recorded.
Q. And what, I'm sorry. I still don't understand when you say, "it's not recorded." Do

Page 83

Dr. Kofke - Direct
you see the block that says, "0730," and then on the second graph, it starts somewhere at 7:45?
A. Oh, let's turn to page 498.
Q. Okay.
A. Look at the Propofol row. Oh, I'm sorry. No. That's not the right page. Page 496.
Q. Okay.
A. The Propofol row says, "Propofol was started between 7:30 and 7:45." That's before the sat, the first sat reading.
Q. Dr. Kofke, if there is documentation in the medical record showing that there was a pulse ox reading that was normal, meaning greater than 90 percent, prior to the administration of Propofol, does that change your opinion in any way?
A. If there's documentation that they put the monitors on before they started their anesthetic, then that removes that as a contributing factor to what happened. It still doesn't take care of the problem with the inadequate -- with the inability to ventilate a patient; who other people were able to ventilate.
Q. Do you take the position that a nasal or oral airway should have been or some type of

Page 84

Dr. Kofke - Direct
airway should have been inserted prior to assuming -- I want you to assume that the pulse ox was normal prior to the administration of Propofol. Do you take the position that some type of airway should have been inserted in Mr. Mikell?
A. No. I can't say that if the sats were normal and he was breathing okay, it's not -- they were necessary to attenuate the development of hypoventilation, an airway obstruction.
So as the physician said in his deposition, putting the patient on his side might have been enough because when you're on your side, your tongue falls out of the way and the airway obstruction is less severe. But it wasn't enough in this case.
Q. And that's what we're talking about the lateral position being used?
A. Yes.
Q. And is it your understanding that Mr. Mikell was placed in the lateral position prior to the procedure starting?
A. Yes. Obviously that's the only way they could do it.
Q. Yeah. And so that that lateral position,

Page 85

Dr. Kofke - Direct
that actually reduces the pressure on the airway and it decreases the likelihood of obstructing the airway?
A. Yes.
Q. Now, we talked about sometime shortly after -- well, I don't want to characterize. Ms. Embrey's note indicates that at approximately 7:48 a.m., that she inserted a nasal airway. So is it fair to assume that at some point, either 7:48 or shortly before 7:48, she inserted a nasal airway on this patient and his oxygen saturations increased?
A. Yes. I believe that.
Q. Should anything have been undertaken at that time based on that result?
A. Just continued close observation, you know, which they did. And then they observed him desaturated and weren't able to manage it.
Q. And so at what point did he -- she goes on to say that, "At approximately 7:55 a.m., he was turned to a supine position from the lateral position to establish better assisted bag-mask ventilation and the nasal airway was out, oral airway was in." What's the point of -- what is

Page 86

Dr. Kofke - Direct
the oral airway?
A. Well, I think, and I agree with it, that an oral airway can better open an airway that's obstructed by a tongue falling on the back of the throat. A properly placed and properly-sized oral airway that is.
And I have no -- you know, I assume that those were the case -- that that was the situation with this.
And then it says, "Bag-mask ventilation," and that's where I -- that's where the patient was hooked up to the anesthesia circuit and it recorded the inadequate tidal volumes being accomplished with that.
Q. And she says, "Patient turned supine from the lateral to establish better assisted bag-mask ventilation. Nasal airway out, oral airway in." What is the point of bag-mask ventilation; can you explain what that means?
A. In the continuum of things that you can do, that's what I said is among the approaches to attenuating hypoxia in patients like this. So you put in an oral airway to decrease the obstruction a little bit and then you try to mask ventilate

Page 87

Dr. Kofke - Direct
them to give them CPAP. And sometimes that entails some tricky things with jaw thrust, and you know, things that you can do to pull the jaw off the back of the -- pull the jaw so that the tongue comes off the back of the throat so that it clears the airway.
Q. And when you talk about it would be like a jaw tilt or how would you --
A. It was a jaw thrust so. Fingers behind the jaw and then the jaw is forced -- is pushed forward (indicating) and that pulls the tongue off the back of the throat. With positive pressure, that's usually enough.
And in this case, given that other people were able to ventilate him, that's probably all he needed.
Q. And do you know whether they tried to do -- they tried the jaw thrust in this patient?
A. Don't know.
Q. If Ms. Embrey testified that she attempted a jaw thrust maneuver, would that in any way affect your opinions?
A. Well, then I have to -- just because two other people said they were able to ventilate,

Page 88

Dr. Kofke - Direct
mask ventilate this man, I have to assume that it was not done effectively. I mean that's all I can say, you know.
The anesthesiologist said he was easy to mask ventilate and the people who intubated him some -- a week later said he was easy to mask ventilation. But in the hands of this team or this CRNA, unable to ventilate: Hypoxia, cardiac arrest.
Q. And when you're talking about bag-masking ventilate -- using the bag-mask device to ventilate a patient, what is the proper technique that one should use?
A. Well, there's you put your one or both hands on the patient, you put your fingers behind the jaw, pull the jaw forward. (Indicating.) You can flex the head backwards or if you want to use a sitting position, there's two ways you can do this.
You can pull the head a little bit anterior and that generally is enough to open up most airways and be able to ventilate. Now, putting two hands on to mask-ventilate means that you don't have a hand free to squeeze the bag.

Page 89

Dr. Kofke - Direct
So depending on what their ventilator capability was, the ventilator can be set to manually ventilate the patient or maybe by then the anesthesiology arrives and the two of them can work with one person squeezing the bag and the other person keeping the airway open. So that's the general approach in this situation.
Q. And you said that you have to assume that the CRNA did not properly or did not use the proper technique to bag-mask this patient. And what leads you to reach that conclusion?
A. Because the anesthesiologist said that the patient was easy to mask ventilate in his deposition. And when he was intubated, on page 507 it says, "Easy MV," easy mask-ventilation, "with oral airway." But it does say two people.
Q. And you said that's on 507?
A. Page 50 -- MUSC, page 507. It's an intubate --
Q. Is there another number on the bottom of that?
A. I don't know. Help. Help.
MR. RANSOM: This is the page you're talking about? (Indicating.)

Page 90

Dr. Kofke - Direct
THE WITNESS: Yeah.
MR. RANSOM: That's 507 of 2,115, Alissa.
BY MS. FLEMING:
Q. And is it dated? What's the date on that page?
A. It's on the bottom. On the bottom.
MR. RANSOM: It's October 8 of 2010. It's from a different procedure.
THE WITNESS: It's intubation. They tried to extubate him and then he failed, so they had to reintubate him.
BY MS. FLEMING:
Q. And so Dr. Kofke, what you're saying is because Dr. Nelson said or testified that the patient was easy to bag-mask and that a week after this procedure, another anesthesiologist documented that the patient was easy to bag-mask, that you're assuming that Ms. Embrey used improper technique to try to bag-mask this patient?
A. That's the only conclusion I can come up with.
Q. And can you explain when you're talking about whether a patient is easy to bag-mask, what

Page 91

Dr. Kofke - Direct
factors play into that determination?
A. I'd say again that's a continuum of difficulty from a patient who you can put a mask on, put them to sleep, paralyze them, put a mask on them and you don't need any oral airways or nasal airways or anything. They got a nice big jaw and there's not a lot of extra tissue and you just squeeze the bag and they just ventilate.
To perhaps the most extreme would be a patient with acromegaly who has a lot of redundant tissue in the back of his throat and you put that patient to sleep and you go to mask-ventilate him and you have an airway obstruction: Impossible to mask-ventilate.
And then large patients who are similar to acromegaly patients also have a lot of extra tissue and can be impossible to ventilate. There's a can't-ventilate situation that we are trained to look for in anesthesia.
You know, can't ventilate, can't intubate is a surgical airway indication. Can't ventilate, can intubate is another situation. Or you have difficult-to-ventilate, you know.
And I don't have a grading for that

Page 92

Dr. Kofke - Direct
other than it's a continuum from minimally difficult, moderately difficult, very difficult, impossible to ventilate.
Q. And so with regard to Ms. Embrey's attempt to bag-mask ventilate this patient, I just want to understand more about why do you think she used the improper technique and the basis of your opinion is that she used the improper technique because Dr. Nelson said that this patient was easy to bag-mask and then a week later on the 8th, another anesthesiologist said this patient was easy to bag-mask ventilate?
A. That's the basis for my opinion, yes.
Q. Are there times when an anesthesiologist may attempt to bag-mask a patient and it can be more difficult than another at another point in time?
A. I would say yes, depending on the context and the situation and if, you know, certainly whenever they come in off the street is probably the easiest time. And after they've been in the hospital for a while and they get more fluids and stuff, it'll be more difficult.
So this actually should have been the

Page 93

Dr. Kofke - Direct
easiest time of his admission.
Q. And are there occasions where an anesthesiologist attempts to bag-mask ventilate a patient and is unsuccessful?
A. Yes. Yeah. We have specific algorithms for dealing with that.
Q. And what does an anesthesiologist do if or CRNA do if he or she attempts to bag-mask ventilate a patient and is unsuccessful?
A. Then if the patient arrested hasn't arrested, I will go straight to a laryngeal mask airway as a rescue device.
Q. Do you always have the benefit of time between a hypoxic event and an arrest to insert an LMA?
A. No. That's why I kind of qualified my answer a little bit. If the patient's sats are decreasing, they haven't arrested and you have an LMA ready, which you should have as part of your checkout, then you put it in. But it might take 15, 30 seconds to put it in and get seated properly and so on.
And if you're by yourself in a room like that, I can see how it would be tricky. If

Page 94

Dr. Kofke - Direct
they proceed to have an arrest, then I say go straight to intubation. Like which is what they did.
Q. They went, in this instance, is it your opinion that when the bag-mask ventilation did not help to improve his hypoxia, they proceeded directly to intubation?
A. Right. Because they have a cardiac arrest situation. So that's perfectly defensible.
Q. And now so what should Ms. Embrey have done after she attempted the oral airway and that -- I guess let me back up. After she attempted the nasal airway, her note indicates that she then attempted to bag-mask ventilate the patient.
Should she have done something differently between the time that she attempted the nasal airway and then subsequent to that, the bag-mask ventilation?
A. The only thing I would have added would have been to stop the Propofol.
Q. Stop the Propofol?
A. Stop the Propofol. And then, you know, be technically capable to actually mask-ventilate the patient.

Page 95

Dr. Kofke - Direct
Q. And what is your understanding of whether was the Propofol stopped at any point in time?
A. I don't think so but we could look at the record and... It looks like it continued on unchanged from the 7:30 to 7:45 block until they increased the dose after intubation at 9:15.
I'm assuming those little caret marks indicate the same dose being given each 15-minute block.
Q. And so it's your opinion that you would have continued on 75 micrograms per kilogram per minute of Propofol from approximately 7:30 to approximately 9 o'clock a.m.?
A. Yes.
Q. Now, if there's documentation in the medical record showing that the Propofol was, the dosage was actually decreased right around the time that this patient developed hypoxia around 7:48, 7:58 a.m., does that change your opinion?
A. Yes. I mean it would even change my opinion if she or the doctor remembered that it was turned off. It's just not documented.
Q. And if the Propofol was reduced and subsequently turned off, how would that change

Page 96

Dr. Kofke - Direct
your opinion?
A. We still have the issue of not being able to ventilate the patient. It's just what I would have done. And it may or may not have helped at that point because it would take probably 10 or 15 minutes for it to -- its effects to fully subside.
Q. And if the Propofol was, in fact, turned on at approximately 7:53 a.m., which would have been prior to her turning him on his back from the lateral position and attempting to bag-mask ventilate the patient, does that affect your opinion in any way?
A. It would affect my opinion that they should have turned off the Propofol because if they did, then I don't have that opinion. But it doesn't affect the overall issues.
Q. And now, we're talking about the bag-mask ventilation. You talked about, you know, the improper technique. How long does one attempt to ventilate the patient before you decide this is not working. I need to attempt some other maneuver?
A. I think you know it within ten seconds probably. Ten or 15 seconds. With each bag, each

Page 97

Dr. Kofke - Direct
ventilation, you can tell.
Q. And do you have any indication of how much time went by between the time that Ms. Embrey attempted to bag-mask ventilate this patient and the time that intubation was undertaken?
A. Since I'm not sure that I entirely trust the precise times that were entered, all I can surmise from the overall picture is that it was -- all this happened over a period of minutes with the -- from the sat of 94 and then the sats rapidly dropped into the 40s and then the oral airway's put in, the patient's put on his back, ineffective ventilation during that period, a few minutes. Five minutes maximum it seems.
Q. And you take the position that the time frame with which it took to try to establish that adequate bag-mask ventilation and intubation was a deviation from the standard of care?
A. No. I don't have an opinion on that. It's, you know, my opinion is that the ventilation was ineffective.
Q. And so what could Ms. Embrey have done differently to try to improve the bag-mask ventilation that she employed?

Page 98

Dr. Kofke - Direct
A. The only thing she might have done differently would have been to object to the anesthesiologist leaving whenever they had a moment of sats in the 90s. Then there would have been two people there and they may have averted the whole thing.
Q. And you said that, "they may have averted the whole thing." You hold that opinion to a reasonable degree of medical certainty most probably that had two people been in the room assisting this patient, that they would have most probably averted the hypoxia --
A. Yes. I think I can say to a medical, reasonable medical certainty that two people in the room would have averted it. They would have reacted quicker. It would have been different.
Q. And what time did Dr. Nelson come back into the room?
A. He came in whenever they got into big trouble with the sats in the 40s. And I'm not sure if he was there before the arrest or not but whenever things were unable to be managed, then he got called back.
Q. And so it's your opinion that as soon as

Page 99

Dr. Kofke - Direct
the sats rose to 94 percent, that it was improper for Dr. Nelson to leave the room at that point in time?
A. Well, it depends on their or her assessment of how difficult this airway is going to become. So I think that in general, if the sats are 94 and the anesthesiologist sees that things are okay, that it's okay for him to expect the nurse to be able to maintain the sats.
You just asked what would have made it different. And you know, if he had stayed, it would have been different. It might have been appropriate for him to leave and expect her to maintain the sats, you know. It's hard for me to say with certainty.
Q. So you're saying that it would have been acceptable or it was acceptable if -- I mean the decisions like that, whether they stay in the room or leave a room, somebody in anesthesiology standpoint or anesthesia standpoint, are those dependent oftentimes on one's clinical judgment?
A. Yes. It's one's clinical judgment and one's experience with who you're working with. But yeah. Clearly I'd say clinical judgment is

Page 100

Dr. Kofke - Direct
the correct descriptor.
Q. And so if Dr. Nelson assessed this patient and after the nasal airway was inserted, the sats rose to 94 percent, you take the position that it was improper for him to leave the room?
A. No.
Q. Now, at what point in time do you believe he should have come -- you said that you could say to a reasonable degree of certainty most probably that the outcome, I'm assuming you mean the cardiac arrest, would not have occurred had Dr. Nelson been in the room with Ms. Embrey; is that your opinion?
A. Yes. If they had both been there.
Q. And what could he have done that was not done that would have changed the outcome?
A. Well, he indicated in his deposition that he was able to ventilate the patient. So on a first maneuver, he would have done that.
And on a second step, he would have been a second person to help ventilate the patient if two hands are needed to keep the airway open. So on both of those counts, it would have been helpful for him, you know, to have been there more

Page 101

Dr. Kofke - Direct
quickly to help.
Q. At what point in time should he have come back into the room?
A. I think he should have been called back as soon as it became clear to the CRNA that this nasal airway wasn't doing it and she was starting to think about putting in an oral airway and turning the patient sideways. Somewhere's in that time is whenever he should have been called and immediately there.
I'm not sure if there was a 30-second or one-minute delay, you know. I can't glean that from the record.
Q. And I was going to ask you, do you know when he actually was called and came back into the room?
A. All I have is what was put in the record.
Q. It looks like, from the narrative, it looks like it says 7:51 note and out --
A. Yes. Yes.
Q. -- out of the room. And then at 7:55, it indicates that Ms. Embrey turned Mr. Mikell into a supine position from a lateral position to establish better assisted bag-mask ventilation,

Page 102

Dr. Kofke - Direct
and the nasal airway was out and that the oral airway was in; do you see that?
A. Wait a minute. I know where it is. I got to find it.
Q. Oh, sure.
A. Here it is. Yes. Wait a minute. That's page -- whoop. Yes. On page 494?
Q. Right.
A. That's where all that narrative was entered.
Q. Right. And then at approximately 7:56 a.m., there's a note that says, "Came into the room. Patient hypoxic with junctional rhythm and no palpable pulse. ACLS initiated. Mayday team called."
A. Right. It says it was charted by DBE but I think in her deposition, she indicates that he actually charted that because she was logged into the record.
Q. Right. And so based on this record, there's approximately a time interval of one minute between what she documented as her attempt to insert the oral airway, bag-mask ventilate this patient and the time that Dr. Nelson came into the

Page 103

Dr. Kofke - Direct
room; is that --
A. Yes.
Q. -- correct?
A. That's what it says.
Q. And so is it your opinion that had Dr. Nelson been in the room approximately one minute earlier, that the cardiac arrest would not have occurred?
A. I think that's reasonable -- that's a reasonable assessment. I can't say with any certainty but it's medical -- reasonably medically certainly. Because that's an important minute.
And of course, we're not sure that it's a minute. It could have been two minutes or three minutes or it, you know, it's all done. As I say, they're trying to take care of the patient while charting.
Q. And when you say, you know, that it would have changed the outcome, meaning it would have prevented the cardiac arrest from occurring, you hold that opinion to a reasonable degree of medical certainty most probably?
A. I think there's a reasonable medical certainty based on the rate of descent of the

Page 104

Dr. Kofke - Direct
saturation that you can see on page 504. I mean it's falling rapidly and if he had been there at the beginning of the descent, it would have attenuated things.
Q. When I ask you most probably, I'm asking you is there a greater than 50 percent chance that the cardiac arrest would have been averted or would not have occurred had Dr. Nelson been in the room at the time that Ms. Embrey attempted to bag-mask ventilate the patient?
A. Yes. Greater than 50 percent chance of preventing the onset of cardiac arrest.
Q. And that's if he would have been in the room approximately one minute earlier?
A. Yes. I'm assuming that she called him as the sats were descending and you can just tell from the rate of fall that it was rapid. So a minute would have made a difference.
Q. And when you say you can tell from the rate of descent, what are you referring to?
A. On page 504, you can see where the sats are falling. And it must have been over the course of about two minutes, it falls from like 80 to 47.
Q. And where are you looking? Tell me about

Page 105

Dr. Kofke - Direct
that.
A. On the black saturation line between 7:45 and 8:00 where you see the big dip, big dip. So during that descent time is the time to make the biggest difference.
Q. And you said that it's your understanding that that dip means that caret that sort of goes down, that that occurred between 7:45 and 8:00 a.m.?
A. Yes. I mean it looks like it started at from 7:45, 7:52 maybe, and then it got to the bottom at maybe 7:58 or 59. And then they did something to bring the sats up.
I don't know if it was intubation or him bag-mask ventilating but they managed to bring the sats up but they're doing CPR at the same time.
Q. And if there's documentation in the record showing that, in fact, the sats between 7:45 and 8:00 a.m. had actually -- were coming up after that initial decrease, would your opinion change?
A. I'm not sure. You mean if there was documentation in the record which showed that the sats didn't drop to 47? Then my opinion would

Page 106

Dr. Kofke - Direct
change.
Q. Right. Let me ask you this. Did the sats drop to 47 before or after Ms. Embrey attempted to insert the oral airway and bag-mask ventilate the patient?
A. It's hard to say when exactly it bottomed but I know that the sats were falling. And I imagine there was a sense of panic, you know.
The nasal airway went in, the sats came up and then he left the room and the sats continued, then proceeded to fall to 47 quickly.
So you've got to do something, and she's, you know, turning him on his back, putting an oral airway in and doing all that stuff and was unable to ventilate him.
Q. And so you can't tell me based on the record exactly what time Mr. Mikell's sats dropped to 47 percent?
A. Relative to the nasal airway and the oral airway, it's hard to say. No, I can't. I can't. You're -- you know...
Q. And if in fact the sats dropped after she attempted the -- but prior or sorry. I guess prior to or as Dr. Nelson was in the room when

Page 107

Dr. Kofke - Direct
those occurred, does that change your opinion?
A. No. Not really because -- well, that sat of 47 might have occurred during the cardiac arrest and it may not have been the cause of the arrest but certainly the sats before that were still low enough to cause trouble, you know, in this patient.
And it's hard to say what occurred at exactly what moment in their course of events.
Q. Do you know what the sats were when Dr. Nelson left the room at 7:51 a.m.?
A. I think she wrote a note that said 94 percent.
Q. And do you know what they were when she attempt to place him in the supine position and bag-mask ventilate him?
A. Well, since I'm not sure that the times that were entered are exactly correct, I can't say with certainty what the exact sat was when she turned him supine other than it was enough to make her worry.
Q. And what you're saying is that you don't know what the sats were between 7:48 a.m. and 7:55 a.m.?

Page 108

Dr. Kofke - Direct
A. Right. Not exactly.
Q. And I mean what do you consider to be honestly, what do you consider to be a normal pulse oximetry reading?
A. I'd say over 92. And actually I should take back my previous statement. I mean you can tell what the sats were at each minute because it's in the graphical chart on page 499, but I can't -- what I can't say with certainty is relating those sats to the events.
Q. And when you say that you can't relate those sats to the event, what do you mean?
A. Because the events were recorded by humans who are trying to take care of a sick patient, so thus I think that there could be some room for honest error there. I mean I'm not sure I'd do any better, you know, unless you have some sort of event marker to press which some anesthesia records give that capability.
Then with that event marker, after the fact, you can go in and fill in what happened at that event marker.
Q. And had Dr. Nelson been in the room approximately sometime between 7:51 and 7:56, what

Page 109

Dr. Kofke - Direct
or actually I want to ask you between 7:55 and 7:56 a.m., what would he have done that would have changed or would have prevented the cardiac arrest from occurring?
A. He would have effectively ventilated the patient or applied CPAP with anesthesia system.
Q. And do you hold the opinion that providing CPAP would have prevented the arrest from occurring?
A. It's more likely than not.
Q. And what is that opinion based on?
A. Because he uses CPAP when he sleeps physiologically and he does all right with it. And it's something which every experienced anesthesiologist knows can open up an obstructed airway.
Q. And when you talk about, earlier you started talking about bag-mask ventilate the patient and I think you were looking at the page of tidal volume. Can we look more closely at what you're looking at as your position that Ms. Embrey had not adequately bag-masked ventilated the patient?
A. There's two pieces of information. One is

Page 110

Dr. Kofke - Direct
that he was continuing to desaturate despite having an oral airway in and her statements that she was masked ventilating. And then we have the anesthesia record on page 499 where the tidal volumes were actually recorded.
Now, this is only -- this is probably the maximum, over 15-minute interval but it says, "72 MLs for a peak pressure of 30." She wasn't getting any gas into his lungs. Now, it's entirely possible that this is just 72 over a 15-minute block from 7:45 to 8 o'clock. Maybe you have some data behind the scenes in your database which says, you know, a higher tidal volume. I don't know what criteria are used for the algorithm to put 72 down.
Maybe she was able to get every single breath at 200 and one breath at 72 and the algorithm picked 72 as the number to put in there. I don't know.
Q. And what is a normal tidal volume?
A. I would say that a normal tidal volume done by hand would be in the 200-to-300-range.
Q. And is expired tidal volume the same as tidal volume?

Page 111

Dr. Kofke - Direct
A. Yes.
Q. And what's the tidal volume tell you?
A. It tells me how much gas is actually going into the lung and then coming back out into the anesthesia circuit.
Q. And in order to measure tidal volume, how do you measure tidal volume? Is that something you measure once you start bag-mask ventilating the patient?
A. The machine measures it and then relays -- I don't know what the actual technology is but the machine measures it and then that digital information is then entered into the electronic record.
Q. And can you say to a reasonable degree of certainty most probably at what point Dr. Nelson should have been in the room to prevent the arrest from occurring?
A. Where the pulse ox is starting to descend, there's a little elbow there at 80 percent, I would assert that if he was there in the room at that point, he would have prevented the subsequent drop to 47.
Q. And so it's your opinion that when the

Page 112

Dr. Kofke - Direct
pulse ox dropped to approximately 80 percent, that he should have been -- if he had been in the room, he would have -- the arrest would have been prevented?
A. Yes.
Q. Do you have any other criticisms of how the events that occurred after he came back into the room?
A. Well, what do you mean, "after he came back into the room"?
Q. Sure. Do you have any criticisms as to the care that was provided once Dr. Nelson entered the room, he was set Donna Embrey with this patient's airway?
A. Okay. So faced with a patient who was desaturating and in a cardiac arrest, it sounds like he was able to get the sats back up, get the patient intubated, get a centered line in, get your blood pressure up, reverse the cardiac arrest, no. I don't have any criticisms of what he did once he came back in the room.
Q. And so you have no criticisms of the management of the patient following him coming back into the room?

Page 113

Dr. Kofke - Direct
A. No.
Q. Now, just explain with regard to the tidal volume measurements, does the machine measure the tidal volume only when the patient is being bag-masked ventilated or is that something that's monitored continuously?
A. If they have the circuit, the mask with the anesthesia circuit on the patient, then it will record both spontaneous and controlled ventilation tidal volumes.
Q. And when you say spontaneous versus controlled, what does that mean?
A. Controlled mean -- spontaneous means the patient is breathing on his own and controlled means that somebody is squeezing the bag or has a ventilator forcing the air into the lungs.
Q. And what is a normal range for a spontaneous tidal volume?
A. A spontaneous is going to be like 200, 300. And you'll do the same with the mask ventilation.
Q. And the measurement would be -- is accurate only if the monitor is correctly hooked up to the bag-mask or the machine?
A. It's only accurate if it's hooked up

Page 114

Dr. Kofke - Direct
correctly to the bag-mask system. And also if you're using a mask, that there's no leak, you know.
That everything that the patient is exhaling is -- that there isn't a leak and is going -- and he's exhaling his whole gas up into the air. So that is a possibility for an error in my conclusions.
Q. And how is the tidal volume monitored if the patient's breathing spontaneously?
A. The anesthesia circuit, you know, by the same technically basically, you know. They breathe into the circuit and the thing registers the gas being exhaled.
Q. And can you describe, just so that we understand, where that monitor is located that would measure the tidal volume?
A. I mean I can't say about their anesthesia machine specifically but in general in the machines that I've worked with, the tidal volume measurement device is back where the soda lime is, somewhere's in that area -- where the soda lime -- you know, next to the machine itself, there's a -- I mean I could draw a picture and you can turn it

Page 115

Dr. Kofke - Direct
into an exhibit if you want.
Q. That's describing it is fine. I just couldn't hear you.
A. Okay. So it's a circle. So here's my mouth (indicating) which of course won't get into the deposition but there's a circle and the mask and or a tube goes into my mouth and there's an exhale, exhale tubing and an inhale tubing.
And usually the exhale tubing has a monitor at the end of it before it goes into the thing that absorbs the carbon dioxide and then goes back into the patient. That's sort of a generic description.
Machines vary from device to device but... And they probably use different technology for actually measuring the tidal volume.
Q. Now, other than what we've discussed, do you have any other opinions regarding the care that was provided in this case?
A. I think I've summarized it.
Q. And do you intend to testify about the cause of Mr. Mikell's injuries or death? Alleged injuries or death?
A. All I'm going to comment on is the cause of

Page 116

Dr. Kofke - Direct
his cardiac arrest.
Q. And so with regard to your affidavit says somewhere along the lines of, "These events were followed by a lengthy hospitalization." Do you intend to give any opinions about what might have caused him to be in the hospital or ultimately what caused his death?
A. Well, it's kind of a tricky question, not that you're trying to be tricky, but I think that if he hadn't had the cardiac arrest, none of that would have happened. So that's one arm of that answer.
But the other arm is I'm not exactly sure what caused him to go into renal failure. Why he needed a trach and peg, and you know, all of that except that I'm confident that none of it would have happened if he hadn't had the cardiac arrest. And they chose to cool him afterwards.
Q. And actually I wanted to ask you that. Hyperthermia protocol, what is the purpose of that protocol?
A. That's the current state of the art for treating patients after a cardiac arrest who appear to be comatose. And you know, it's a newer

Page 117

Dr. Kofke - Direct
protective strategy that's being employed.
Q. Do you have any opinions about the cause of Mr. Mikell's death?
A. No. I didn't review his chart carefully for damages, or you know, things like that.
Q. And are you going to be rendering any opinions about whether the cardiac arrest caused any injuries and/or a worsening of his cardiac function?
A. I didn't review his chart carefully for those elements, so I don't think I should comment. I was asked to review the anesthesia management.
Q. And so just to clarify. You're not going to give any opinions about whether the cardiac arrest that occurred on October 1st, 2010, caused or contributed to any alleged damage to his heart or a worsening to his heart function?
A. If his heart got worse after this, I think I have to say that the cardiac arrest contributed to it because it wouldn't have happened without the cardiac arrest.
But after the cardiac arrest and the hyperthermia, I didn't focus on any of that stuff.
Q. And if the medical records indicate that

Page 118

Dr. Kofke - Direct
his heart function, meaning, his ejection fraction was the same if not slightly better following this incident, are you going to disagree with that information?
A. No. Because, well as I said, I didn't carefully review it but if you tell me or someone tells me that the heart improved afterwards, well, then -- I don't think the cardiac arrest made his heart get better, it probably was other therapies that he was getting, you know, in the ICU.
Q. And if his heart function was about the same afterwards, does that -- do you intend to say that the cardiac arrest worsened his cardiac function?
A. Only if it was worse so. So no.
Q. And with regard to Mr. Mikell's renal function, do you have any opinions about whether the incident on October 1st, 2010, caused any type of change in his renal function?
A. He came in with chronic renal dysfunction to begin with, so that made him particularly vulnerable to having a period of hypotension from the cardiac arrest. So I think the cardiac arrest did contribute to that.

Page 119

Dr. Kofke - Direct
Q. And do you know whether at any point in time, whether his renal function returned to his baseline?
A. I don't know. I didn't, as I say, I didn't review the chart carefully for that. All I know is he got dialysis -- I think he got dialysis for some period of time.
Q. Do you intend to testify that the events that occurred on October 1st of 2010, somehow caused or contributed to Mr. Mikell's death?
A. I think that they contributed, I'm not sure that they caused.
Q. And when you say you think that they contributed, what factors are you relying on? Do you know what caused his death --
A. No.
Q. -- do you have any opinions as to what caused his death?
A. Nope. All I know is that if the cardiac arrest hadn't happened, he would have gone home that night. But instead, he had a cardiac arrest and ended up with a prolonged ICU stay and trach and peg, and you know.
So I can't help but conclude that the

Page 120

Dr. Kofke - Direct
cardiac arrest contributed to this. I don't know or I don't recall what the exact cause of his moment of death was.
Q. And do you recall when he died?
A. No.
Q. Does the timing of when he died compare to when the arrest occurred factor into your opinion about whether the arrest that occurred on October 1st, 2010, contributed to his death?
A. The only way that I would think that it didn't, that the cardiac arrest didn't contribute to it is if he went on to totally recover and get hit by a car or something. I mean, you know, die of some other cause unrelated to this.
Q. And how do you know -- I mean what factors are you relying on to reach the opinion that the cardiac arrest contributed to Mr. Mikell's death?
A. Because he had a cardiac arrest and then he ended up in the ICU for some period of time with renal failure and that was all due to the cardiac arrest.
And I don't know what he died from. It's kind of irrelevant if he died shortly after this. He was going to go home that day and

Page 121

Dr. Kofke - Direct
instead, he ended up in an ICU and dying at some time afterwards. After being in the ICU for some period of time.
Q. And just to clarify. Do you know when he died?
A. No.
Q. And do you know what caused his death?
A. No.
Q. Do you have any information surrounding the time frame of his death?
A. No.
Q. What may have occurred?
A. Didn't review his chart at all regarding that event.
Q. And do you have any information regarding the incidents that may have occurred between the time that -- do you know whether Mr. Mikell was discharged from MUSC or whether he died in the hospital?
A. Don't know. All I reviewed was the anesthesia-related stuff.
Q. You said that you don't know whether he was discharged prior to the time that he died. Does that have any bearing on your opinions?

Page 122

Dr. Kofke - Direct
A. I think it's generally -- basically irrelevant. He had a cardiac arrest, he didn't go home. Instead he went through a prolonged hospital course, and the exact mechanism of death becomes less important other than to say that it wouldn't have happened had he not arrested.
All that stuff, however it is that he died, it wouldn't have happened.
Q. But you don't know when he died?
A. No.
Q. And you don't know whether he was in the hospital when he died or whether he was at home?
A. No.
Q. And you don't know whether he saw, if he had been discharged from the hospital, whether he saw -- you don't whether his renal function returned to baseline or not?
A. Correct.
Q. And you don't know whether he sustained any type of injury or damage to his heart as a result of the arrest?
A. No.
Q. Can people suffer a cardiac arrest and not have any long-term sequelae from that?

Page 123

Dr. Kofke - Direct
A. Yes.
Q. And can people suffer cardiac arrest and sustain some type of transient worsening of their condition but subsequently return to baseline?
A. Yes. That's the hope of hyperthermia, but yes.
Q. And when you say that had he not suffered an arrest and that none of this stuff would have happened and so therefore it automatically contributed to his death, what factors about his condition contributed in your opinion to his death?
A. I don't know. Except that he would have gone home that night if he hadn't had the cardiac arrest and wouldn't have undergone the hospitalization and whatever happened after that.
Q. And so is it your opinion that because Mr. Mikell suffered an arrest, that it must have in some way contributed to his death?
A. Yes. That's why I used the word, "contributed." I'm not sure about caused.
Q. And but you're not able to provide any information regarding what factors about his condition or what sequelae the arrest may have

Page 124

Dr. Kofke - Direct
caused that contributed to his death; is that correct?
A. That's correct.
MS. FLEMING: Actually I don't think I have any further questions. I appreciate your time and I hope that you don't get much more weather. Rob, you may have some questions.
MR. RANSOM: I don't have any questions.
MS. FLEMING: Okay.
THE WITNESS: Not a single objection.
MS. FLEMING: Yeah.
MR. RANSOM: What good are they?
MS. FLEMING: Thank you. I appreciate it.
MR. RANSOM: Thanks, Alissa.
MS. FLEMING: I would like an e-tran with exhibits, that would be fine.
(Witness excused.)
(Teleconference deposition concluded at 4:41 p.m.)

I N D E X

WITNESS	DR	CR	RDR	RCR
WILLIAM A. KOFKE, M.D.	3			

E X H I B I T S

NUMBER	DESCRIPTION	PAGE
Kofke-1	Letter dated 12/16/14 with 32 Notice of Deposition attached	
Kofke-2	Dr. Kofke's typewritten Notes with different attachments	41

CERTIFICATE

I HEREBY CERTIFY that the proceedings, evidence and objections are contained fully and accurately in the stenographic notes taken by me upon the videoconference deposition of WILLIAM A. KOFKE, M.D., MBA, FCCM, taken on March 4, 2015, and that this is a true and correct transcript of same.

JOANNE E. GUBLER, RPR and Notary Public

(The foregoing certification of this transcript does not apply to any reproduction of the same by any means, unless under the direct control and/or supervision of the certifying reporter.)

Exhibit C

LEVENTIS & RANSOM
ATTORNEYS AT LAW

Post Office Box 11067
Columbia, South Carolina 29211

1913 Bull Street
Columbia, South Carolina 29201

Telephone (803) 765-2383
Facsimile (803) 799-1612 (fax)

James J. Leventis
jjleventis@aol.com

Robert B. Ransom
bertcone@aol.com

April 11, 2016

M. Dawes Cook, Jr. ,Esq.
Post Office Drawer H
Charleston, SC 29402

VIA EMAIL: mdc@barnwell-whaley.com

Re: Estate of Charles Mikell v. MUSC
2012-CP-10-7275

Dear Dawes:

I was able to speak with Dr. Kofke about what has been learned through recent discovery. He has produced the attached notes which are sort of his electronic cutting and pasting of the record as he goes through it. Here is what I understand his main conclusions about the case to be, albeit in my words not his:

1. The anesthesia record has too many discrepancies and internal inconsistencies to be of much use in determining what really happened. The whole purpose of an electronic medical record is to avoid reliance on people's memories, which is what we are left with in this case.

2. If the text messages and phone calls took place before Mr. Mikell desaturated, then that activity probably caused the cardiac arrest because the anesthesia providers were distracted from what was developing.

3. If the text messages and phone calls took place during the desaturation, that is even worse because that activity would have interfered with managing the airway, leading to the cardiac arrest.

4. If the text messages and phone calls had nothing to do with it, then there is no excuse for failing to manage the airway so as to avoid the cardiac arrest entirely.

5. Following his debilitating hospitalization, Mr. Mikell never returned to his pre-event baseline. Several medications which had been used to keep him stable were changed while he was in the hospital. This made him more susceptible to the type of heart dysfunction described as being the likely cause of his death. So the cardiac arrest, physical injuries, hospitalization, debilitation, medical management, etc. all contributed to his death.

This is in addition to the things Dr. Kofke talked about at his deposition in March 2015.

Thank you for your attention to this matter. Please call me if you have any questions or comments.

Very truly yours,

Robert

Robert B. Ransom

Attachment

STATE OF SOUTH CAROLINA	)	IN THE COURT OF COMMON PLEAS
	)	
COUNTY OF CHARLESTON	)	CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased,	)	
Plaintiff,	)	**DEFENDANT MEDICAL UNIVERSITY OF SOUTH CAROLINA'S ANSWERS TO PLAINTIFF'S FIRST DISCOVERY REQUESTS**
vs.	)	
MEDICAL UNIVERSITY OF SOUTH CAROLINA,	)	
Defendant.	)	

TO: ROBERT B. RANSOM, ESQUIRE, COUNSEL FOR THE PLAINTIFF:

Defendant Medical University of South Carolina (hereinafter "MUSC"), by and through its undersigned counsel, hereby answers the Plaintiff's First Discovery Request as follows:

RESPONSES TO DISCOVERY REQUESTS

1. Give the names and addresses of persons known to the parties or counsel to be witnesses concerning the facts of the case and indicate whether or not written or recorded statements have been taken from the witnesses and indicate who has possession of such statements.

ANSWER:

Jeffrey Akhtar, MD
Carolina Family Care
30 Bee Street
Suite 2100
Charleston, SC 29403

Dr. Akhtar is a family care physician at Carolina Family Care. He is expected to testify regarding the medical care and treatment that he provided to Charles Mikell. The Defendant is not in possession of any written or recorded statement.

Luann Arthur
14415 Lusby Ridge Road
Accokeek, MD 20607

Ms. Arthur is the ex-wife of Charles Mikell. She is expected to testify regarding her knowledge of the allegations in the Complaint and medical history of Mr. Mikell. The Defendant is not in possession of any written or recorded statement.

Sofia Barbosa, M.D.
Kindred Hospital
326 Calhoun Street
Charleston, SC 29401

Dr. Barbosa is a physician at Kindred Hospital. She is expected to testify regarding her knowledge of the allegations in the Complaint and the medical care and treatment that she provided to Mr. Mikell. The Defendant is not in possession of any written or recorded statement.

Donna Embrey,CRNA
MUSC
171 Ashley Avenue
Charleston, SC 29425

Ms. Embrey is a Certified Registered Nurse Anesthetist employed by MUSC. She provided medical care to Charles Mikell on October 1, 2010 during the colonoscopy procedure. She is expected to testify regarding the allegations in the Complaint as well as the care and treatment that she provided to Mr. Mikell on October 1, 2010. The Defendant is not in possession of any written or recorded statement.

Dawn P. Heyward, R.N., B.S.N., A.R.N.P.
MUSC
171 Ashley Avenue
Charleston, SC 29424

Ms. Heyward is a nurse practitioner employed by MUSC. She provided medical care to Mr. Mikell in the Heart Failure Clinic at MUSC. She is expected to testify regarding her evaluation of Mr. Mikell and the care that she provided to him.

John Terrill Huggins, M.D.
MUSC
171 Ashley Avenue
Charleston, SC 29424

Dr. Huggins is a physician employed by MUSC. He is Board Certified in Internal Medicine, Critical Care Medicine, and Pulmonary Disease. He provided medical care and treatment to Charles Mikell following the colonoscopy that was performed on October 1,

2010 and through the time of his discharge on October 26, 2010. He is expected to testify regarding the medical care and treatment that he provided to Mr. Mikell. The Defendant is not in possession of any written or recorded statement.

Pamela Mazyck, Pharm. D.
MUSC
171 Ashley Avenue
Charleston, SC 29424

Dr. Mazyck is a pharmacologist at MUSC. She is expected to testify regarding her knowledge of the allegations in the Complaint. The Defendant is not in possession of any written or recorded statement.

Jennifer R. Matos, M.D.
MUSC
171 Ashley Avenue
Charleston, SC 29424

Dr. Matos is an attending physician at MUSC. She is expected to testify regarding her knowledge of the allegations in the Complaint and the medical care and treatment that she provided to Mr. Mikell. The Defendant is not in possession of any written or recorded statement.

Dadrian Michael
14415 Lusby Ridge Road
Accokeek, MD 20607

Mr. Michael is the son of Charles Mikell. He is expected to testify regarding his knowledge of the allegations in the Complaint and medical history of Mr. Mikell. The Defendant is not in possession of any written or recorded statement.

Madison Michael
14415 Lusby Ridge Road
Accokeek, MD 20607

Ms. Michael is the daughter of Charles Mikell. She is expected to testify regarding her knowledge of the allegations in the Complaint and medical history of Mr. Mikell. The Defendant is not in possession of any written or recorded statement.

Jewel Mikell
1325 5th Avenue
Charleston, SC 29407

Ms. Mikell is the mother of Charles Mikell. Upon information and belief, Ms. Mikell was present at MUSC and/or communicated with MUSC during Mr. Mikell's admission in

October of 2010. She is expected to testify regarding her knowledge of the allegations in the Complaint. The Defendant is not in possession of any written or recorded statement.

Eric Nelson, M.D.
MUSC
171 Ashley Avenue
Charleston, SC 29425

Dr. Nelson is a physician employed by MUSC. He is Board Certified in Anesthesiology. He provided medical care and treatment to Charles Mikell during the colonoscopy that was performed on October 1, 2010 at MUSC. He is expected to testify regarding his knowledge of the allegations in the Complaint and the medical care and treatment that he provided to Mr. Mikell. The Defendant is not in possession of any written or recorded statement.

Kenneth Mark Payne, M.D.
MUSC 171 Ashley Avenue
Charleston, SC 29425

Dr. Payne is a physician employed by MUSC. He is Board Certified in Gastroenterology and Hepatology. He performed the colonoscopy on Charles Mikell at MUSC on October 1, 2010. He is expected to testify regarding his knowledge of the allegations in the Complaint and the medical care and treatment that he provided to Mr. Mikell. The Defendant is not in possession of any written or recorded statement.

Shon Turner
c/o Robert B. Ransom
Leventis and Ransom

Shon Turner is the Plaintiff in this case. Mr. Turner is expected to testify regarding the allegations in the Complaint. The Defendant is not in possession of any written or recorded statement.

Adrian B. Van Bakel, M.D.
MUSC 171 Ashley Avenue
Charleston, SC 29425

Dr. Van Bakel is a physician employed by MUSC. He is Board Certified in Internal Medicine and Cardiovascular Disease. He is an Associate Professor of Medicine/Cardiology and Medical Director of the Cardiac Transplant Program at MUSC. He provided medical care and treatment to Charles Mikell following his admission to MUSC in October of 2010. He is expected to testify regarding the medical care and treatment he provided to Mr. Mikell as well as his knowledge of the allegations in the Complaint. The Defendant is not in possession of any written or recorded statement.

Defendant MUSC identifies each and every person whose name appears in the medical records of Charles Mikell from MUSC, any other healthcare providers who provided care

to Charles Mikell, and any other witnesses identified by Plaintiff. Defendant MUSC reserves the right to supplement this answer as discovery progresses, up to and including the time of trial.

2. Set forth a list of photographs, plats, sketches or other prepared documents in possession of the party that relate to the claim or defense in this case.

ANSWER: Objection. Defendant MUSC objects to this request to the extent that it seeks the discovery of information and/or documents that are protected from disclosure by the attorney-client privilege or that seeks the mental impressions, conclusions, opinions, or legal theories of counsel or other representative of MUSC. Without waiving and subject to the foregoing objection, see documents bates labeled 1.554 (Mikell) MUSC 1-2556.

3. Set forth the names and addresses of all insurance companies which have liability insurance coverage relating to the claim and set forth the number or numbers of the policies involved and the amount or amounts of liability coverage provided in each policy. If there is any dispute as to coverage under any liability insurance policy, please describe the nature and basis for the dispute.

ANSWER:

Insurance Reserve Fund
P.O. Box 11066
Columbia, SC 29211
Policy No.: P12012001H
Limits: Tort liability coverage is limited in accordance with the South Carolina Tort Claims Act, S.C. Code Ann § 15-78-10, et. seq.

4. List the names and addresses of any expert witnesses whom the party proposes to use as a witness at the trial of the case and for each such expert set forth: (a) a complete statement of all opinions to be expressed and the basis and reasons therefore; (b) the data and other information considered by the expert in forming the opinions; (c) any exhibits to be used as a summary of or support for the opinions; (d) citations of any treatise, text or other authority upon which the expert has especially relied; and (e) the nature of any financial arrangements between the expert and the party or counsel relating to the expert's fees for consulting or

testifying in connection with this case; (f) state the date upon which the expert was first contacted regarding this case; (g) produce any and all communications with the expert relating to his services in this case, including but not limited to retainers and materials provided for review; and (h) produce a current copy of the experts' *curriculum vitae*.

ANSWER: Objection. Defendant MUSC objects to Interrogatory No. 4 to the extent that it seeks the discovery of the mental impressions, conclusions, opinions, or legal theories of counsel or other representatives of MUSC. Without waiving and subject to the foregoing objection, MUSC has not yet determined which expert witnesses it will call at the trial of this case and expressly reserves the right to supplement this response.

5. For each person known to the parties or counsel to be a witness concerning the facts of the case, set forth either a summary sufficient to inform the other party of the important facts known to or observed by such witness, or provide a copy of any written or recorded statements taken from such witnesses.

ANSWER: See Answer to Request No. 1.

6. If you contend that some other person or legal entity is, in whole or in part, liable to you or the party asserting a claim against you in this matter, identify such person or entity and describe the basis of said liability.

ANSWER: Objection. Defendant MUSC objects to Interrogatory No. 6 to the extent that it seeks the discovery of the mental impressions, conclusions, opinions or legal theories of counsel or other representative of Defendant MUSC concerning this litigation and is protected from discovery pursuant to the work-product doctrine. Without waiving and subject to the foregoing objection, discovery is ongoing, and therefore, Defendant MUSC reserves the right to supplement this response up to and including the time of trial.

7. Produce any and all writings, recorded statements, or other materials in any way memorializing the events involved in this litigation, whether made by the party, a witness, or some other person (not including counsel). This request includes but is not limited to any incident report from the events of October 1, 2010, and the results of any root cause analysis of the events of October 1, 2010.

ANSWER: Objection. Defendant MUSC objects to Request No. 7 on the grounds that it requests information of proceedings of, and data, documents, records, and information prepared or acquired, reviewed, investigated by a hospital relating to root cause analysis and/or incident reports that are confidential and not subject to discovery, subpoena, or introduction into evidence in any civil action pursuant to S.C. Code Ann. § 44-7-392 (2012). Defendant MUSC further objects to Request No. 7 to the extent that it seeks discovery of the mental impressions, conclusions, opinions or legal theories of counsel or other representative of Defendant MUSC concerning this litigation and is protected from discovery pursuant to the work-product doctrine.

8. Produce any and all photographs, plats, sketches, diagrams, drawings, video tapes, visual representations, audio tapes, recordings, items of physical evidence, or other tangible materials, objects or items which relate in any way to the current litigation.

ANSWER: Objection. Defendant MUSC objects to Request No. 8 on the grounds that it seeks the discovery of information that is protected by the attorney-client privilege or that seeks the discovery of the mental impressions, conclusions, opinions, or legal theories of counsel or other representative of Defendant MUSC concerning this litigation and is protected from discovery pursuant to the work product doctrine. Without waiving and subject to the foregoing objections, see BWPH 1.554 (Mikell) MUSC 1-2556.

9. Produce any and all documents or other written or tangible materials used or relied upon in answering any of the Plaintiff's interrogatories.

ANSWER: Objection. Defendant MUSC objects to Request No. 9 on the grounds that it seeks the discovery of information that is protected by the attorney-client privilege or that seeks the discovery of the mental impressions, conclusions, opinions, or legal theories of counsel or other representative of Defendant MUSC concerning this litigation and is protected from discovery pursuant to the work product doctrine. Without waiving and subject to the foregoing objections, please find the documents of Charles Mikell bates labeled BWPH 1.554 (Mikell) MUSC 1-2556.

10. Produce any and all visual or audio surveillance conducted on the Plaintiff or any witnesses in this case.

ANSWER: None.

11. Produce any and all documents, items, materials, or things obtained through the issuance of a Rule 45 subpoena in this case.

ANSWER: To be supplemented.

12. Produce any and all documents, items, materials or things which will be offered into evidence at the trial of this case.

ANSWER: Defendant MUSC has not yet determined which documents, items, materials or other things it will offer into evidence at the trial of this case and, therefore, reserves the right to supplement this response up to and including the time of trial.

13. Produce a complete copy of any and all medical records relating to Charles Mikell, including but not limited to office notes, consultations, telephone message slips, prescriptions, test results, reports, hospital records, faxes, e-mails, and any and all other items in whatever form they may exist (written or electronic).

ANSWER: See documents bates labeled BWPH 1.554 (Mikell) MUSC 1-2115.

14. Produce any and all written protocols, policies, procedures or guidelines which apply to any of the medical diagnoses, medical treatment or medical procedures provided to Charles Mikell on October 1, 1010 *(sic)*.

ANSWER: Objection. Defendant MUSC objects to Request No. 14 on the grounds that it is overly broad and unduly burdensome. Should Plaintiff narrow the scope of his request to define for which diagnoses, treatment, or procedures he seeks the protocols, policies, procedures, and/or guidelines, Defendant MUSC will attempt to identify any documents responsive to the request, should such documents exist.

15. Produce a complete itemized billing detail showing all charges for services provided to Charles Mikell at or by MUSC at any time on or after October 1, 2010.

ANSWER: See documents bates labeled BWPH 1.554 (Mikell) MUSC 1528-1561.

16. Produce all electronic data recorded or captured by the anesthesia machine used for the colonoscopy procedure performed on Charles Mikell on October 1, 2010. If no such data exists or is currently available, state the date upon which the data was deleted or erased and describe the circumstances under which this occurred.

ANSWER: See documents bates labeled BWPH 1.554 (Mikell) MUSC 2116-2556.

17. Identify the manufacturer, make, model, year, serial number and any and all other identifying information for the anesthesia machine used for the colonoscopy procedure performed on Charles Mikell on October 1, 2010. Describe any and all data management systems in place on October 1, 2010 for the purpose of backing up or storing data captured or recorded by the anesthesia machine.

ANSWER: Defendant MUSC does not maintain a record of the specific anesthesia machine(s) used for each patient during each procedure; therefore, it is unable to identify the exact machine(s) used during the colonoscopy performed on Charles Mikell on October 1, 2010. However, Defendant MUSC used the following type of equipment during the colonoscopy performed on Mr. Mikell on October 1, 2010:

GE Datex Ohmeda Avance Anesthesia Machine
Philips Intellivue MP 70 Physiological Monitor

18. Identify and describe all acts of contributory or comparative negligence which serve as the basis for the Third Defense plead in the Answer and as to each such act state the duty of care owed by Charles Mikell which said act violated.

ANSWER: Objection. Defendant MUSC objects to Request No. 18 on the grounds that it seeks the discovery of the mental impressions, conclusions, opinions, or legal theories of counsel or other representative of Defendant MUSC concerning this litigation and is protected from discovery pursuant to the work product doctrine. Without waiving and subject to the foregoing objection, Defendant MUSC reserves the right to supplement this response up to and including the time of trial as discovery is ongoing.

19. Identify and describe all discretionary acts which serve as the basis for the Second Defense plead in the Answer and as to each such discretionary act, state (a) who was acting with discretion; (b) at what specific time the discretionary act took place; and (c) describe the discretionary act itself in detail.

ANSWER: Objection. Defendant MUSC objects to Request No. 6 to the extent that it seeks the discovery of the mental impressions, conclusions, opinions or legal theories of counsel or other representative of Defendant MUSC concerning this litigation and is protected from discovery pursuant to the work-product doctrine. Without waiving and subject to the foregoing objection, Defendant MUSC states that the physicians and other healthcare providers involved in Mr. Mikell's care on October 1, 2010 exercised their

clinical judgment in providing medical care and treatment to him which qualifies as a discretionary act under S.C. Code Ann. § 15-78-60(5). Furthermore, Defendant MUSC craves reference to the medical records of Charles Mikell with regard to each discretionary actor, act, and time that each act occurred. Defendant MUSC also states that the establishment of policies and procedures is a discretionary function under S.C. Code Ann. § 15-78-60(5).

20. Identify by name, address, telephone number and any and all other available identifying information, all persons who both (a) participated in providing care to Charles Mikell on October 1, 2010 and (b) were not at that time working as employees of the Defendant.

ANSWER: Objection. Defendant MUSC objects to Request No. 20 on the grounds that it is overly broad, unduly burdensome, and not reasonably calculated to lead to the discovery of admissible evidence. Without waiving and subject to the foregoing object, please refer to the medical record of Charles Mikell from MUSC dated October 1, 2010. Upon information and belief, all individuals who provided medical care to Mr. Mikell on October 1, 2010, as identified in the medical records from MUSC dated October 1, 2010, were employees of MUSC.

19.*(sic)* Identify by name, address, telephone number and any and all other available identifying information, all persons who both (a) participated in providing care to Charles Mikell on October 1, 2010 and (b) were at that time "students" within the meaning of S.C. Code Ann §15-78-60(25). For each person:

i. explain and describe how such persons' status as a "student" has been determined;

ii. explain and describe when and how Charles Mikell was notified of such persons' status as a "student" and the role they would play in providing his care;

iii. state the specific role such persons played in providing care to Charles Mikell;

iv. state such persons' training and qualifications for providing such care;

v. identify all personnel responsible for supervising the care provided by such persons; and

vi. explain how MUSC distinguished such persons from its other agents, servants and employees of MUSC.

ANSWER: Objection. Defendant MUSC objects to Request No. 19 on the grounds that it is overly broad, unduly burdensome and not reasonably calculated to lead to the discovery of admissible evidence. Defendant MUSC further objects to Request No. 19 on the grounds that it is vague and misleading. Without waiving and subject to the foregoing objection, upon information and belief, no students provided medical care to Mr. Mikell on October 1, 2010.

BARNWELL WHALEY PATTERSON & HELMS, LLC

BY: _____

M. DAWES COOKE, JR., ESQUIRE
ALISSA FLEMING, ESQUIRE
288 Meeting Street, Suite 200 (29401)
Post Office Drawer H
Charleston, SC 29402
Tel: (843) 577-7700
Fax: (843) 577-7708
Email: afleming@barnwell-whaley.com

ATTORNEYS FOR DEFENDANT MEDICAL UNIVERSITY OF SOUTH CAROLINA

Charleston, South Carolina

May 17, 2013

STATE OF SOUTH CAROLINA	)	IN THE COURT OF COMMON PLEAS
COUNTY OF CHARLESTON	)	CIVIL ACTION NO.: 2012-CP-10-7275
SHON TURNER, as Personal Representative of the ESTATE OF CHARLES MIKELL, deceased, Plaintiff, vs. MEDICAL UNIVERSITY OF SOUTH CAROLINA, Defendant.	)	**DEFENDANT MEDICAL UNIVERSITY OF SOUTH CAROLINA'S SUPPLEMENTAL ANSWERS TO PLAINTIFF'S FIRST DISCOVERY REQUESTS**

TO: ROBERT B. RANSOM, ESQUIRE, COUNSEL FOR THE PLAINTIFF:

Defendant Medical University of South Carolina (hereinafter "MUSC"), by and through its undersigned counsel, hereby answers the Plaintiff's First Discovery Request as follows:

RESPONSES TO DISCOVERY REQUESTS

4. List the names and addresses of any expert witnesses whom the party proposes to use as a witness at the trial of the case and for each such expert set forth: (a) a complete statement of all opinions to be expressed and the basis and reasons therefore; (b) the data and other information considered by the expert in forming the opinions; (c) any exhibits to be used as a summary of or support for the opinions; (d) citations of any treatise, text or other authority upon which the expert has especially relied; and (e) the nature of any financial arrangements between the expert and the party or counsel relating to the expert's fees for consulting or testifying in connection with this case; (f) state the date upon which the expert was first contacted regarding this case; (g) produce any and all communications with the expert relating to

his services in this case, including but not limited to retainers and materials provided for review; and (h) produce a current copy of the experts' *curriculum vitae*.

ANSWER: **Objection. Defendant MUSC objects to Interrogatory No. 4 to the extent that it seeks the discovery of the mental impressions, conclusions, opinions, or legal theories of counsel or other representatives of MUSC. Without waiving and subject to the foregoing objection, MUSC discloses the following:**

James M. Berry, M.D.
Professor of Anesthesiology
Chief, Division of Multispecialty Adult Anesthesiology
Vanderbilt University
1301 Medical Center Drive, 4648 TVC
Nashville, TN 37232-5614

Dr. Berry is expected to testify that MUSC's care of Mr. Mikell was within the applicable standard of care. Specifically, Dr. Berry's opinions include but are not limited to (1) the pre-anesthesia evaluation of Mr. Mikell was within the standard of care and (2) the anesthesia care and treatment that Mr. Mikell received was within the applicable standard of care.

A copy of Dr. Berry's CV Bates labeled BWPH 1.554 (Mikell) Berry 000001 - 00012 is attached.

In addition, MUSC reserves the right to elicit expert opinions regarding the standard of care and causation from any all witnesses identified by either party as well as any and all of Mr. Mikell's healthcare providers.

BARNWELL WHALEY PATTERSON & HELMS, LLC

BY: _____

M. DAWES COOKE, JR., ESQUIRE
ALISSA FLEMING, ESQUIRE
288 Meeting Street, Suite 200 (29401)
Post Office Drawer H
Charleston, SC 29402
Tel: (843) 577-7700
Fax: (843) 577-7708
Email: afleming@barnwell-whaley.com

ATTORNEYS FOR DEFENDANT MEDICAL UNIVERSITY OF SOUTH CAROLINA

Charleston, South Carolina
February 6, 2015

MUSC Health

"ANESTHESIANT"

MRN: 001400764
Name: MIKELL, CHARLES L
DOB: 01/25/1961
PatCom: 270428782
Surgeon: Payne , Mark

Height(...20001
Weight(kg): 137.29983
BMI: 44.7
Sex: M
Age: 49 years

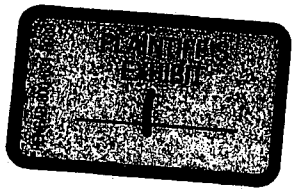
Anesthesia Record

Surgery Date: 10/01/2010

TIME	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	
Medications																					Totals
Midazolam (Versed) (mg) (IV)				4																	4.00
Rocuronium (mg) (IV)				50																	50.00
Drips																					
Phenylephrine (microgram/kg/min)				0.8>	0.8>	0.8>	0.8>	4	4	X											Totals
Propofol (microgram/kg/min)								54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	4	4	74.9
Amiodarone(mg/min) / D5W (mL)							0.999>	>	>	>	>	>	>	>	>	>	>	>	>	>	131.7
Fluids IN																					150.5
Normal Saline 0.9% (mL)	500>	>	>		X																Totals
Normal Saline 0.9% (mL)				1000>	>	>	>	>	>	>	>		X								500.00
Normal Saline 0.9% (mL/h)							50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	0.00
Fluids OUT (mL)																					236.11
Urine												350									Totals
																					370.00

XLS 061210

10/1/2010 13:46



MUSC Health

"ANESTHESIANT"

MRN: 001400764 [redacted] [redacted] Height(cm): [redacted].20001
Name: MIKELL, CHARLES L Weight(kg): 137.28963
DOB: 01/25/1961 BMI: 44.7
PatCare: 270428782 Sex: M
Surgeon: Payne , Mark Age: 49 years

Anesthesia Record Surgery Date: 10/01/2010

TIME	12:30	12:45	13:00	13:15	13:30																		Totals
Medications																							
Midazolam (Versed) (mg) (IV)																							0.00
Rocuronium (mg) (IV)																							50.00
Drips																							Totals
Phenylephrine (microgram/kg/min)																							74.9
Propofol (microgram/kg/min)	[#]	^	^	^	^																		131.7
Amiodarone(mg/min) / D5W (mL)	[>]	>	>	>	>																		150.6
Fluids IN																							Totals
Normal Saline 0.9% (mL)																							900.00
Normal Saline 0.9% (mL)																							0.00
Normal Saline 0.9% (mL/h)	[50>]	50>	50>	50>	50>																		236.11
Fluids OUT (mL)																							Totals
Urine				370																			370.00

XLS 051710

MUSC Health

"ANESTHESIANT"

MRN: 001400764
Name: MIKELL, CHARLES L
DOB: 01/25/1961
PatCom: 270428782
Surgeon: Payne , Mark

Height(cm): [illegible]01
Weight(kg): 137.29983
BMI: 44.7
Sex: M
Age: 49 years

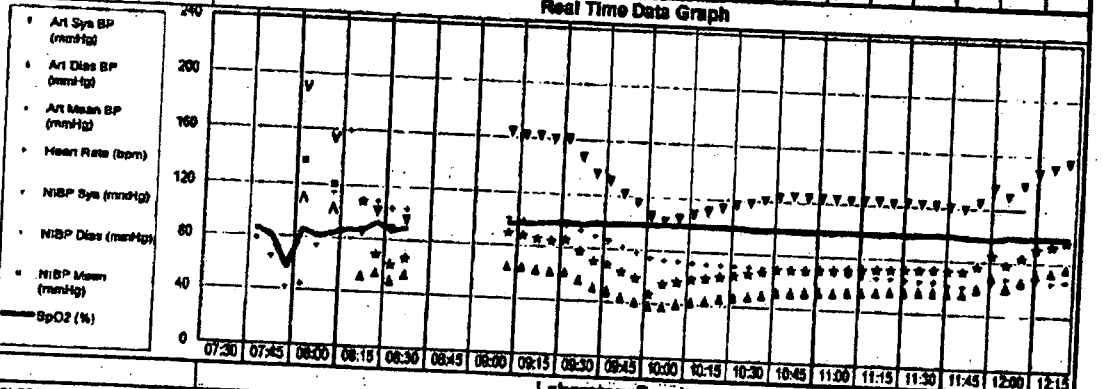
Surgery Date: 10/01/2010

Anesthesia Record

Real Time Variables

TIME	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15
FIO2 (%)	99.0	99.0	97.0	98.0																
SpO2 (%)	47.5	83.5	88.7	89.6		98.9	99.4	99.2	99.9	99.6	99.4	98.7	98.6	98.6	98.6	98.6	98.7	98.2	98.5	98.0
EtCO2 (mmHg)	0.0	82.6	34.0	34.6																
Des out (%)		0.0	0.9	0.0																
Resp_m	15.9	24.9	16.0	16.0																
Tidal volume (mL)	72.0	904.0	604.0	553.0																
PIP (cmH2O)	30.0	86.0	30.0	23.0																
Temperature (°C)					36.8										36.5*				36.6	

Real Time Data Graph



Laboratory Results

	10:00
HEMOGLOBIN	10.5
GLUCOSE	177

ALS 081210

10/1/2010 13:46

MUSC Health

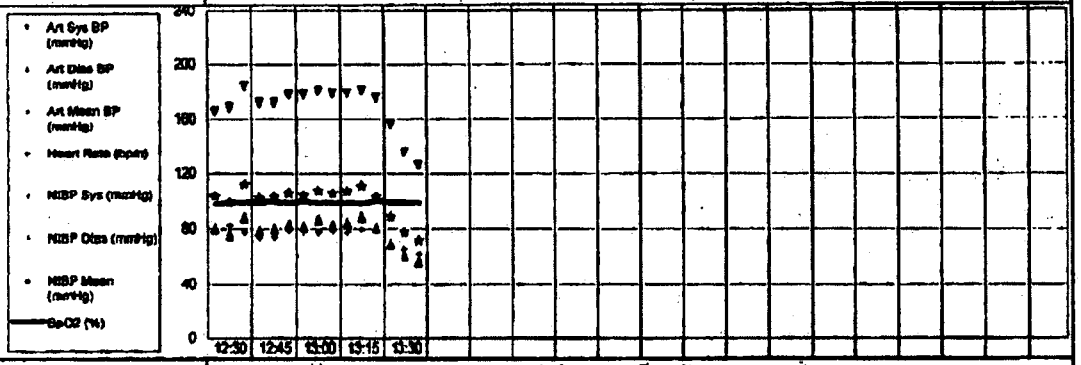
"ANESTHESIANT"

MRN: 001400764 | Height(cm): [illegible]001
Name: MIKELL, CHARLES L. | Weight(kg): 137.25883
DOB: 01/26/1961 | BMI: 44.7
PatCont: 270428782 | Sex: M
Surgeon: Payne , Mark | Age: 48 years

Anesthesia Record | Surgery Date: 10/01/2010

TIME	12:30	12:45	13:00	13:15	13:30
Real Time Variables					
FiO2 (%)					
SpO2 (%)	99.4	97.7	96.9	100.0	98.1
EtCO2 (mmHg)					
Des out (%)					
Resp_ec					
Tidal volume (mL)					
PIP (cmH2O)					
Temperature (°C)					36.6

Real Time Data Graph



Laboratory Results

| | | | | |

MUSC Health
SURGICAL SERVICES

POST ANESTHESIA CARE UNIT RECORD

Allergies:
No known medication allergies

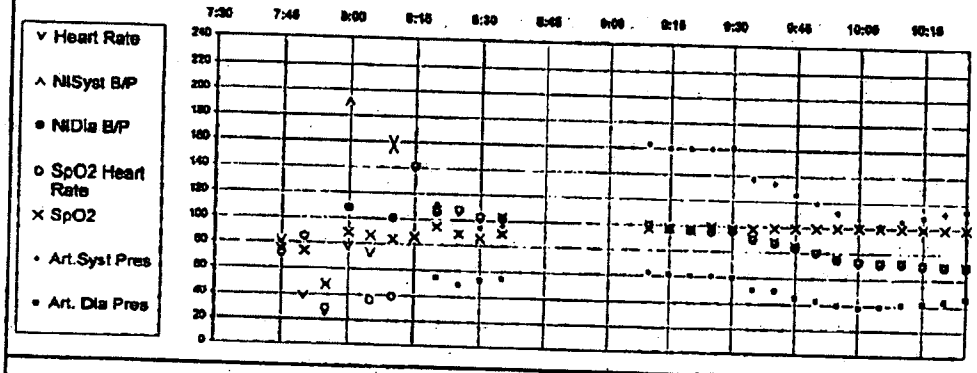
Account #: 270428782
Patient Name: MIKELL, CHARLES
DOB: 1/25/1961
CPI: 001400764
Physician:
Age: 49 years
Sex: M

Height (cm): 175
Weight (Kg): 137.29983
BMI: 44.73
Admission Date: 10/1/2010

Arrival in PACU: 10/01/10 06:45
Ready for Discharge from PACU: 10/01/10 13:40
Discharge from PACU:

Procedure:_ C_45378 - DIAGNOSTIC COLONOSCOPY (Pre-op)
C_45378 - DIAGNOSTIC COLONOSCOPY (Surgical)

Anesthesia Type:



VITAL SIGNS

TIME	7:30	7:45	8:00	8:15	8:30	8:45	9:00	9:15	9:30	9:45	10:00	10:15
Temperature						97						
Heart Rate		75	100	100	103		100	97	88	78	72	70
BP Heart Rate				107	103		100	97	89	78	71	70
Pulse O2 Heart Rate		99	99	100	102		100	95	87	78	72	70
Pulse O2 Saturation		97.5	93.5	98.7	99.8		98.9	99.4	99.2	99.9	99.8	99.4
Respiratory Rate							18	15	15	17	15	18
NISBP			154									
NIDBP			101									
MIMAP			120									
Art Systolic Pres				89.0	96.0		169.0	169.0	134.0	112.0	108.0	114.0
Art Dia Pres				46.0	54.0		83.0	81.0	80.0	40.0	41.0	48.0
Art Mean Pres				62.0	68.0		86.0	86.0	79.0	57.0	59.0	63.0
CVP												

CONTINUOUS INFUSION (DOSAGE)

Phenylephrine (nanogram/kg/min)				0.5>	0.5>	0.5>	0.5>			X		
Propofol (microgram/kg/min)								54.5>	54.5>	54.5>	54.5>	54.5>
Amiodarone(mg/min) / D5W (mL)							0.999>	"	"	"	"	"

ELECTRONIC SIGNATURES	ELECTRONIC SIGNATURES
ALT — Annette Thompson, R.N. (THO4IPSA)	
DBE — Donna Embrey, CRNA (EMBREY)	
EWN — Eric Nelson, MD (NELSONEW)	
JGT — Jeffrey Toohey, R.N. (TOOHEYJ)	

Printed on: 10/01/2010 13:47
Post Anesthesia Care Unit Flowsheet
Confidential
Page 1 of 9

PLAINTIFF'S EXHIBIT 2

MUSC Health
SURGICAL SERVICES

POST ANESTHESIA CARE UNIT RECORD

Allergies:
No known medication allergies

PACU

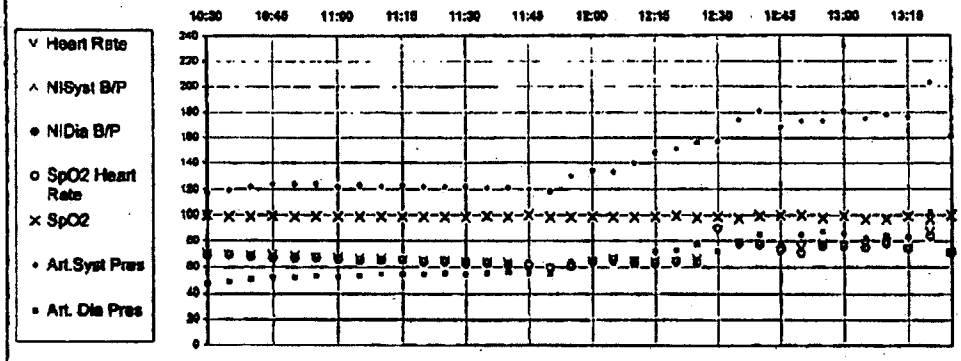
Account #: 270428782
Patient Name: MIKELL, CHARLES
DOB: 1/25/1951 Age: 49 years
CPI: 001400764 Sex: M
Physician:

Height (cm): 178 BMI: 44.73
Weight (Kg): 137.29983 Admission Date: 10/1/2010

Arrival in PACU: 10/01/10 09:46 Ready for Discharge from PACU: 10/01/10 13:40 Discharge from PACU:

Procedure:_

Anesthesia Type:



VITAL SIGNS

TIME	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	12:30	12:45	13:00	13:15
Temperature			36.6°				37					
Heart Rate	69	67	66	64	63	60	64	66	77	77	78	71
BP Heart Rate	69	67	66	63	63	59	64	66	77	76	78	70
Pulse O2 Heart Rate	68	67	66	64	62	60	63	64	77	76	78	71
Pulse O2 Saturation	98.7	99.0	98.6	98.6	98.7	98.2	98.5	98.0	99.4	97.7	98.9	100.0
Respiratory Rate	17	16	15	15	15	16	22	19	21	24	22	24
NISBP												
NIDBP												
NIMAP												
Art Systolic Pres	122.0	124.0	122.0	122.0	121.0	130.0	140.0	156.0	151.0	173.0	179.0	161.0
Art Dia Pres	60.0	63.0	64.0	55.0	56.0	64.0	66.0	77.0	66.0	67.0	64.0	71.0
Art Mean Pres	68.0	70.0	71.0	72.0	73.0	82.0	85.0	98.0	108.0	109.0	108.0	92.0
CVP												

CONTINUOUS INFUSION (DOSAGE)

Phenylephrine (micrograms/kg/min)												
Propofol (micrograms/kg/min)	[54.5>]	54.5>	54.5>	54.5>	54.5>	54.5>	"	"	"	"	"	"
Amiodarone(mg/kg/d) / D5W (mL)	[>]	>	>	>	>	>	>	>	>	>	>	>

ELECTRONIC SIGNATURES	ELECTRONIC SIGNATURES
ALT — Annette Thompson, R.N. (THOMPSA)	
DBE — Donna Embrey, CRNA (EMBREY)	
EWN — Eric Nelson, MD (NELSONEW)	
JGT — Jeffrey Toohey, R.N. (TOOHEYJ)	

MUSC Health
SURGICAL SERVICES

POST ANESTHESIA CARE UNIT RECORD

Allergies:
No known medication allergies

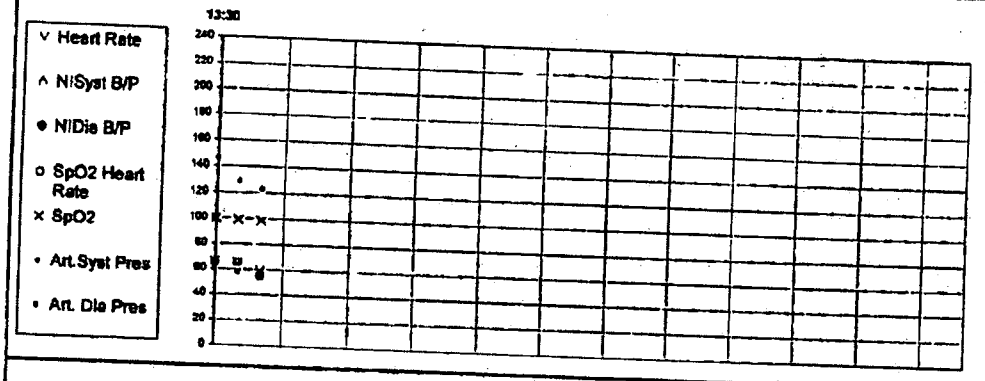
Account #: 270428782
Patient Name: MIKELL, CHARLES
DOB: 1/25/1961
CPI: 001400764
Physician:
Age: 49 years
Sex: M

Height (cm): 175
Weight (Kg): 137.29983
BMI: 44.73
Admission Date: 10/1/2010

Arrival in PACU: 10/01/10 08:48
Ready for Discharge from PACU: 10/01/10 13:40
Discharge from PACU:

Procedure:_

Anesthesia Type:



VITAL SIGNS

TIME	13:39
Temperature	37
Heart Rate	59
BP Heart Rate	63
Pulse O2 Heart Rate	58
Pulse O2 Saturation	98.1
Respiratory Rate	15
NISBP	
NIDBP	
NIMAP	
Art Systolic Pres	123.0
Art Dia Pres	55.0
Art Mean Pres	78.0
CVP	

CONTINUOUS INFUSION (DOSAGE)

Phenylephrine (microgram/kg/min)	
Propofol (microgram/kg/min)	[*]
Amiodarone(mg/min) / D5W (mL)	[>]

ELECTRONIC SIGNATURES

ALT — Annette Thompson, R.N. (THOMPSA)
QBE — Donna Embrey, CRNA (EMBREY)
EWN — Eric Nelson, MD (NELSONEW)
JGT — Jeffrey Toohey, R.N. (TOOHEYJ)

ELECTRONIC SIGNATURES

MUSC Health
SURGICAL SERVICES

Account #: 270428782
Patient Name: MIKELL, CHARLES
DOB: 1/28/1961 Age: 49 years
CPI: 001400764 Sex: M
Physician:

POST ANESTHESIA CARE UNIT RECORD

Height (cm): 175 BMI: 44.73
Weight (Kg): 137.26993 Admission Date: 10/1/2010

VITAL SIGNS

TIME													

MUSC Health
SURGICAL SERVICES

POST ANESTHESIA CARE UNIT RECORD
Nursing diagnosis and Outcomes / Memos

Account #: 270428782
Patient Name: MIKELL, CHARLES
DOB: 1/25/1961
CPI: 001400764
Physician:
PACU
Age: 49 years
Sex: M

Height (cm): 175
Weight (Kg): 137.29983
BMI: 44.73
Admission Date: 10/1/2010

Dt/Tm Initials	NURSING DIAGNOSIS AND OUTCOME	Dt/Tm Initials	NURSING DIAGNOSIS AND OUTCOME

Chart Dt/Tm Initials	MEMOS Memo (Documentation time)	Chart Dt/Tm Initials	MEMOS Memo (Documentation time)
10/01/2010 09:12 JGT	(Pain: Scale (Self report)) >12 years and able to understand numerical values (10/01/2010 09:12)		
10/01/2010 10:08 JGT	(Foley Catheter: Placed) 16 french no difficulty (10/01/2010 10:08)		
10/01/2010 13:44 JGT	(Propofol) restarted. (10/01/2010 13:44)		

MUSC Health
SURGICAL SERVICES

POST ANESTHESIA CARE UNIT RECORD
Scores and Assessments Sheet

Account #: 270428782
Patient Name: MIKELL, CHARLES
DOB: 1/25/1961 Age: 49 years
CPt: 001400764 Sex: M
Physician:

Height (cm): 175 BMI: 44.73
Weight (Kg): 137.29983 Admission Date: 10/1/2010

Dt/Tm Initials	Assessments Category	Assessment Items and comments
10/01/2010 09:12 JGT	Oxygen: FiO2 %	-60%
10/01/2010 09:12 JGT	Airway	-ETT Tube
10/01/2010 09:12 JGT	ETT: Measurement	-Measurement at Lip:
10/01/2010 09:12 JGT	ETT: Size	-Size 8.0 -Cuffed
10/01/2010 09:12 JGT	Cardiac Rhythm	-Sinus Tachycardia
10/01/2010 09:12 JGT	Oxygen: Mode	-Mechanical Ventilation (PRVC, rate 15, TV 600, peep 5)
10/01/2010 09:12 JGT	Pulse Strength: Carotids Pedis	-Normal +2 Left -Normal +2 Right
10/01/2010 09:12 JGT	Pulse Strength: Radial	-Normal +2 Left -Normal +2 Right
10/01/2010 09:12 JGT	Abdominal Assessment: Abdomen	-Soft -Distended
10/01/2010 09:12 JGT	Nausea/Vomiting	-Nausea Absent
10/01/2010 09:12 JGT	Pain: Scale (Self report)	-Unable to Assess
10/01/2010 09:12 JGT	Eyes: Opening	-No response 1
10/01/2010 09:12 JGT	Level of Consciousness	-Unresponsive
10/01/2010 09:12 JGT	Motor Strength: Arm	-No Response Left -No Response Right
10/01/2010 09:12 JGT	Motor Strength: Leg	-No Response Left -No Response Right
10/01/2010 09:12 JGT	Pupils: Reaction	-Closed Left -Closed Right
10/01/2010 09:12 JGT	Verbal: Adult	-Trach or Intubated
10/01/2010 09:12 JGT	Pupils: Size	-3 mm Left -3 mm Right
10/01/2010 09:12 JGT	Peripheral IV #1	-18 gauge -Antecubital Left
10/01/2010 09:12 JGT	Peripheral IV #1: Assessment	-IV Fluids Infusing -Intact -Clean Dry Intact
10/01/2010 09:12 JGT	Arterial Line #1:	-Radial Left -Patent -Leveled to Phlebostatic Axis
		-Normal
10/01/2010 09:12 JGT	Arterial Line #1: Site	-Intact -Clean Dry Intact
10/01/2010 09:12 JGT	Central Line #1	-CVP-Triple Lumen -Femoral Right
10/01/2010 09:12 JGT	Central Line #1: Assessment	-Intact -Clean Dry Intact
10/01/2010 09:12 JGT	Central Line #1: Status	-Patent
10/01/2010 09:12 JGT	Peripheral IV #2	-22 gauge -Hand Right
10/01/2010 09:12 JGT	Peripheral IV #2: Assessment	-IV Fluids Infusing -Intact -Clean Dry Intact
10/01/2010 09:12 JGT	Peripheral IV #3	-18 gauge -Antecubital Left
10/01/2010 09:12 JGT	Peripheral IV #3: Assessment	-IV Fluids Infusing -Intact -Clean Dry Intact
10/01/2010 10:00 JGT	Genitourinary Tube #1: Device/Method	-Foley Catheter
10/01/2010 10:00 JGT	Genitourinary Tube #1: Drainage	-Clear -Amber
10/01/2010 12:00 JGT	Oxygen: Mode	-Mechanical Ventilation (simv)
10/01/2010 12:00 JGT	Oxygen: FiO2 %	-40%

Dt/Tm Initials	Score Category	Score Total and Items with score

Confidential

MUSC Health
SURGICAL SERVICES

POST ANESTHESIA CARE UNIT RECORD
Medications and Fluids In and Out Sheet

Account #: 270428782
Patient Name: MIKELL, CHARLES
DOB: 1/25/1951
CPI: 001400764
Physician:

Age: 49 years
Sex: M

Height (cm): 175
Weight (Kg): 137.29983
BMI: 44.73
Admission Date: 10/01/2010

TIME	7:00	8:00	9:00	10:00	11:00	12:00	13:00			8 Hr Total	Acc Total
FLUIDS IN (IVF / BLD PRODUCTS)											
Normal Saline 0.9%	277.8	222.2									500.0
Normal Saline 0.9%			49.4	50.0	50.0	50.0	36.7				236.1
TOTAL	277.8	222.2	49.4	50.0	50.0	50.0	36.7	0.0	0.0		736.1
ADDITIVE and BLOOD PRODUCT DETAILS										**Orders with Conditions**	
(10/01/2010 07:35) Normal Saline 0.9% (mL): 500 mL New Bag, IV											
(10/01/2010 08:20) Normal Saline 0.9% (mL): 0 mL Leveled											
(10/01/2010 08:20) Normal Saline 0.9% (mL): Done											
(10/01/2010 08:26) Normal Saline 0.9% (mL): 1000 mL New Bag											
(10/01/2010 09:00) Normal Saline 0.9% (mL/h): 50 mL/h New Bag, IV											
(10/01/2010 10:16) Normal Saline 0.9% (mL): 1000 mL Leveled											
(10/01/2010 10:16) Normal Saline 0.9% (mL): Done											
CONTINUOUS INFUSION (VOLUME)											
Propofol			34	45	45	8					132
Phenylephrine		54	21								75
Amiodarone/D5W			25	33	33	33	24				161
TOTAL	0	54	80	78	78	42	24	0	0		367
TOTAL INTAKE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		1593.2
OUTPUT											
Urine				356	6	6	2			8 Hr Total	Acc Total
											370
TOTAL	0	0	0	356	6	6	2	0	0		370
TOTAL OUTPUT										0	370
BALANCE										0.0	723.2

MEDICATIONS (Condition) Schedule (Dose/units) Route	DATE/TIME	ADMINISTERED BY
Midazolam (Versed) (4 mg) IV	10/01/2010 08:25	Donna Embrey
Rocuronium (50 mg) IV	10/01/2010 08:23	Donna Embrey

Electrolyte replacement documented in IVF

MUSC Health
SURGICAL SERVICES

POST ANESTHESIA CARE UNIT RECORD
Nursing Documentation Sheet

Account #: 270428782
Patient Name: MIKELL, CHARLES
DOB: 1/25/1961 Age: 49 years
CPI: 001400764 Sex: M
Physician:

Height (cm): 175 BMI: 44.73
Weight (Kg): 137.29983 Admission Date: 10/1/2010

Dt /Tm Initials	NURSING CARE	Dt /Tm Initials	NURSING CARE
10/01/2010 10:08 JGT	Foley Catheter: Placed *** Done		
10/01/2010 10:15 JGT	Suctioned *** Done		
10/01/2010 11:00 JGT	Suctioned *** Done		
10/01/2010 12:00 JGT	Suctioned *** Done		
10/01/2010 12:37 JGT	Suctioned *** Done		

Dt /Tm Initials	EVENTS	Dt /Tm Initials	EVENTS
10/01/2010 07:35 DBE	Transfer to:	10/01/2010 08:31 EWN	Patient Oxygenated w/100% 02
10/01/2010 07:35 DBE	Patient in Room (PIR)	10/01/2010 08:31 EWN	ETT in place
10/01/2010 07:48 ALT	Transfer # (EVTROUT-)	10/01/2010 08:31 EWN	Defibrillation - Joules: 200
10/01/2010 07:47 DBE	Transfer to SCeNO	10/01/2010 08:31 EWN	CPR stopped
10/01/2010 07:48 EWN	Anesthesiologist assessed patient, reviewed chart and formulated anesthesia plan	10/01/2010 08:31 EWN	Patient stabilized
		10/01/2010 08:31 EWN	Post resuscitation rhythm:
10/01/2010 07:48 EWN	Anesthesiologist medically directing case and present for all critical portions.	10/01/2010 08:37 DBE	To recovery area in stable condition
		10/01/2010 08:37 DBE	Patient transported with O2
10/01/2010 07:48 EWN	Anesthesiologist present for induction	10/01/2010 08:37 DBE	Transported via stretcher/bed
10/01/2010 07:48 EWN	I (or another attending anesthesiologist) was immediately available throughout and present for all key/critical portions of case	10/01/2010 08:37 DBE	Patient Out of Room (POR)
		10/01/2010 08:37 DBE	Transfer from SCeNO
		10/01/2010 08:45 JGT	Phase I PACU admission
10/01/2010 08:00 EWN	Memo Came into room. Pt. hypotic with junctional rhythm and no palpable pulse. ACLS protocol initiated, Mayday team called.	10/01/2010 08:45 JGT	Report received from: Donna Embry CRNA
		10/01/2010 08:45 JGT	Side rails up
		10/01/2010 08:45 JGT	Wheels locked
10/01/2010 08:27 DBE	Central line placed by Attending Anesthesiologist	10/01/2010 08:45 JGT	Connected to monitors
10/01/2010 08:27 DBE	Hand hygiene prior to donning gloves	10/01/2010 08:45 JGT	Arrival to PACU/ICU (APACU)
10/01/2010 08:27 DBE	Maximum barrier precautions utilized for strict sterile technique including sterile body drape, hat, mask, and sterile gloves.	10/01/2010 08:54 DBE	Transfer to LCsAn
		10/01/2010 08:58 DBE	Anesthesia machine checked, alarms on and functioning
		10/01/2010 08:58 DBE	Integrity of Anesthesia circuit confirmed
10/01/2010 08:27 DBE	Skin preparation with chlorohexadine	10/01/2010 08:58 DBE	Standard monitors available, alarms on and functioning
10/01/2010 08:27 DBE	Landmarks indentified	10/01/2010 08:58 DBE	Suction available and functioning
10/01/2010 08:27 DBE	Introducer needle inserted into vessel, free blood flow	10/01/2010 08:58 DBE	Airway equipment available and functioning
10/01/2010 08:27 DBE	Triple lumen catheter Rt. femoral vein.	10/01/2010 08:58 DBE	Anesthesia and resuscitation drugs available
10/01/2010 08:27 DBE	Blood return through all lumens. Lumens flushed.	10/01/2010 08:58 DBE	NPO status verified
10/01/2010 08:27 DBE	Sterile transparent dressing placed over insertion site	10/01/2010 08:58 DBE	Patient chart and preoperative assessment reviewed
10/01/2010 08:31 EWN	Anesthesiologist present for airway device placement	10/01/2010 08:58 DBE	Patient identified by 2 methods
10/01/2010 08:31 EWN	Arrhythmia identified: v fib	10/01/2010 08:58 DBE	Pre-op vital signs reviewed
10/01/2010 08:31 EWN	Non-palpable pulse	10/01/2010 08:58 DBE	Surgical consent verified and appropriate
10/01/2010 08:31 EWN	Chest compressions initiated	10/01/2010 08:58 DBE	Risks, benefits, and complications of anesthetic plan

MUSC Health
SURGICAL SERVICES

POST ANESTHESIA CARE UNIT RECORD
Nursing Documentation Sheet

Account #: 270428782
Patient Name: MIKELL, CHARLES
DOB: 1/25/1961
CPI: 001400764
Physician:
Age: 49 years
Sex: M

Height (cm): 178
Weight (Kg): 137.29983
BMI: 44.73
Admission Date: 10/1/2010

Dt /Tm	Initials	NURSING CARE

Dt /Tm	Initials	NURSING CARE

Dt /Tm	Initials	EVENTS
		discussed and understood
10/01/2010 08:58	DBE	Procedure/ site marking(s) verified where appropriate
10/01/2010 09:04	DBE	Transfer from LCsAn
10/01/2010 09:12	JGT	Transfer to PACU
10/01/2010 09:46	JGT	Family at Bedside mother
10/01/2010 10:54	JGT	Family at Bedside mother
10/01/2010 12:16	JGT	Memo Dr. Guidan at bedside, Propofol off at this time to evaluate patients Neuro status.
10/01/2010 12:17	JGT	Family at Bedside pastor
10/01/2010 13:40	JGT	Discharge criteria not met
10/01/2010 13:40	JGT	Transfer to ICU:
10/01/2010 13:40	JGT	Transported via stretcher/bed stretcher
10/01/2010 13:40	JGT	With Oxygen
10/01/2010 13:40	JGT	With monitors
10/01/2010 13:40	JGT	Ready for Discharge from PACU (RDPACU)
10/01/2010 13:42	JGT	Memo ice packs applied to pulse points. Dr. Guidan at bedside to evaulate patients neuro status. No response to verbal or noxious stimuli. Placed back on sedation for transfer to MSICU

Dt /Tm	Initials	EVENTS

MUSC Health

"ANESTHESIANT"

MRN: 001400764
Name: MIKELL, CHARLES L.
DOB: 01/25/1961
PatCom: 270428782
Surgeon: Payne , Mark

(cm): 175.20001
Weight(kg): 137.28983
BMI: 44.7
Sex: M
Age: 49 years

Anesthesia Record

Surgery Date: 10/01/2010

Case Times

Anest Start:	10/01 07:20	Surg Start:	10/01 07:35	Proc Start:	10/01 07:42
Anest End:		Surg End:	10/01 08:37	Proc End:	10/01 07:56
Anest Total:		Surg Total:	01:02	Proc Total:	00:14

Surgical Procedure

DIAGNOSTIC COLONOSCOPY

Pre-op Diagnosis

Post-op Diagnosis

Allergies

No known medication allergies

Staff and Electronic Signature Legend (Initials)

Role: Scheduled Surgeon - Payne, Mark (MAP)
Role: Primary Surgeon - Payne, Mark (MAP)
Role: Pre/Postoperative Registered Nurse - Toobey, Jeffrey (JGT)
Role: Anesthesia Attending - Nelson, Eric (EWN)
Role: CRNA - Embrey, Donna (DBE)

Anesthesia Attending Documentation Electronically Signed By:

10/01	07:48	EWN	Anesthesiologist assessed patient, reviewed chart and formulated anesthe
10/01	07:48	EWN	Anesthesiologist medically directing case and present for all critical portion
10/01	07:48	EWN	Anesthesiologist present for induction
10/01	07:48	EWN	I (or another attending anesthesiologist) was immediately available throug
10/01	08:31	EWN	Anesthesiologist present for airway device placement

Anesthesia Type	ASA
General Anesthesia	III

Anesthesia Events

10/01	07:25	DBE	Anesthesia machine checked, alarms on and functioning
10/01	07:25	DBE	Integrity of Anesthesia circuit confirmed
10/01	07:25	DBE	Standard monitors available, alarms on and functioning
10/01	07:25	DBE	Suction available and functioning
10/01	07:25	DBE	Airway equipment available and functioning
10/01	07:25	DBE	Anesthesia and resuscitation drugs available
10/01	07:25	DBE	NPO status verified
10/01	07:25	DBE	Patient chart and preoperative assessment reviewed
10/01	07:25	DBE	Patient identified by 2 methods
10/01	07:25	DBE	Pre-op vital signs reviewed
10/01	07:25	DBE	Surgical consent verified and appropriate
10/01	07:25	DBE	Risks, benefits, and complications of anesthetic plan discussed and understood
10/01	07:25	DBE	Procedural site marking(s) verified where appropriate
10/01	07:25	DBE	Peripheral IV placed preoperatively
10/01	07:25	DBE	22 gauge peripheral IV catheter in situ in HA.
10/01	07:25	DBE	Right hand
10/01	07:35	DBE	Transfer to:
10/01	07:42	DBE	Patient evaluated immediately prior to induction
10/01	07:42	DBE	Standard monitors applied
10/01	07:42	DBE	Respiratory rate monitored
10/01	07:42	DBE	ETCO2 wave form present
10/01	07:42	DBE	Plan spontaneous ventilation throughout case
10/01	07:48	EWN	Anesthesiologist assessed patient, reviewed chart and formulated anesthesia plan
10/01	07:48	EWN	Anesthesiologist medically directing case and present for all critical portions.
10/01	07:48	EWN	Anesthesiologist present for induction
10/01	07:48	EWN	I (or another attending anesthesiologist) was immediately available throughout and present for all key/critical portions of case
10/01	07:48	DBE	Memo Nelson,MDA in .Nasal airway in. O2 sat up to 94%. Pt remains lateral.
10/01	07:51	DBE	Memo Nelson out.
10/01	07:56	DBE	Memo Pt turned supine from Lateral to establish better assisted Bag-Mask ventilation. Nasal airway out. Oral airway in.
10/01	07:56	DBE	Memo Came into room. Pt. hypoxic with junctional rhythm and no palpable pulse. ACLS protocol initiated, Mayday team called.
10/01	07:57	DBE	Non-palpable pulse
10/01	07:57	DBE	Chest compressions initiated and continuous until noted. .
10/01	07:57	DBE	Patient Oxygenated w/100% 02 per Bag-mask
10/01	08:01	DBE	Atraumatic laryngoscopy DVL x 1 per Embrey,CRNA.
10/01	08:01	DBE	Intubation - Tube size: #8.0 lr ETT @ 23 cm @ lips.
10/01	08:01	DBE	Cuff inflated with minimum volume to create seal
10/01	08:01	DBE	Breath sound equal and bilateral
10/01	08:01	DBE	ETCO2 confirmed via CO2 Monitor
10/01	08:01	DBE	Memo Eyes taped.
10/01	08:11	DBE	Arrhythmia identified: v fib noted when compressions halted.
10/01	08:11	DBE	Defibrillation - Joules: 200
10/01	08:12	DBE	CPR stopped Palpable pulse present.
10/01	08:16	DBE	Arterial line placed by CRNA
10/01	08:16	DBE	Left radial artery
10/01	08:16	DBE	Sterile technique
10/01	08:16	DBE	Skin prep with chlorobeuadine
10/01	08:16	DBE	20 ga arterial catheter over wire
10/01	08:16	DBE	Attempts: 1 per Dushenko,CRNA.
10/01	08:16	DBE	Good arterial waveform
10/01	08:16	DBE	Arterial catheter taped and sterile dressing applied .
10/01	08:23	DBE	Peripheral IV placed after induction
10/01	08:23	DBE	16 gauge peripheral IV catheter
10/01	08:23	DBE	Left antecubital x1 per Dushenko,CRNA.
10/01	08:23	DBE	Aseptic technique used
10/01	08:25	DBE	Central line placed by Attending Anesthesiologist
10/01	08:25	DBE	Hand hygiene prior to donning gloves
10/01	08:25	DBE	Maximum barrier precautions utilized for strict sterile technique including sterile body drape, hat, mask, and sterile gloves.
10/01	08:25	DBE	Skin preparation with chlorohexadine
10/01	08:26	DBE	Landmarks identified

MUSC PAGE 494 OF 2115

204

MUSC Health

"ANESTHESIANT"

MRN: 001400764
Name: MIKELL, CHARLES L
DOB: 01/23/1951
PatCom: 270428782
Surgeon: Payne , Mark

Ht(cm): 175.26001
Weight(kg): 137.28983
BMI: 44.7
Sex: M
Age: 49 years

Anesthesia Record

Surgery Date: 10/01/2010

Case Times

Anest Start:	10/01 07:20	Susp Start:	10/01 07:35	Proc Start:	10/01 07:42
Anest End:		Susp End:	10/01 08:37	Proc End:	10/01 07:56
Anest Total:		Susp Total:	01:02	Proc Total:	00:14

Staff and Electronic Signature Legend (Initials)

Surgical Procedure

Anesthesia Attending Documentation Electronically Signed By:

Pre-op Diagnosis

Post-op Diagnosis

Allergies

Anesthesia Type	ASA
General Anesthesia	III

Anesthesia Events

10/01	08:25	DBE	Introducer needle inserted into vessel, free blood flow
10/01	08:25	DBE	Triple lumen catheter Rt. femoral vein.
10/01	08:25	DBE	Blood return through all lumens. Lumens flushed.
10/01	08:29	DBE	Sterile transparent dressing placed over insertion site
10/01	08:31	EWN	Anesthesiologist present for airway device placement
10/01	08:31	DBE	Patient Oxygenated w/100% 02 and remains on vent.
10/01	08:31	DBE	ETT in place as per above.
10/01	08:31	EWN	Patient stabilized
10/01	08:31	DBE	Post resuscitation rhythm: SR.
10/01	08:37	DBE	To recovery area in stable condition
10/01	08:37	DBE	Patient transported with O2
10/01	08:37	DBE	Transported via stretcher/bed
10/01	08:45	JGT	Phase I PACU admission
10/01	08:45	JGT	Report received from: Donna Embry CRNA
10/01	08:45	JGT	Side rails up
10/01	08:45	JGT	Wheels locked
10/01	08:45	JGT	Connected to monitors
10/01	08:45	DBE	To PACU in stable condition with O2/ambu/MDA/RT/monitors for transport. VSS. Pt to vent in PACU on arrival per RT. SBAR report to PACU RN.
10/01	09:00	DBE	Postoperative Location:PACU
10/01	09:00	DBE	Mechanical ventilatory support
10/01	09:00	DBE	Requiring vasoactive/inotropic drips
10/01	09:00	DBE	Pain managed by primary care service
10/01	09:00	DBE	Cardiac arrest: during procedure.
10/01	09:46	JGT	Family at Bedside mother
10/01	10:54	JGT	Family at Bedside mother
10/01	12:16	JGT	Memo Dr. Guldan at bedside, Propofol off at this time to evaluate patients Neuro status.
10/01	12:17	JGT	Family at Bedside pastor
10/01	13:40	JGT	Discharge criteria not met
10/01	13:40	JGT	Transfer to ICU:
10/01	13:40	JGT	Transported via stretcher/bed stretcher
10/01	13:40	JGT	With Oxygen
10/01	13:40	JGT	With monitors
10/01	13:42	JGT	Memo Ice packs applied to pulse points. Dr. Guldan at bedside to evaluate patients neuro status. No response to verbal or noxious stimuli. Placed back on sedation for transfer to MSICU

MUSC Health

"ANESTHESIANT"

MRN: 001400764
Name: MIKELL, CHARLES L.
DOB: 01/25/1961
PatCom: 270428782
Surgeon: Payne , Mark

Height: 75.20001
Weight(kg): 137.29983
BMI: 44.7
Sex: M
Age: 49 years

Anesthesia Record

Surgery Date: 10/01/2010

TIME	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15	
Medications																					**Totals**
Amiodarone (mg) (IV)				3																	3.00
Atropine (mg) (IV)			1																		1.00
Epinephrine 1:1000 (mg) (IV)			1																		1.00
Midazolam (Versed) (mg) (IV)	2			4																	6.00
Phenylephrine (micrograms) (IV)				720																	720.00
Rocuronium (mg) (IV)				50																	50.00
Drips																					**Totals**
Phenylephrine (micrograms/kg/min)				*0.8>	0.8>	0.8>	0.8>	^	^>	X											77.8
Propofol (micrograms/kg/min)	75>	">	"	"	"	"	"	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	"	"	352.6
Amiodarone(mg/min) / D5W (mL)							0.999>	>	>	>	>	>	>	>	>	>	>	>	>	>	308.5
Amiodarone(mg/min) / D5W (mL)					1>	>	>>	X													16.7
Fluids IN																					**Totals**
Normal Saline 0.9% (mL)	500>	>	>		X																500.00
Normal Saline 0.9% (mL)				1000>	>	>	>	>	>	>	>		X								0.00
Normal Saline 0.9% (mL/h)							50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	470.28
Fluids OUT (mL)																					**Totals**
Urine											350										370.00

MUSC Health

"ANESTHESIANT"

MRN: 001400764
Name: MIKELL, CHARLES L
DOB: 01/26/1961
PatCom: 270428782
Surgeon: Payne , Mark
Height: 75.20001
Weight(kg): 137.29983
BMI: 44.7
Sex: M
Age: 49 years

Anesthesia Record

Surgery Date: 10/01/2010

TIME	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15	14:30	14:45	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15	Totals
Amiodarone (mg) (IV)																					3.00
Atropine (mg) (IV)																					1.00
Epinephrine 1:1000 (mg) (IV)																					1.00
Midazolam (Versed) (mg) (IV)																					6.00
Phenylephrine (microgram) (IV)																					720.00
Rocuronium (mg) (IV)																					50.00

Drips

																					Totals
Phenylephrine (micrograms/kg/min)																					
Propofol (micrograms/kg/min)	[1]	A	A	A	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	54.5>	77.8
Amiodarone(mg/min) / D5W (mL)	[1]	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	382.6
Amiodarone(mg/min) / D5W (mL)																					308.5
																					16.7

Fluids IN

																					Totals
Normal Saline 0.9% (mL)																					500.00
Normal Saline 0.9% (mL)																					0.00
Normal Saline 0.9% (mL/h)	[50>]	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	50>	479.28

Fluids OUT (mL)

																					Totals
Urine				370																	370.00

KLE 001210

MUSC Health

"ANESTHESIANT"

MRN: 001400764	Height([illegible]5.20001
Name: MIKELL, CHARLES L	Weight(kg): 137.29983
DOB: 01/25/1961	BMI: 44.7
PatCom: 270428782	Sex: M
Surgeon: Payne , Mark	Age: 49 years

Anesthesia Record Surgery Date: 10/01/2010

TIME	17:30	17:45	18:00	18:15	Totals
Medications					
Amiodarone (mg) (IV)					3.00
Atropine (mg) (IV)					1.00
Epinephrine 1:1000 (mg) (IV)					1.00
Midazolam (Versed) (mg) (IV)					6.00
Phenylephrine (microgram) (IV)					720.00
Rocuronium (mg) (IV)					50.00
Drips					Totals
Phenylephrine (micrograms/kg/min)					77.8
Propofol (micrograms/kg/min)	54.5>	54.5>	54.5>	54.6>	352.5
Amiodarone(mg/min) / D5W (mL)	|> |	>	>	>	308.5
Amiodarone(mg/min) / D5W (mL)					18.7
Fluids IN					Totals
Normal Saline 0.9% (mL)					500.00
Normal Saline 0.9% (mL)					0.00
Normal Saline 0.9% (mL/hr)	50>	50>	50>	50>	470.28
Fluids OUT (mL)					Totals
Urine					370.00

ALS 081216

Page 5 of 8

10/2/2010 18:15

MUSC Health

ANESTHESIANT

MRN: 001400764
Name: MIKELL, CHARLES L
DOB: 01/25/1961
PatCon: 270428782
Surgeon: Payne , Mark

Height(cm): [illegible]
Weight(kg): 137.28983
BMI: 44.7
Sex: M
Age: 49 years

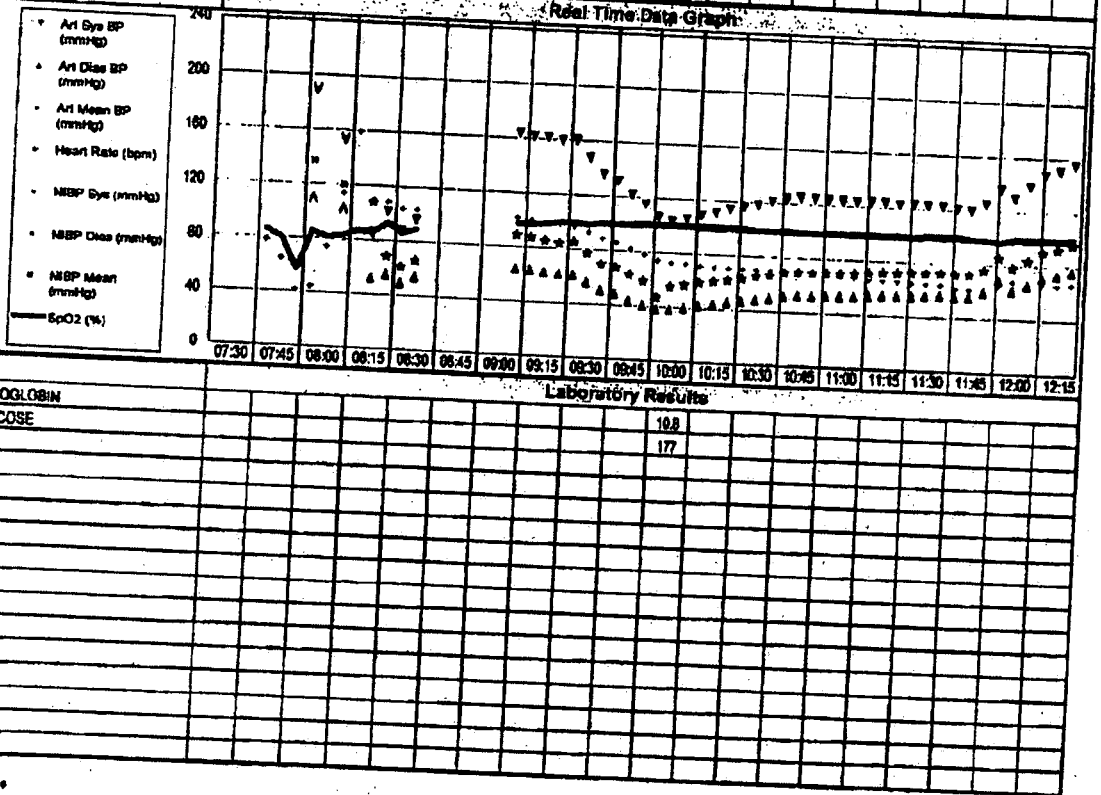
Anesthesia Record

Surgery Date: 10/01/2010

Real Time Variables

TIME	07:30	07:45	08:00	08:15	08:30	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15
FiO2 (%)		99.0	98.0	97.0	98.0															
SpO2 (%)		47.5	85.5	86.7	89.6		96.9	99.4	99.2	99.9	99.8	99.4	98.7	98.6	98.6	98.6	98.7	98.2	98.5	98.0
EtCO2 (mmHg)		0.0	62.6	34.0	34.8															
Des out (%)			0.0	0.9	0.9															
EKG Rhythm	SR	PEA*	SR*	SR*	SR	SR	SR*	SR*	SR*	SR*	SR*	SR*	SR*	SR*	SR*	SR*	SR*	SR*	SR*	SR*
Resp. rt		15.0	24.0	16.0	16.0															
Tidal volume (mL)		72.0	604.0	604.0	563.0															
PIP (cmH2O)		30.0	56.0	30.0	23.0															
Temperature (°C)						36.6									36.5*				36.6	

Real Time Data Graph



Laboratory Results

	10:00
HEMOGLOBIN	10.8
GLUCOSE	177

XLS 091210

Page 8 of 8

10/2/2010 18:15

MUSC Health

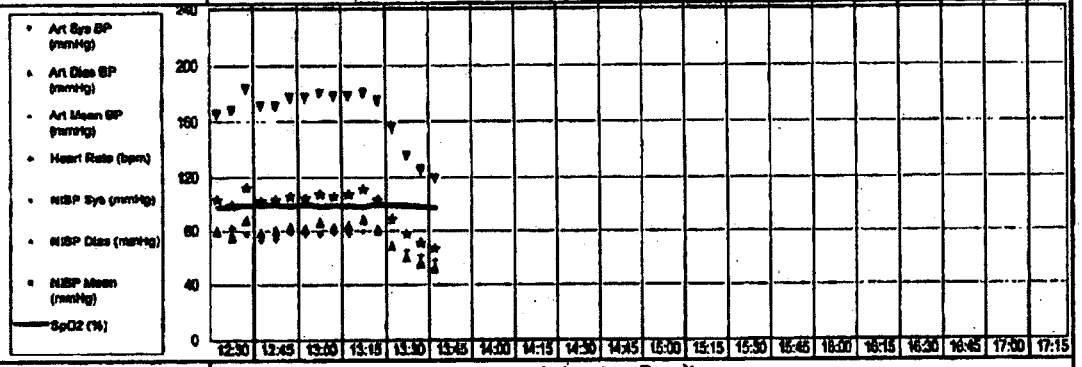
"ANESTHESIANT"

MRN: 001400764 | Height(cm): [illegible]
Name: MIKELL, CHARLES L | Weight(kg): 137.29983
DOB: 01/25/1961 | BMI: 44.7
PatCom: 270428782 | Sex: M
Surgeon: Payne , Mark | Age: 49 years

Anesthesia Record Surgery Date: 10/01/2010

TIME	12:30	12:45	13:00	13:15	13:30	13:45	14:00	14:15	14:30	14:45	15:00	15:15	15:30	15:45	16:00	16:15	16:30	16:45	17:00	17:15
Real Time Variables																				
FiO2 (%)																				
SpO2 (%)	99.4	97.7	96.9	100.0	97.9	97.2														
EtCO2 (mmHg)																				
Des out (%)																				
EKG Rhythm	SR*	SR*	SR*	SR*	SR*	SR*														
Resp_m																				
Tidal volume (mL)																				
PIP (cmH2O)																				
Temperature (°C)					36.6															

Real Time Data Graph



Laboratory Results

HEMOGLOBIN									10.7											
GLUCOSE									214											

MUSC Health

ANESTHESIANT

MRN: 001400764
Name: MIKELL, CHARLES L
DOB: 01/25/1961
PatCom: 270428782
Surgeon: Payne, Mark

Height(cm): [illegible]01
Weight(kg): 137.29983
BMI: 44.7
Sex: M
Age: 49 years

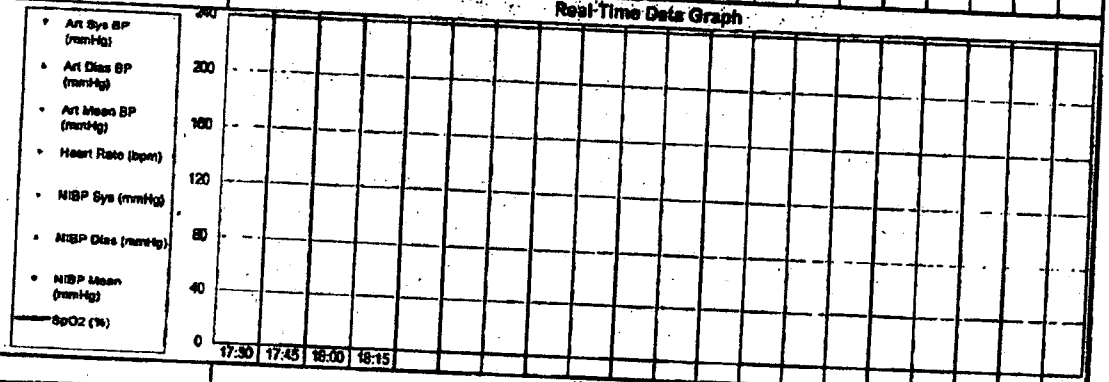
Anesthesia Record

Surgery Date: 10/01/2010

Real Time Variables

TIME	17:30	17:45	18:00	18:15
FiO2 (%)				
SpO2 (%)				
EtCO2 (mmHg)				
Des out (%)				
EKG Rhythm				
Rsp_m				
Tidal volume (mL)				
PIP (cmH2O)				
Temperature (°C)				

Real-Time Data Graph



Laboratory Results

HEMOGLOBIN	
GLUCOSE	

KLS 001240

MUSC Health

"ANESTHESIANT"

MRN: 001400764
Name: MIKELL, CHARLES L
DOB: 01/25/1961
PatCom: 270428782
Surgeon: Hoy , Mark

Height: 75.20003
Weight(Kg): 136.30963
Bmi: 44.4
Sex: Male
Age: 49 years

Anesthesia Record

Surgery Date: 10/12/2010

| TIME | 08:46 | 09:00 | 09:15 | 09:30 | 09:45 | 10:00 | 10:15 | 10:30 | 10:45 | 11:00 | | |

MUSC Health

"ANESTHESIANT"

MRN: 001400764
Name: MIKELL, CHARLES L
DOB: 01/25/1961
PatCnm: 270428782
Surgeon: Hoy, Mark

Height(cm): [illegible]
Weight(kg): 136.36993
BMI: 44.4
Sex: Male
Age: 49 years

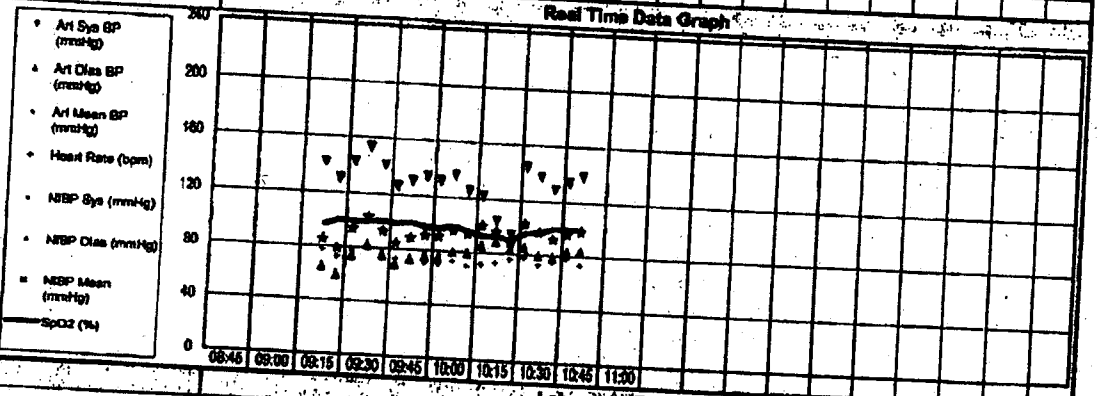
Anesthesia Record

Surgery Date: 10/12/2010

Real Time Variables

TIME	08:45	09:00	09:15	09:30	09:45	10:00	10:15	10:30	10:45	11:00
FiO2 (%)	21.0	21.0	85.0	61.0	36.0	26.0	53.0	93.0	96.0	
SpO2 (%)			100.0	100.0	94.5	98.4	82.1	100.0	100.0	
EtCO2 (mmHg)	0.0	0.0	0.8	42.6	41.8	41.0	48.4	43.3	43.3	
Sevo out (%)			1.0	1.5	1.5	1.7	1.1	4.4	0.7	
Des out (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
EKG Rhythm			SR	SR	SR	SR	SR	SR	SR	
Resp_rate			14.0	14.0	14.0	14.0	14.0	14.0	8.0	
Tidal volume (mL)			567.0	541.0	544.0	563.0	226.0	530.0	554.0	
PIP (cmH2O)	0.0	0.0	1.0	34.0	35.0	35.0	28.0	34.0	24.0	
Esophageal Temp (°C)					37.6	37.6	37.6	37.7		

Real Time Data Graph



Laboratory Results

MUSC Health

"ANESTHESIANT"

Anesthesia/PACU Record

MRN: 001400784	Height(cm): 175.20002
Name: MIKELL, CHARLES L.	Weight(kg): 137.29968
DOB: 01/25/1961	BMI: 44.7
PatCom: 270428782	Sex: M
Surgeon: Payne , Mark	Age: 49 years

Surgery Date: 10/01/2010

Case Times

Anest Start: 10/01 07:20	Surg Start: 10/01 07:35	Proc Start: 10/01 07:42	PACU Start: 10/01 08:45	Stepdown Start:
Anest End: 10/01 09:12	Surg End: 10/01 08:37	Proc End: 10/01 07:56	PACU End: 10/01 13:40	Stepdown End:
Anest Total: 01:52	Surg Total: 01:02	Proc Total: 00:14	PACU Total: 04:55	Stepdown Total:

Surgical Procedure

DIAGNOSTIC COLONOSCOPY

Pre-op Diagnosis

Post-op Diagnosis

Allergies

No known medication allergies

Staff and Electronic Signature Legend (Initials)

Role: Scheduled Surgeon - Payne, Mark (MAP)
Role: Primary Surgeon - Payne, Mark (MAP)
Role: Pre/Postoperative Registered Nurse - Toohey, Jeffrey (JGT)
Role: Anesthesia Attending - Nelson, Eric (EWN)
Role: CRNA - Embrey, Donna (DBE)

Anesthesia Attending Documentation Electronically Signed By:

10/01 7:48 EWN Anesthesiologist assessed patient, reviewed chart and formulated anesthesia pla
10/01 7:48 EWN Anesthesiologist medically directing case and present for all critical portions.
10/01 7:48 EWN Anesthesiologist present for induction
10/01 7:48 EWN I (or another attending anesthesiologist) was immediately available throughout a
10/01 8:31 EWN Anesthesiologist present for airway device placement

Anesthesia Type	ASA
General Anesthesia	III

Anesthesia Events

10/01	7:25	DBE	Airway equipment available and functioning
10/01	7:25	DBE	Surgical consent verified and appropriate
10/01	7:25	DBE	Pre-op vital signs reviewed
10/01	7:25	DBE	Risks, benefits, and complications of anesthetic plan discussed and understood
10/01	7:25	DBE	Procedural site marking(s) verified where appropriate
10/01	7:25	DBE	Anesthesia machine checked, alarms on and functioning
10/01	7:25	DBE	Integrity of Anesthesia circuit confirmed
10/01	7:25	DBE	Standard monitors available, alarms on and functioning
10/01	7:25	DBE	Suction available and functioning
10/01	7:25	DBE	Anesthesia and resuscitation drugs available
10/01	7:25	DBE	Patient identified by 2 methods
10/01	7:25	DBE	Patient chart and preoperative assessment reviewed
10/01	7:25	DBE	NPO status verified
10/01	7:25	DBE	Peripheral IV placed preoperatively
10/01	7:25	DBE	Right hand
10/01	7:25	DBE	22 gauge peripheral IV catheter in situ in HA.
10/01	7:35	DBE	Transfer to:
10/01	7:42	DBE	Patient evaluated immediately prior to induction
10/01	7:42	DBE	Standard monitors applied
10/01	7:42	DBE	Respiratory rate monitored
10/01	7:42	DBE	ETCO2 wave form present
10/01	7:42	DBE	Plan spontaneous ventilation throughout case
10/01	7:48	EWN	Anesthesiologist medically directing case and present for all critical portions.
10/01	7:48	EWN	I (or another attending anesthesiologist) was immediately available throughout and present for all key/critical portions of case
10/01	7:48	DBE	Memo Nelson,MDA in .Nasal airway in. O2 sat up to 94%. Pt remains lateral.
10/01	7:48	EWN	Anesthesiologist assessed patient, reviewed chart and formulated anesthesia plan
10/01	7:48	EWN	Anesthesiologist present for induction
10/01	7:51	DBE	Memo Nelson out.
10/01	7:55	DBE	Memo Pt turned supine from Lateral to establish better assisted Bag-Mask ventilation. Nasal airway out. Oral airway in.
10/01	7:56	DBE	Memo Came into room. Pt. hypoxic with junctional rhythm and no palpable pulse. ACLS protocol initiated, Mayday team called.
10/01	7:57	DBE	Non-palpable pulse
10/01	7:57	DBE	Chest compressions initiated and continuous until noted.
10/01	7:57	DBE	Patient Oxygenated w/100% 02 per Bag-mask
10/01	8:01	DBE	Atraumatic laryngoscopy DVL x 1 per Embrey,CRNA.
10/01	8:01	DBE	Intubation - Tube size: #8.0 fr ETT @ 23 cm @ lips.
10/01	8:01	DBE	Cuff inflated with minimum volume to create seal
10/01	8:01	DBE	Breath sound equal and bilateral
10/01	8:01	DBE	ETCO2 confirmed via CO2 Monitor
10/01	8:01	DBE	Memo Eyes taped.
10/01	8:11	DBE	Arrhythmia identified: v fib noted when compressions halted.
10/01	8:11	DBE	Defibrillation - Joules: 200
10/01	8:12	DBE	CPR stopped Palpable pulse present.
10/01	8:16	DBE	Skin prep with chlorhexadine
10/01	8:16	DBE	Sterile technique
10/01	8:16	DBE	Arterial line placed by CRNA
10/01	8:16	DBE	Arterial catheter taped and sterile dressing applied
10/01	8:16	DBE	Left radial artery
10/01	8:16	DBE	20 ga arterial catheter over wire
10/01	8:16	DBE	Attempts: 1 per Dusharko,CRNA.
10/01	8:16	DBE	Good arterial waveform
10/01	8:23	DBE	Peripheral IV placed after induction
10/01	8:23	DBE	Aseptic technique used
10/01	8:23	DBE	16 gauge peripheral IV catheter
10/01	8:23	DBE	Left antecubital x1 per Dusharko,CRNA.
10/01	8:25	DBE	Skin preparation with chlorhexidine
10/01	8:25	DBE	Landmarks indentified
10/01	8:25	DBE	Introducer needle inserted into vessel, free blood flow
10/01	8:25	DBE	Triple lumen catheter Rt. femoral vein.
10/01	8:25	DBE	Sterile transparent dressing placed over insertion site
10/01	8:25	DBE	Maximum barrier precautions utilized for strict sterile technique including sterile body drape, hat, mask, and sterile gloves.
10/01	8:25	DBE	Hand hygiene prior to donning gloves
10/01	8:25	DBE	Blood return through all lumens. Lumens flushed.
10/01	8:25	DBE	Central line placed by Attending Anesthesiologist
10/01	8:31	DBE	Post resuscitation rhythm: SR.
10/01	8:31	DBE	Patient Oxygenated w/100% 02 and remains on vent.
10/01	8:31	DBE	ETT in place as per above.
10/01	8:31	EWN	Anesthesiologist present for airway device placement
10/01	8:31	EWN	Patient stabilized
10/01	8:37	DBE	Patient transported with O2
10/01	8:37	DBE	To recovery area in stable condition

MUSC Health

"ANESTHESIANT"

Anesthesia/PACU Record

MRN: 001400764	Height(cm): 175.20002
Name: MIKELL, CHARLES L	Weight(kg): 137.29986
DOB: 01/25/1981	BMI: 44.7
PatCons: 270428782	Sex: M
Surgeon: Payne , Mark	Age: 49 years

Surgery Date: 10/01/2010

Case Times

Anest Start: 10/01 07:20	Surg Start: 10/01 07:35	Proc Start: 10/01 07:42	PACU Start: 10/01 08:45	Stepdown Start:
Anest End: 10/01 09:12	Surg End: 10/01 08:37	Proc End: 10/01 07:56	PACU End: 10/01 13:40	Stepdown End:
Anest Total: 01:52	Surg Total: 01:02	Proc Total: 00:14	PACU Total: 04:55	Stepdown Total:

Surgical Procedure

Staff and Electronic Signature Legend (Initials)

Pre-op Diagnosis

Postop Diagnosis

Anesthesia Attending Documentation Electronically Signed By:

Allergies

Anesthesia Type	ASA
General Anesthesia	III

Anesthesia Events

10/01	8:37	DBE	Transported via stretcher/bed
10/01	8:45	JGT	Phase I PACU admission
10/01	8:45	JGT	Report received from: Donna Embry CRNA
10/01	8:45	JGT	Side rails up
10/01	8:45	JGT	Wheels locked
10/01	8:45	JGT	Connected to monitors
10/01	8:45	DBE	To PACU in stable condition with O2/ambu/MDA/RT/monitors for transport. VSS. Pt to vent in PACU on arrival per RT. SBAR report to PACU RN.
10/01	9:15	DBE	Postoperative Location:PACU
10/01	9:15	DBE	Cardiac arrest: during procedure.
10/01	9:15	DBE	Requiring vasoactive/inotropic drips
10/01	9:15	DBE	Mechanical ventilatory support
10/01	9:15	DBE	Pain managed by primary care service
10/01	9:46	JGT	Family at Bedside mother
10/01	10:54	JGT	Family at Bedside mother
10/01	12:16	JGT	Memo Dr. Guidan at bedside, Propofol off at this time to evaluate patients Neuro status.
10/01	12:17	JGT	Family at Bedside pastor
10/01	13:40	JGT	Discharge criteria not met
10/01	13:40	JGT	Transfer to ICU:
10/01	13:40	JGT	Transported via stretcher/bed stretcher
10/01	13:40	JGT	With monitors
10/01	13:40	JGT	With Oxygen
10/01	13:42	JGT	Memo ice packs applied to pulse points. Dr. Guidan at bedside to evaulate patients neuro status. No response to verbal or noxious stimuli. Placed back on sedation for transfer to MSICU

MUSC Health

"ANESTHESIANT"

Anesthesia/PACU Record

MRN: 001400764	Height(cm): 175.20002
Name: MIKELL, CHARLES L	Weight(kg): 137.29968
DOB: 01/25/1961	BMI: 44.7
PatCom: 270428782	Sex: M
Surgeon: Payne , Mark	Age: 49 years

Surgery Date: 10/01/2010

TIME	7:34	7:35	7:36	7:37	7:38	7:39	7:40	7:41	7:42	7:43	7:44	7:45	7:46	7:47	7:48	7:49	7:50	7:51	7:52	7:53	
Medications																					**Totals**
Amiodarone (mg) (IV)																					3
Atropine (mg) (IV)																					1
Epinephrine 1:1000 (mg) (IV)																					1
Midazolam (Versed) (mg) (IV)		1	1																		6
Phenylephrine (microgram) (IV)																					720
Rocuronium (mg) (IV)																					50
Drips																					**Totals (mL)**
Phenylephrine (microgram/kg/min)																					77.8
Propofol (microgram/kg/min)								75>	75>	75>	75>	75>	75>	75>	75>	75>	50>	50>	50>	"A	352.6
Amiodarone(mg/min) / D5W (mL)																					306.5
Amiodarone(mg/min) / D5W (mL)																					16.67
Fluids IN																					**Totals (mL)**
Normal Saline 0.9% (mL)		500>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	500
Normal Saline 0.9% (mL)																					0
Normal Saline 0.9% (mL/h)																					470.3
Fluids OUT (mL)																					**Totals (mL)**
Urine																					370

MUSC Health

"ANESTHESIANT"

Anesthesia/PACU Record

MRN: 001400764
Name: MIKELL, CHARLES L
DOB: 01/25/1961
PatCom: 270426782
Surgeon: Payne , Mark

Height(cm): 175.20002
Weight(kg): 137.20000
BMI: 44.7
Sex: M
Age: 49 years
Surgery Date: 10/01/2010

TIME	7:54	7:55	7:56	7:57	7:58	7:59	8:00	8:01	8:02	8:03	8:04	8:05	8:06	8:07	8:08	8:09	8:10	8:11	8:12	8:13	
Medications																					Totals
Amiodarone (mg) (IV)																					3
Atropine (mg) (IV)																					1
Epinephrine 1:1000 (mg) (IV)							1								0.5	0.5					1
Midazolam (Versed) (mg) (IV)																					5
Phenylephrine (microgram) (IV)																					720
Rocuronium (mg) (IV)																					50
Drips																					Totals (mL)
Phenylephrine (microgram/kg/min)																					77.8
Propofol (microgram/kg/min)	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	352.6
Amiodarone(mg/min) / D5W (mL)																					306.5
Amiodarone(mg/min) / D5W (mL)																					16.67
Fluids IN																					Totals (mL)
Normal Saline 0.9% (mL)	>|	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	500
Normal Saline 0.9% (mL)																					0
Normal Saline 0.9% (mL/h)																					470.3
Fluids OUT (mL)																					Totals (mL)
Urine																					370

XLS: 11152010

4/2/2013 13:14

BWPH 1.554 (Mikell)
MUSC
2119

MUSC Health

"ANESTHESIANT"

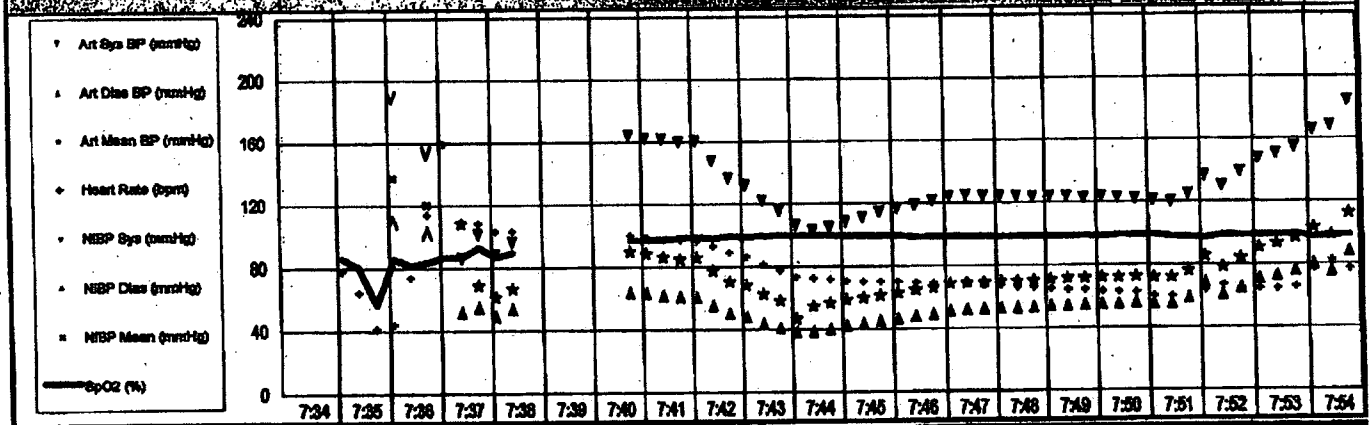
Anesthesia/PACU Record

MRN: 001400764		Height(cm): 175.20002	
Name: MIKELL, CHARLES L.		Weight(kg): 137.29966	
DOB: 01/25/1961		BMI: 44.7	
PatComm: 270428782		Sex: M	
Surgeon: Payne , Mark		Age: 49 years	
		Surgery Date: 10/01/2010	

Real Time Vitals Data

TIME	7:34	7:35	7:36	7:37	7:38	7:39	7:40	7:41	7:42	7:43	7:44	7:45	7:46	7:47	7:48	7:49	7:50	7:51	7:52	7:53	7:54
SpO2 (%)															96.7	75	69.2	90.1	80.7	88	73.3
Temperature (°C)																					
EKG Rhythm		SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR
SpO2 Heart Rate bpm															74	72	101	83	62	75	85
Spontaneous Resp Rate																			0	1	1
Resp Rate from pCO2 cart															0	0	0	11	14	17	0
Vent Resp Rate/min																			1	1	1
FiO2 (%)															99	35	26	29	24	26	29
EtCO2 (mmHg)															0	0.754	52.76	45.24	10.56	10.56	0.754
Des out (%)																					
Exp. Tidal volume (mL)																			41	32	
PIP (cmH2O)															0	0	0	0	0	1	0

Real Time Graph Data



Real Time Lab Data

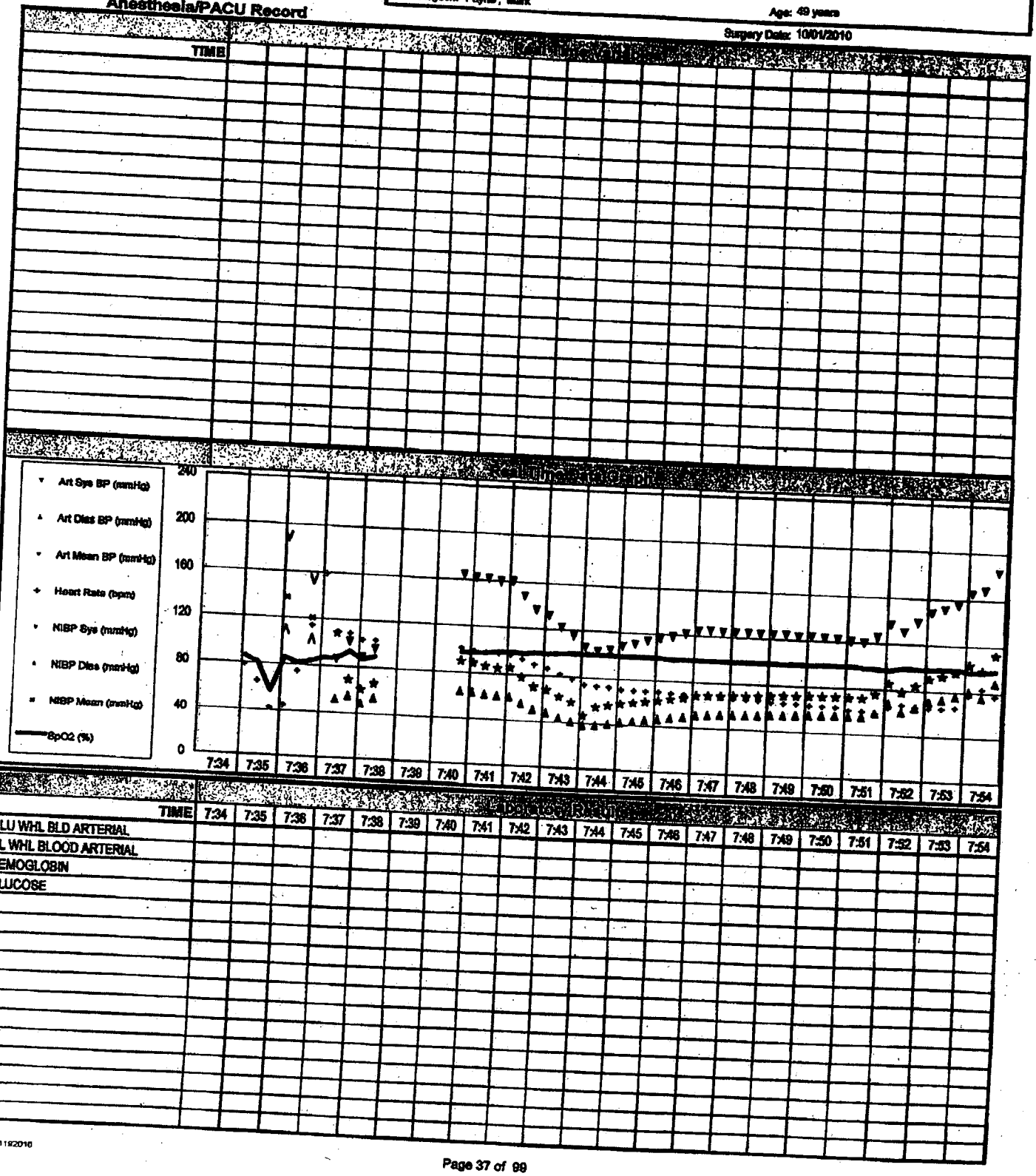
TIME	7:34	7:35	7:36	7:37	7:38	7:39	7:40	7:41	7:42	7:43	7:44	7:45	7:46	7:47	7:48	7:49	7:50	7:51	7:52	7:53	7:54
PH ARTERIAL																					
PH ARTERIAL																					
PCO2 ARTERIAL																					
PCO2 ARTERIAL																					
PO2 ARTERIAL																					
PO2 ARTERIAL																					
BICARB ARTERIAL																					
BICARB ARTERIAL																					
TOTAL CO2 ARTERIAL																					
O2 SAT ARTERIAL																					
O2 SAT ARTERIAL																					
HCT WHL BLD ARTERIAL																					
HGB WHL BLD ARTERIAL																					
NA WHL BLD ARTERIAL																					
K WHL BLD ARTERIAL																					
IONIZED CA ARTERIAL																					

MUSC Health

"ANESTHESIANT"

Anesthesia/PACU Record

MRN: 001400784	Height(cm): 175.20002
Name: MIKELL, CHARLES L	Weight(kg): 137.29968
DOB: 01/25/1961	BMI: 44.7
PatCom: 270428782	Sex: M
Surgeon: Payne , Mark	Age: 49 years
	Surgery Date: 10/01/2010



XLS 11192010

4/2/2013 13:15
BWPH 1.554 (Mikell)
MUSC
2152

MUSC Health

ANESTHESIANT

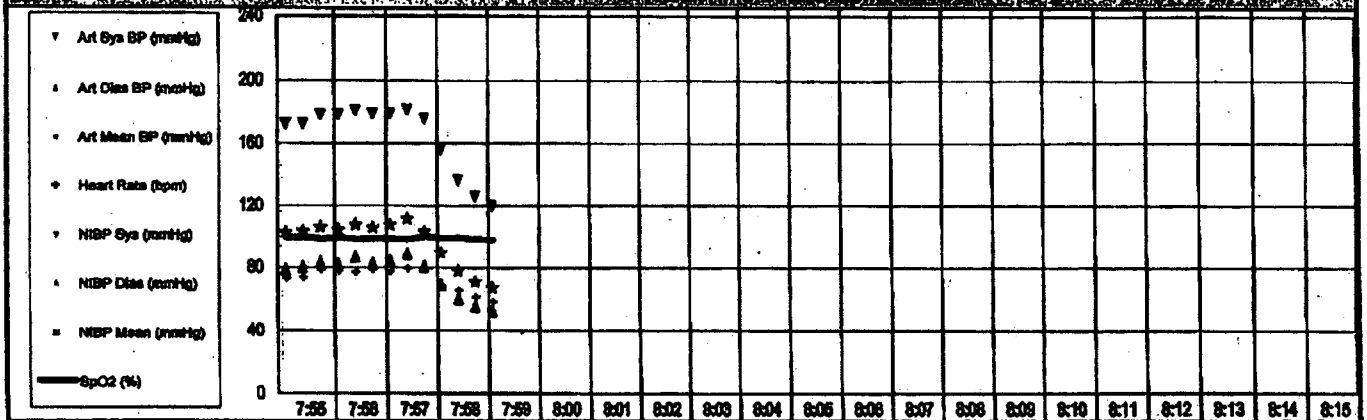
Anesthesia/PACU Record

MRN: 001400764		Height(cm): 175.20002	
Name: MIKELL, CHARLES L.		Weight(kg): 137.29966	
DOB: 01/25/1961		BMI: 44.7	
PatCom: 270428782		Sex: M	
Surgeon: Payne , Mark		Age: 49 years	
		Surgery Date: 10/01/2010	

Real Time Vitals

TIME	7:55	7:56	7:57	7:58	7:59	8:00	8:01	8:02	8:03	8:04	8:05	8:06	8:07	8:08	8:09	8:10	8:11	8:12	8:13	8:14	8:15
SpO2 (%)	62.1	75	41.2	47.5		67.6	88.1	88.4	96.4	88.3	79.9	77.6		88.3		83.5					79.7
Temperature (°C)																					
EKG Rhythm	SR	JUNCT	JUNCT	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	V-FIB*	SR*	SR*	SR*	SR*
SpO2 Heart Rate bpm	90	64	30	29		29	102	95	87	106	94	79		36		39					89
Spontaneous Resp Rate	3	12	14	18	15	15	13	7	2	1	0	0	0	0	1	1	22	9	28	24	15
Resp Rate from pCO2 cart	0	17	0	0	0	0	0	20	9	10	10	10	10	0	0	0	17	15	17	11	15
Vent Resp Rate/min	4	12	14	18	15	15	13	8	17	13	10	10	10	10	11	10	25	15	28	24	15
FIO2 (%)	95	95	99	99	99	100	100	96	79	94	96	97	98	98	98	98	97	99	98	98	98
EtCO2 (mmHg)	1.508	24.88	0	0	0	7.54	0	16.59	9.802	20.36	13.57	10.58	7.54	2.262	4.524	5.278	23.37	16.59	26.64	62.58	52.03
Des out (%)										0	0	0	0	0	0	0	0	0	0	0	0
Exp. Tidal volume (mL)	17	60	121	72	72	314	93	454	107	549	546	557	553	559	726	559	1128	781	10	904	1061
PIP (cmH2O)	3	27	28	28	30	32	31	38	26	29	27	27	27	27	35	27	57	63	10	55	47

Real Time Graphics



Real Time Labs

TIME	7:55	7:56	7:57	7:58	7:59	8:00	8:01	8:02	8:03	8:04	8:05	8:06	8:07	8:08	8:09	8:10	8:11	8:12	8:13	8:14	8:15
PH ARTERIAL																					
PH ARTERIAL																					
PCO2 ARTERIAL																					
PCO2 ARTERIAL																					
PO2 ARTERIAL																					
PO2 ARTERIAL																					
BICARB ARTERIAL																					
BICARB ARTERIAL																					
TOTAL CO2 ARTERIAL																					
O2 SAT ARTERIAL																					
O2 SAT ARTERIAL																					
HCT WHL BLD ARTERIAL																					
HGB WHL BLD ARTERIAL																					
NA WHL BLD ARTERIAL																					
K WHL BLD ARTERIAL																					
IONIZED CA ARTERIAL																					

MUSC Health

"ANESTHESIANT"

Anesthesia/PACU Record

MRN: 001400764	Height(cm): 175.20002
Name: MIKELL, CHARLES L.	Weight(kg): 137.29996
DOB: 01/25/1961	BMI: 44.7
PatCom: 270426782	Sex: M
Surgeon: Payne , Mark	Age: 49 years

Surgery Date: 10/01/2010

Assessments

10/01/2010 07:35 DBE	Oxygen: FiO2 Liters	•4 Liters	10/01/2010 08:30 DBE	Oxygen: Mode	•Mechanical Ventilation
10/01/2010 07:35 DBE	Pressure Points	•Lateral - Checked	10/01/2010 08:30 DBE	Pressure Points	•Supine - Checked
10/01/2010 07:35 DBE	Oxygen: Mode	•Nasal Canula	10/01/2010 08:30 DBE	Oxygen: FiO2 Liters	
10/01/2010 07:40 DBE	Oxygen: FiO2 Liters	•4 Liters	10/01/2010 08:35 DBE	Oxygen: FiO2 Liters	•10 Liters
10/01/2010 07:40 DBE	Oxygen: Mode	•Nasal Canula	10/01/2010 08:35 DBE	Oxygen: Mode	•Mechanical Ventilation
10/01/2010 07:40 DBE	Pressure Points	•Lateral - Checked	10/01/2010 08:35 DBE	Pressure Points	•Supine - Checked
10/01/2010 07:45 DBE	Oxygen: FiO2 Liters	•4 Liters	10/01/2010 08:40 DBE	Oxygen: FiO2 Liters	•10 Liters
10/01/2010 07:45 DBE	Oxygen: Mode	•Nasal Canula	10/01/2010 08:45 DBE	Oxygen: FiO2 Liters	•10 Liters
10/01/2010 07:45 DBE	Pressure Points	•Lateral - Checked	10/01/2010 08:50 DBE	Oxygen: FiO2 Liters	•10 Liters
10/01/2010 07:50 DBE	Oxygen: FiO2 Liters	•6 Liters	10/01/2010 08:55 DBE	Oxygen: FiO2 Liters	•10 Liters
10/01/2010 07:50 DBE	Oxygen: Mode	•Nasal Canula	10/01/2010 09:00 DBE	Oxygen: FiO2 Liters	•10 Liters
10/01/2010 07:50 DBE	Pressure Points	•Lateral - Checked	10/01/2010 09:05 DBE	Oxygen: FiO2 Liters	•10 Liters
10/01/2010 07:55 DBE	Pressure Points	•Supine - Checked	10/01/2010 09:10 DBE	Oxygen: FiO2 Liters	•10 Liters
10/01/2010 07:55 DBE	Oxygen: Mode	•Manual Bag-Mask	10/01/2010 09:12 JGT	Oxygen: FiO2 %	•60%
10/01/2010 07:55 DBE	Oxygen: FiO2 Liters	•15 Liters	10/01/2010 09:12 JGT	Airway	•ETT Tube
10/01/2010 08:00 DBE	Oxygen: Mode	•Manual Bag-Mask	10/01/2010 09:12 JGT	ETT: Measurement	•Measurement at Lip:
10/01/2010 08:00 DBE	Pressure Points	•Supine - Checked	10/01/2010 09:12 JGT	ETT: Size	•Size 8.0
10/01/2010 08:00 DBE	Oxygen: FiO2 Liters	•15 Liters			•Cuffed
10/01/2010 08:05 DBE	Oxygen: FiO2 Liters	•10 Liters	10/01/2010 09:12 JGT	Cardiac Rhythm	•Sinus Tachycardia
10/01/2010 08:05 DBE	Oxygen: Mode	•Mechanical Ventilation	10/01/2010 09:12 JGT	Oxygen: Mode	•Mechanical Ventilation
10/01/2010 08:05 DBE	Pressure Points	•Supine - Checked			(PRVC, rate 15, TV 500, peep 5)
10/01/2010 08:10 DBE	Oxygen: Mode	•Mechanical Ventilation	10/01/2010 09:12 JGT	Pulse Strength: Dorsalis Pedis	•Normal +2 Left
10/01/2010 08:10 DBE	Pressure Points	•Supine - Checked			•Normal +2 Right
10/01/2010 08:10 DBE	Oxygen: FiO2 Liters	•10 Liters	10/01/2010 09:12 JGT	Pulse Strength: Radial	•Normal +2 Left
10/01/2010 08:15 DBE	Oxygen: Mode	•Mechanical Ventilation			•Normal +2 Right
10/01/2010 08:15 DBE	Pressure Points	•Supine - Checked	10/01/2010 09:12 JGT	Abdominal Assessment: Abdomen	•Soft
10/01/2010 08:15 DBE	Oxygen: FiO2 Liters	•10 Liters			•Distended
10/01/2010 08:20 DBE	Oxygen: Mode	•Mechanical Ventilation	10/01/2010 09:12 JGT	Nausea/Vomiting	•Nausea Absent
10/01/2010 08:20 DBE	Pressure Points	•Supine - Checked	10/01/2010 09:12 JGT	Pain: Scale (Self report)	•Unable to Assess
10/01/2010 08:20 DBE	Oxygen: FiO2 Liters	•10 Liters	10/01/2010 09:12 JGT	Eyes: Opening	•No response 1
10/01/2010 08:25 DBE	Oxygen: Mode	•Mechanical Ventilation	10/01/2010 09:12 JGT	Level of Consciousness	•Nonresponsive
10/01/2010 08:25 DBE	Pressure Points	•Supine - Checked	10/01/2010 09:12 JGT	Motor Strength: Arm	•No Response Left
10/01/2010 08:25 DBE	Oxygen: FiO2 Liters	•10 Liters			•No Response Right

Nursing Care

10/01/2010 10:08 JGT	Foley Catheter: Placed *** Done
10/01/2010 10:15 JGT	Suctioned *** Done
10/01/2010 11:00 JGT	Suctioned *** Done
10/01/2010 12:00 JGT	Suctioned *** Done
10/01/2010 12:37 JGT	Suctioned *** Done

PACU Score and/or FLACC Pain Scale

XLS: 11192010

4/2/2013 13:15

BWPH 1.554 (Mikell)
MUSC
2213

MUSC Health

[redacted]

"ANESTHESIAART"

Anesthesia/PACU Record

MRN: 001400764	Height(cm): 175.26562
Name: MIXELL, CHARLES L.	Weight(kg): 137.29998
DOB: 01/25/1961	BMI: 44.7
PatCom: 270428782	Sex: M
Surgeon: Payne , Mark	Age: 49 years
	Surgery Date: 10/01/2010

Anest Start: 10/01 07:20	Surg Start: 10/01 07:35	Proc Start: 10/01 07:42	PACU Start: 10/01 08:45	Shutdown Start:
Anest End: 10/01 09:12	Surg End: 10/01 08:37	Proc End: 10/01 07:56	PACU End: 10/01 13:40	Shutdown End:
Anest Total: 01:52	Surg Total: 01:02	Proc Total: 00:14	PACU Total: 04:55	Shutdown Total:

DIAGNOSTIC COLONOSCOPY

Role: Scrub/Asst Surgeon - Payne, Mark (MAP)
Role: Primary Surgeon - Payne, Mark (MAP)
Role: Pre/Postoperative Registered Nurse - Toohey, Jeffrey (JST)
Role: Anesthesia Attending - Nelson, Eric (EWN)
Role: CRNA - Embrey, Donna (DBE)

10/01 7:48 EWN Anesthesiologist assessed patient, reviewed chart and formulated anesthesia pla
10/01 7:48 EWN Anesthesiologist medically directing case and present for all critical portions.
10/01 7:48 EWN Anesthesiologist present for induction
10/01 7:48 EWN I (or another attending anesthesiologist) was immediately available throughout a
10/01 8:31 EWN Anesthesiologist present for airway device placement

No known medication allergies

10/01 7:25	DBE	Airway equipment checked and functioning
10/01 7:25	DBE	Surgical consent verified and appropriate
10/01 7:25	DBE	Pre-op vital signs reviewed
10/01 7:25	DBE	Risks, benefits, and complications of anesthetic plan discussed and understood
10/01 7:25	DBE	Procedural site and surgical verified where appropriate
10/01 7:25	DBE	Anesthesia machine checked, alarms on and functioning
10/01 7:25	DBE	Integrity of Pre-Op site adult confirmed
10/01 7:25	DBE	Standard monitors available, alarms on and functioning
10/01 7:25	DBE	Suction available and functioning
10/01 7:25	DBE	Anesthesia and resuscitation drugs available
10/01 7:25	DBE	Patient identified by 2 methods
10/01 7:25	DBE	Patient chart and preoperative assessment reviewed
10/01 7:25	DBE	NPO status verified
10/01 7:25	DBE	Peripheral IV placed preoperatively
10/01 7:25	DBE	Right hand
10/01 7:25	DBE	22 gauge peripheral IV catheter in situ in IVA
10/01 7:35	DBE	Transfer to:
10/01 7:42	DBE	Patient evaluated immediately prior to induction
10/01 7:42	DBE	Standard positions applied
10/01 7:42	DBE	Respiratory rate confirmed
10/01 7:42	DBE	ETCO2 wave form present
10/01 7:42	DBE	Plan appropriate ventilation throughout case
10/01 7:42	EWN	Anesthesiologist medically directing case and present for all critical portions.
10/01 7:48	EWN	I (or another attending anesthesiologist) was immediately available throughout and present for all critical portions of case
10/01 7:48	DBE	Mamo Nelson,MDA in Xanax drip@ 6L O2 set up to 94%. Pt remains intact
10/01 7:48	EWN	Anesthesiologist assessed patient, reviewed chart and formulated anesthesia plan
10/01 7:48	EWN	Anesthesiologist present for induction
10/01 7:51	DBE	Mamo Nelson out.
10/01 7:56	DBE	Mamo Pt turned supine from Left lat to establish below established Bag/Mask ventilation. Nasal airway out. Oral airway in.
10/01 7:56	DBE	Mamo Came into room. Pt. hypotensive with junctional rhythm and no palpable pulse. ACLS protocol initiated. Mayday team called.
10/01 7:57	DBE	Non-palpable pulse
10/01 7:57	DBE	Chest compressions initiated and continuous until noted.
10/01 7:57	DBE	Patient Oxygenated w/100% 02 per Bag/mask
10/01 8:01	DBE	Atraumatic laryngoscopy DVL x 1 per Embrey,CRNA.
10/01 8:01	DBE	Intubation - Tube size: #8.0 tr ETT @ 23 cm @ lips.
10/01 8:01	DBE	Cuff inflated with minimum volume to create seal
10/01 8:01	DBE	Breath sound equal and bilateral
10/01 8:01	DBE	ETCO2 confirmed via CO2 Monitor
10/01 8:01	DBE	Memo Eyes taped.
10/01 8:11	DBE	Arrhythmia identified: v fib noted when compressions halted.
10/01 8:11	DBE	Defibrillation - Joules: 200
10/01 8:12	DBE	CPR stopped Palpable pulse present.
10/01 8:12	DBE	Skin prep with chlorhexidine
10/01 8:16	DBE	Sterile technique
10/01 8:16	DBE	Arterial line placed by CRNA
10/01 8:16	DBE	Arterial catheter taped and sterile dressing applied
10/01 8:16	DBE	Left radial artery
10/01 8:16	DBE	20 ga arterial catheter over wire
10/01 8:16	DBE	Atraumatic x 1 per Embrey,CRNA.
10/01 8:16	DBE	Good arterial waveform
10/01 8:23	DBE	Peripheral IV placed after induction
10/01 8:23	DBE	Aseptic technique used
10/01 8:23	DBE	18 gauge performed IV catheter
10/01 8:23	DBE	Left antecubital x1 per Embrey,CRNA.
10/01 8:25	DBE	Skin preparation with chlorhexidine
10/01 8:25	DBE	Lacrilube to bilateral eyes
10/01 8:25	DBE	Intravenous needle inserted into vessel, free blood flow
10/01 8:25	DBE	Triple lumen catheter to femoral vein.
10/01 8:25	DBE	Sterile technique/drapes/towels placed over insertion site
10/01 8:26	DBE	Maximum barrier precautions utilized for strict sterile technique including sterile body drape, hat, mask, and sterile gloves.
10/01 8:26	DBE	Hand hygiene prior to donning gloves
10/01 8:26	DBE	Blood return through all lumens. Lumens flushed.
10/01 8:28	DBE	Central line placed by Attending Anesthesiologist
10/01 8:31	DBE	Post reintubation mydriasis SR.
10/01 8:31	DBE	Patient Oxygenated w/100% 02 and remains on vent.
10/01 8:31	DBE	ETT in place by elbow.
10/01 8:31	EWN	Anesthesiologist present for airway device placement.
10/01 8:31	EWN	Patient extubated
10/01 8:37	DBE	Patient transported with O2
10/01 8:37	DBE	To endoscopy area in stable condition

MUSC Health

[redacted]

"ANESTHESIA"
Anesthesia Record

MRN: 08440094
Name: MIKELL, CHARLES L
DOB: 01/26/1961
PatCsn: 270428782
Surgeon: Payne , Mark

Height(cm): 175.2602
Weight(kg): 137.28886
BMI: 44.7
Sex: M
Age: 49 years

Surgery Date: 10/01/2010

Anest Start: 10/01 07:20 Anest End: 10/01 09:12 Anest Total: 01:52	Surg Start: 10/01 07:55 Surg End: 10/01 09:57 Surg Total: 01:52	Proc Start: 10/01 07:42 Proc End: 10/01 07:56 Proc Total: 00:14	PACU Start: 10/01 08:45 PACU End: 10/01 13:40 PACU Total: 04:55	Stoptime Start: Stoptime End: Stoptime Total:

General Anesthesia

10/01	8:37	DBE	Transferred into operating room
10/01	8:45	JGT	Phase I PACU admission
10/01	8:45	JGT	Report received from: Donna Embry CRNA
10/01	8:45	JGT	Side rails up
10/01	8:45	JGT	Wheels locked
10/01	8:45	JGT	Connected to monitors
10/01	8:45	DBE	To PACU in stable condition with O2/ambu/MD/ART/monitors for transport. VSS. Pt to vent to PACU on arrival per RT. SBAR report to PACU RN.
10/01	9:15	DBE	Postoperative Location:PACU
10/01	9:15	DBE	Cardiac arrest during procedure.
10/01	9:15	DBE	Requiring vasoactive/inotropic drips
10/01	9:15	DBE	Mechanical ventilatory support
10/01	9:15	DBE	Pain managed by primary care service
10/01	9:46	JGT	Family at Bedside mother
10/01	10:54	JGT	Family at Bedside mother
10/01	12:16	JGT	Memo:Dr. Golden at bedside, Propofol off at this time to evaluate patients neuro status.
10/01	12:17	JGT	Family at Bedside pastor
10/01	13:40	JGT	Discharge offsite not met
10/01	13:40	JGT	Transfer to ICU:
10/01	13:40	JGT	Transported via stretcher/bed w/ambu bag
10/01	13:40	JGT	With monitors
10/01	13:40	JGT	With Oxygen
10/01	13:42	JGT	Memo:Ice packs applied to pelvic pelvis. Dr. Golden at bedside to evaluate patients neuro status. No response to verbal or noxious stimuli. Placed back on sedation for transfer to MSICU

XLS: 11192010

5/3/2013 16:18
BWPH 1.554 (Mikell)
MUSC
2216

MUSC Health

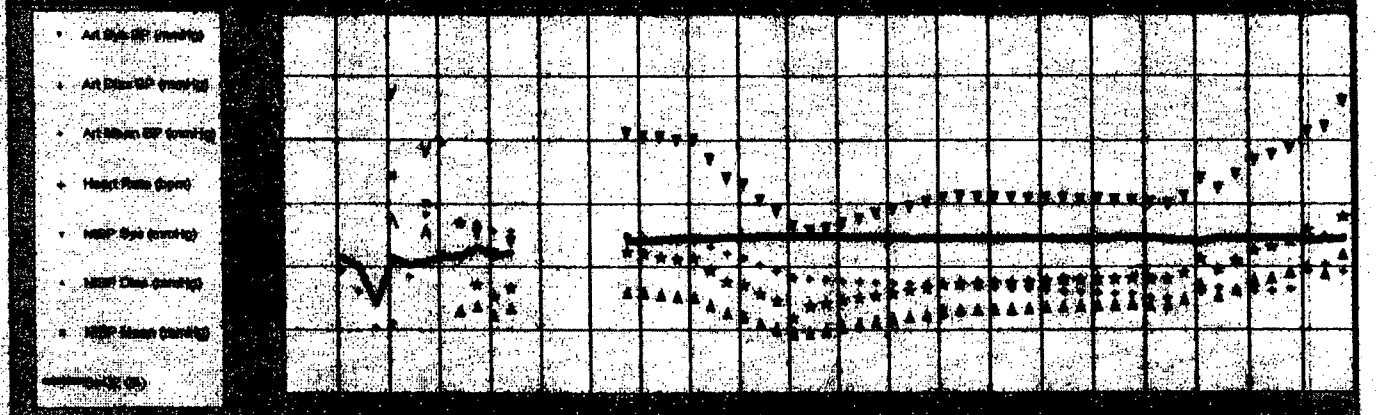
[redacted]

"ANESTHESIANT"

Anesthetic/PACU Record

MRN: 0014007784	Height(cm): 175.26682
Name: MIKELL, CHARLES L	Weight(kg): 137.26908
DOB: 01/25/1961	BMI: 44.7
PatCsn: 270426782	Sex: M
Surgeon: Payne , Mark	Age: 49 years
	Surgery Date: [redacted]

Time	7:36	7:36	7:37	7:38	7:39	7:40	7:41	7:42	7:43	7:44	7:45	7:46	7:47	7:48	7:49	7:50	7:51	7:52	7:53	7:54	7:55
SpO2 (%)														98.7	78	69.2	99.1	90.7	86	79.2	92.1
Temperature (°C)																					
BMG Rhythm	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR
SpO2 Heart Rate bpm														74	72	101	83	82	75	85	80
Spontaneous Resp Rate																		0	1	1	3
Resp Rate from pCO2 cart														0	0	0	11	14	17	0	0
Vent Resp Rate/min																		1	1	1	4
FIO2 (%)														99	35	35	29	34	35	29	95
EtCO2 (mmHg)														0	0.794	69.76	45.26	19.58	19.58	0.794	1.508
Des exh (%)																					
Exp. Tidal volume (mL)																		41	32		17
PIP (cmH2O)														0	0	0	0	0	1	0	3

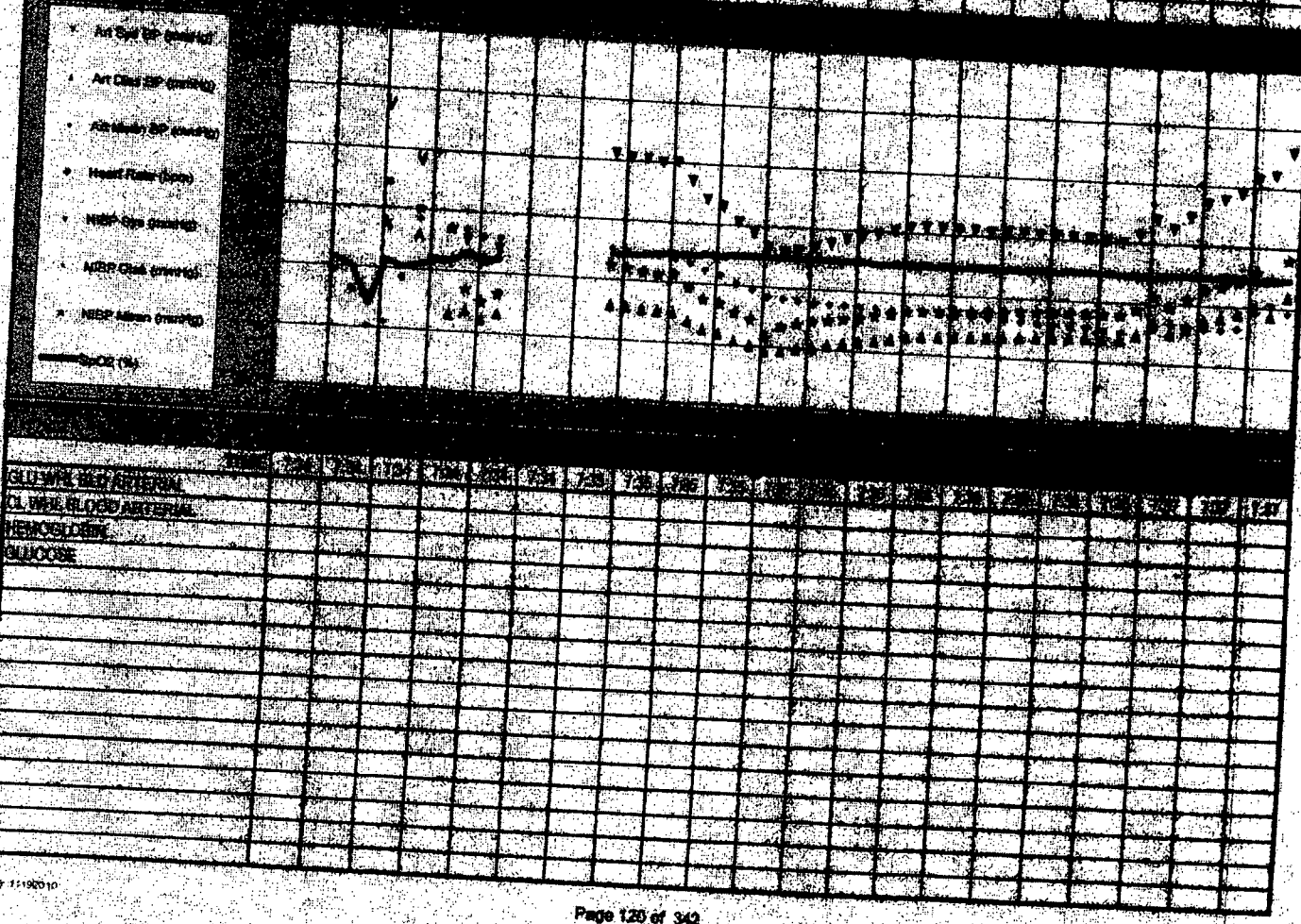


Time	7:36	7:36	7:37	7:38	7:39	7:40	7:41	7:42	7:43	7:44	7:45	7:46	7:47	7:48	7:49	7:50	7:51	7:52	7:53	7:54	7:55
RT ARTERIAL																					
RT ARTERIAL																					
RADIAL ARTERIAL																					
RADIAL ARTERIAL																					
ECG ARTERIAL																					
ECG ARTERIAL																					
RADIAL ARTERIAL																					
RADIAL ARTERIAL																					
DISTAL ECG ARTERIAL																					
ECG ART ARTERIAL																					
ECG ART ARTERIAL																					
ART RADIAL ARTERIAL																					
ART RADIAL ARTERIAL																					
ART RADIAL ARTERIAL																					
ART RADIAL ARTERIAL																					
RADIAL ART ARTERIAL																					

MUSC Health

MRN: 00140094
Name: MIKELL, CHARLES L
DOB: 01/25/1961
PatCom: 270428782
Surgeon: Payer , Medi

Height(cm): 175.26
Weight(kg): 137.2
BMI: 44.7
Sex: M
Age: 49 years
Surgery Date: 08/



XLS: 11192010

BWPH 1.554 (Mikell)
MUSC
2258

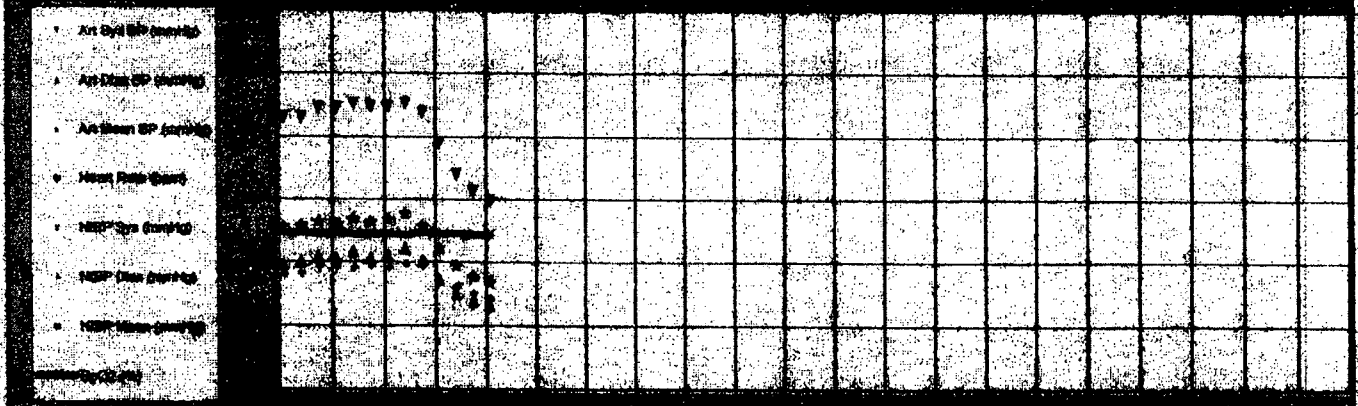
MUSC Health

[redacted]

MRN: 001480784
Name: MIKELL, CHARLES L
DOB: 01/25/1961
PatCare: 270426782
Physician: Payne , Mark

Height: 170.2000
Weight: 127.0000
BSA: 1.7
Sex: M
Age: 49 years
Admit Date: 10/1/2012

Time	7:00	7:05	7:10	7:15	7:20	7:25	7:30	7:35	7:40	7:45	7:50	7:55	8:00	8:05	8:10	8:11	8:12	8:13	8:14	8:15
SvO2 (%)	76	47.5	47.5		88.1	86.1	89.4	90.0	89.3	78.9	77.3		80.3		83.6					79.7
Temperature (C)																				
ECG Rhythm	AWRT*	AWRT*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	PEA*	SR*	PEA*	V-Fib*	V-Fib*	SR*	SR*	SR*
SvO2 Heart Rate bpm	81	90	29		29	92	95	97	100	94	78		98		99					89
Spontaneous Resp Rate	12	16	16	16	16	16	7	2	1	0	0	0	0	1	1	6	28	8	28	28	16
Vent Rate from PCO2 cart	17	0	0	0	0	0	20	0	10	10	10	10	0	0	0	22	17	16	17	11	15
Vent Resp Rate/min	12	14	10	16	16	16	6	17	13	10	10	10	10	11	10	13	25	16	26	24	15
FIO2 (%)	95	95	99	95	100	100	95	70	94	95	97	95	95	95	95	95	97	97	95	95	95
EtCO2 (mmHg)	26.00	0	0	0	7.00	0	19.50	9.00	20.50	19.67	19.00	7.00	2.00	4.00	6.00	0.00	29.00	19.00	29.00	42.00	42.00
Dae cut (%)									0	0	0	0	0	0	0	0	0	0	0	0	0
Exp. Tidal volume (mL)	60	121	72	72	314	93	454	107	549	646	667	653	659	788	658	1327	1488	761	10	994	1091
PIP (cmH2O)	27	36	36	36	32	31	36	35	29	27	27	27	27	35	27	60	57	60	19	55	47



Time	7:00	7:05	7:10	7:15	7:20	7:25	7:30	7:35	7:40	7:45	7:50	7:55	8:00	8:05	8:10	8:11	8:12	8:13	8:14	8:15
Art ARTERIAL																				
Art ARTERIAL																				
PCO2 ARTERIAL																				
PCO2 ARTERIAL																				
PO2 ARTERIAL																				
PH ARTERIAL																				
[redacted]																				
SO2 SAT ARTERIAL																				
TOTAL CO2 ARTERIAL																				
O2 SAT ARTERIAL																				
O2 SAT ARTERIAL																				
[redacted]																				
[redacted]																				
[redacted]																				
[redacted]																				
[redacted]																				
[redacted]																				
BASE, B.D ARTERIAL																				
[redacted]																				
TOTAL CO2 ARTERIAL																				

MUSC Health

MRN: 001400764
Name: MIRELL, CHARLES L
DOB: 01/25/1961
PatCom: 270428782
Surgeon: Payne, Mark

Height(cm): 175.26
Weight(kg): 137.2
BMI: 44.7
Sex: M
Age: 49 Years

"ANESTHESIANT"
Anesthesia/PACU Record

Art Sys BP (mmHg)
Art Dias BP (mmHg)
Art Mean BP (mmHg)
Heart Rate (bpm)
NIBP Sys (mmHg)
NIBP Dias (mmHg)
NIBP Mean (mmHg)
SpO2 (%)

LU WHL BLD ARTERIAL
L WHL BLOOD ARTERIAL
EMOGLOBIN
LUCOSE

BWPH 1.564 (Mikell)
MUSC

MUSC Health

"ANESTHESIANT"

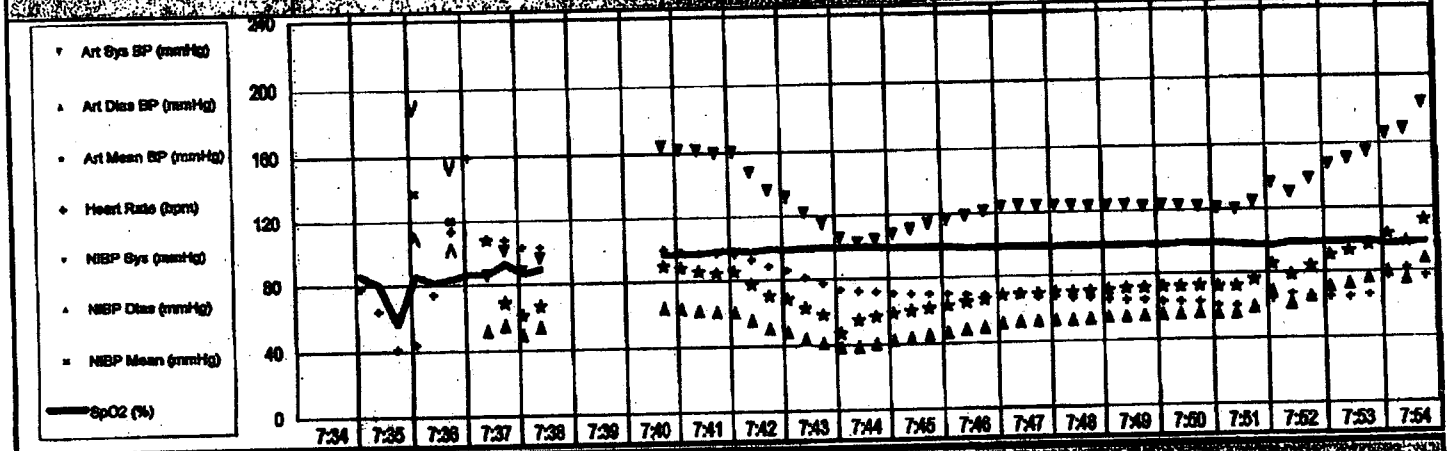
Anesthesia/PACU Record

MRN: 001400764	Height(cm): 175.20002
Name: MIKELL, CHARLES L.	Weight(kg): 137.29968
DOB: 01/26/1961	BMI: 44.7
PatCom: 270428782	Sex: M
Surgeon: Payne , Mark	Age: 49 years
	Surgery Date: 10/01/2010

Real-time Vitals

TIME	7:34	7:35	7:36	7:37	7:38	7:39	7:40	7:41	7:42	7:43	7:44	7:45	7:46	7:47	7:48	7:49	7:50	7:51	7:52	7:53	7:54
SpO2 (%)															96.7	75	89.2	90.1	80.7	88	73.3
Temperature (°C)																					
EKG Rhythm		SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR
SpO2 Heart Rate bpm															74	72	101	83	62	75	85
Spontaneous Resp Rate																			0	1	1
Resp Rate from pCO2 cart															0	0	0	11	14	17	0
Vent Resp Rate/min																			1	1	1
FIO2 (%)															99	35	26	29	24	26	29
EtCO2 (mmHg)															0	0.764	52.76	45.24	10.56	10.56	0.764
Des out (%)																			41	32	
Exp. Tidal volume (mL)															0	0	0	0	0	1	0
PIP (cmH2O)																					

Real-time Graphics



Laboratory Results

TIME	7:34	7:35	7:36	7:37	7:38	7:39	7:40	7:41	7:42	7:43	7:44	7:45	7:46	7:47	7:48	7:49	7:50	7:51	7:52	7:53	7:54
PH ARTERIAL																					
PH ARTERIAL																					
PCO2 ARTERIAL																					
PCO2 ARTERIAL																					
PO2 ARTERIAL																					
PO2 ARTERIAL																					
BICARB ARTERIAL																					
BICARB ARTERIAL																					
TOTAL CO2 ARTERIAL																					
O2 SAT ARTERIAL																					
O2 SAT ARTERIAL																					
HCT WHL BLD ARTERIAL																					
HGB WHL BLD ARTERIAL																					
NA WHL BLD ARTERIAL																					
K WHL BLD ARTERIAL																					
IONIZED CA ARTERIAL																					

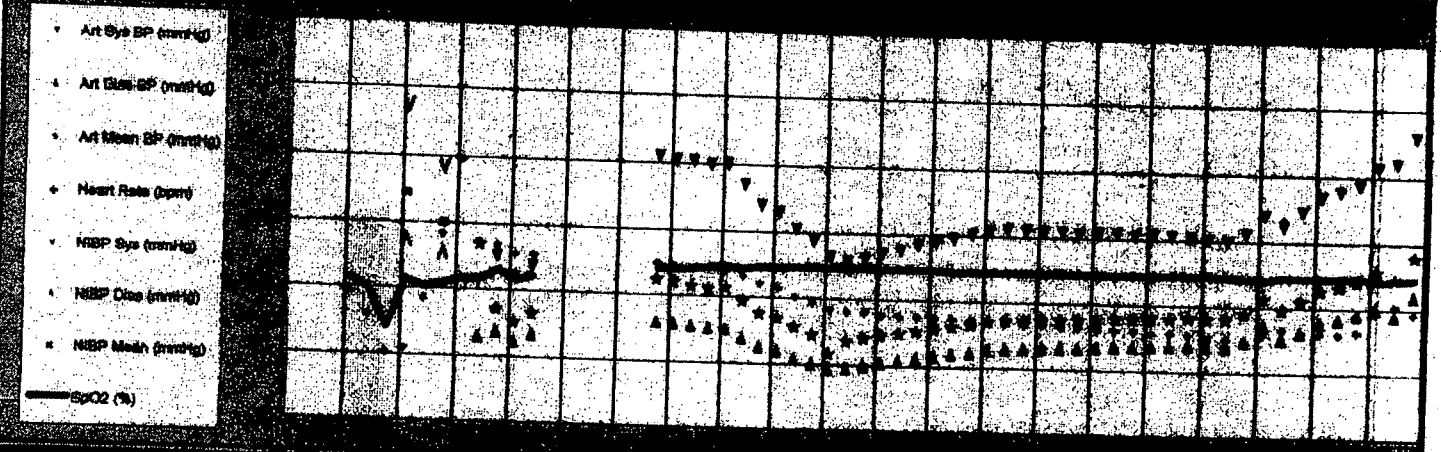
MUSC Health

MRN: 001400784
Name: MIKELL, CHARLES L
DOB: 01/26/1961
PatCon: 270428782
Surgeon: Payne , Mark

Height(cm): 175.26
Weight(kg): 137.29
BMI: 44.7
Sex: M
Age: 49 years

ANESTHESIA
Anesthesia EMAR Record

TIME	7:30	7:32	7:33	7:34	7:35	7:36	7:37	7:38	7:39	7:40	7:41	7:42	7:43	7:44	7:45	7:46	7:47	7:48	7:49	7:50	7:51	7:52	7:53	7:54	7:55
SpO2 (%)																									
Temperature (°C)																									
EKG Rhythm	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR	SR
SpO2 Heart Rate bpm																									
Spontaneous Resp Rate																									
Resp Rate from nCO2 cart																									
Vent Resp Rate/min																									
FIO2 (%)																									
EtCO2 (mmHg)																									
Des out (%)																									
Exp. Tidal volume (mL)																									
PIP (cmH2O)																									



TIME	7:56	7:57	7:58	7:59	8:00	8:01	8:02	8:03	8:04	8:05	8:06	8:07	8:08	8:09	8:10	8:11	8:12	8:13	8:14	8:15	8:16	8:17	8:18	8:19	8:20
PH ARTERIAL																									
PH ARTERIAL																									
PCO2 ARTERIAL																									
PCO2 ARTERIAL																									
PO2 ARTERIAL																									
PO2 ARTERIAL																									
BICARB ARTERIAL																									
BICARB ARTERIAL																									
TOTAL CO2 ARTERIAL																									
O2 SAT ARTERIAL																									
O2 SAT ARTERIAL																									
HCT WHL BLD ARTERIAL																									
HGB WHL BLD ARTERIAL																									
NA WHL BLD ARTERIAL																									
K WHL BLD ARTERIAL																									
IONIZED CA ARTERIAL																									

LB: 11192010

BWPH 1.554 (Mikell) 8/5/2013 16:19
MUSC

Table of Contents

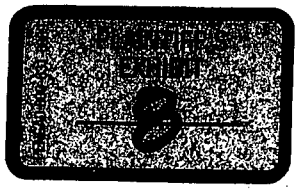
1. Signature Page

2. Mission Statement

3. Policies and Basic Standards of Anesthesia Care

4. Department of Anesthesia Quality Improvement Activities

5. Department of Anesthesia Quality Improvement Plan



MUSC Health

Anesthesia & Perioperative Medicine
Policies and Basic Standards of Anesthesia Care Manual

Approved by:

_____ **Date:** 4/1/09
Scott T. Reeves, MD
Chairman
Department of Anesthesia and Perioperative Medicine

Karen Weaver RN, MA **Date:** 3/31/09
Karen Weaver, RN, MA
Director of Surgical Services

_____ **Date:** 3/31/09
Susan Harvey, MD
Vice Chair Department of Anesthesia and Perioperative Medicine
Medical Director for the University Hospital Operating Room

_____ **Date:** 4/28/09
Marilyn Schaffner, Phd., RN, CGRN
Administrator for Clinical Services and MUSC Chief Nursing Executive

Wendy Ewing CRNA **Date:** 3-31-09
Wendy Ewing, CRNA
Main Anesthesia Manager

Jodi Weber CRNA **Date:** 3/31/09
Jodi Weber, CRNA
Ashley River Tower Manager

_____ CRNA **Date:** 3/31/09
Nancy Kitten, CRNA
Rutledge Tower Manager

BWPH 1.554 (Mikell)
MUSC
2558 CONFIDENTIAL

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Department Of Anesthesia and Perioperative Medicine
Mission Statement

The mission of the Department of Anesthesiology is to support the mission of the Medical University of South Carolina by: (1) being excellent physicians and nurses; (2) being excellent clinical anesthesiologists and certified registered nurse anesthetists; (3) maintaining collegial relations within the medical center; (4) providing efficient, cost-effective, continuously evaluated medical care; (5) recruiting the best possible attendings, residents, nursing staff, and students into the department; (6) providing excellent educational experiences for present and future health care providers in anesthesia and other medical disciplines; and (7) encouraging, supporting, and performing relevant clinical and basic research.

BWPH 1.554 (Mikell)
MUSC
2559 CONFIDENTIAL

MUSC Health

Section	No	Title		
	4	Policies and Basic Standards of Anesthesia Care		
Owner:		Department of Anesthesia and Perioperative Medicine		
Location/File:		Anesthesia Policies/O:/Policies/Anesthesia Intranet		
Date Effective: 04/2009		Reviewed:	Revised:	Legal Review:

Definitions:

During the elective surgical schedule, all anesthetics administered in the Operating Room will be the responsibility of the anesthesiologist assigned to the specific case or his/her designate. The certified registered nurse anesthetist and house staff will be under his/her direction and supervision. The anesthesiologist designated as "DOD" (Doctor of the Day) will coordinate the schedule to include add-on cases and personnel needs.

Anesthesia services will be provided on a 24-hour basis to the UH operating rooms and the UH Labor & Delivery service. The Anesthesia Call Team, under the direction and supervision of the on-call anesthesiologist, will provide emergency anesthesia services. There will be additional anesthesiologists on call for emergent specialty procedures such as OB, cardiothoracic, and organ transplants. ART Maydays, Rapid Response Intubations and Acute Postoperative Pain Service will be covered on a 24-hour basis by a CRNA with anesthesiologist availability.

Anesthesia service will be provided to the Rutledge Tower Ambulatory Operating Rooms, and Rutledge Tower NORA sites on a Monday through Friday basis. Routine cases are between the hours of 06:00 and 17:00. The anesthesia team is under the direction and supervision of an attending anesthesiologist. RT Maydays and Rapid Response will be covered by the CRNA staff and anesthesiologist when available.

Policy:

BASIC STANDARDS OF ANESTHESIA CARE:
These standards apply for any administration of anesthesia involving the Department of Anesthesia personnel and are specifically referable to pre-planned anesthetics administered in designated anesthetizing locations (UH, ART or Ambulatory ORs, Labor&Delivery ORs, Pediatric and Adult Catheterization and EP units, multiple DDC locations, Radiology suites: Angiographies, Ultrasound, Fluoroscopy, CT; specific exclusion: administration of epidural analgesia for labor or pain management). In emergency circumstances in any location, immediate life support measures of whatever appropriate nature come first with attention turning to the measures described in these standards as soon as possible and practical. These are minimal standards that may be exceeded at any time based on the judgment of the involved anesthesia personnel. These standards encourage high quality patient care, but observing them cannot guarantee any specific patient outcome. These standards are subject to revision from time to time, as warranted by the evolution of technology and practice.

Anesthesia care will be provided by the Attending Anesthesiologist. Certified Registered Nurse Anesthetist and House Staff may perform anesthesia under the supervision of an Attending Anesthesiologist. The patient's medical condition will be the responsibility of a qualified physician member of the medical staff. Except in extreme emergencies pre-anesthetic evaluation will be completed prior to the patients transfer to the procedure area. Pre-anesthetic evaluations are preferably completed during the patient's pre-admission visit to either the RT or ART PAT clinics. Patient interviewing and evaluations will be performed prior to the administration of any mind-altering medication.

Pre-anesthetic laboratory and diagnostic testing will be completed prior to the procedure and/or anesthesia on an individual patient basis, based on disease status. Indications for specific tests will include, but are not limited to, tests for identification of clinical indicators or risk factors (I.E. age, pre-existing disease, and magnitude of the procedure). The individual anesthesia provider will order specific tests when, in their judgment, the results may influence decisions regarding risk in anesthesia management. All relevant abnormalities will be documented and the action taken for correction and safety will be recorded.

State, City and County legal requirements will be observed at all times.

Procedure:

1. Pre-anesthetic evaluation and preparation by Anesthesia Personnel.

    a. A thorough chart review will be performed.

    b. The patient will be interviewed to include a medical history, anesthesia history, and medication history.

c. Impressions will be recorded on the patient's pre-anesthetic form along with an assessment of the patient's risk status utilizing the American Society of Anesthesiologists classification scale.Nurse Anesthetists and House Staff will present any potential problems or abnormalities to the Attending Anesthesiologist.

d. A physical examination will be performed to provide information that might assist in decisions regarding risk and management. There will be a review of objective diagnostic data (I.E. laboratory, ECG, and x-ray).

e. Essential tests and medications will be ordered and consultation will be obtained as necessary.

f. Informed consent will be obtained and the anesthetic plan will be formulated and discussed with the patient and/or responsible adult.

2. The physician will determine the patient's capacity as an appropriate anesthesia candidate based on the results of the pre-anesthetic evaluation including, but not limited to:

   a. Laboratory and diagnostic screening.
      aa. Review of Systems
      bb. Laboratory results, EKG, and X-ray.

   b. History review.
      aa. Previous anesthetics
      bb. Family history regarding anesthesia
      cc. Allergies
      dd. Medications-drug therapy
      ee. Last fluid and food intake, NPO status
      ff. History of tobacco use, alcohol intake, and use of illicit drugs.
      gg. Medical history

   c. A determination of physical status will be made according to the ASA standards of the American Society of Anesthesiology.

3. The evaluator shall document in the medical record the anesthetic options discussed, results of the interview, any related experiences, and/or potential anesthetic complications. The anesthesia provider will document the proposed anesthesia plan.

INTRAOPERATIVE ANETHESIA CARE:

1. Re-evaluation of the patient prior to induction will occur: This will include current history and physical within 30 days, laboratory and EKG results, X-rays, time and dosages of pre-anesthetic medication, and any changes in condition as compared with previous notations.

2. Prior to administering anesthesia, the practitioner administering anesthesia will check and document the readiness, availability, cleanliness, sterility where indicated, working condition and the alarm systems of all equipment to be used. The availability of the equipment necessary to conduct the anesthetic procedure includes, but is not limited to, a functioning laryngoscope, endotracheal tubes, airways and mask, functioning suction, and a means of artificial ventilation will be determined.

3. Blood Pressure and Heart Rate: Every patient receiving general anesthesia, regional anesthesia, or monitored anesthesia care shall have a blood pressure and heart rate measured at least every five minutes where not clinically impractical.

4. Electrocardiogram: Every patient shall have the electrocardiogram continuously displayed from the induction or institution of anesthesia until preparing to leave the anesthesia location, where not clinically impractical.

5. Continuous Monitoring: During every administration of general anesthesia, the anesthesia provider shall employ methods, which continuously monitor the patient's ventilation and circulation. The methods shall include, for ventilation and circulation each, at least one of the following or the equivalent:

   (I) Ventilation: Monitoring of end tidal carbon dioxide will occur in a continuous fashion throughout the case.

   (II) Circulation: Palpation of a pulse, auscultation of heart sounds, monitoring of a tracing of Intra-arterial pressure, pulse plethysmography/oximetry, or ultrasound peripheral pulse monitoring will occur. Pulse oximetry is mandatory on all patients. It is recognized that brief interruptions of the continuous monitoring may be unavoidable.

6. Breathing System Disconnection Monitoring: When ventilation is controlled by an automatic mechanical ventilator, there shall be in continuous use a device that is capable of detecting disconnection of any component of the breathing system. The device must give an audible sound when its alarm threshold is exceeded. (It is recognized that there are certain rare or unusual circumstances in which such a device may fail to detect a disconnection).

7. Oxygen Analyzer: During every administration of general anesthesia using an anesthesia machine, the concentration of oxygen in the patient breathing system will be measured by a functioning oxygen analyzer with a low concentration limit alarm in use. This device must conform to the American National Standards Institute No. Z. 79. 10 standard.

8. Temperature: During every administration of general anesthesia, there shall be readily available a means to measure the patient's temperature. Rational. – A means of temperature measurement must be available as a potential aid in the diagnosis and treatment of suspected or actual intraoperative hypothermia and malignant hyperthermia. The measurement/monitoring of temperature during every general anesthetic is not specifically mandated because of the potential risks of such monitoring and because of the likelihood of other physical signs giving earlier indication of the development of malignant hyperthermia.

9. All information is to be accurately recorded on the anesthetic record. This shall at least include monitoring data, dosage, route, and duration of anesthetic agents, all drugs administered and transfused, as well as the amounts, and any unusual occurrence during the course of the anesthetic. The type and amounts of all fluids administered, including blood and blood products, will be recorded.

10. The status of the patient at the conclusion of the procedure will be recorded.

11. An anesthesia care team member will accompany the patient to the post-anesthesia care unit.

POST-OPERATIVE ANESTHESIA CARE:

The Post Anesthesia Care Unit (PACU) is the area to which patients are taken immediately following surgery. Here they are observed closely and are rendered intensive nursing care until they are deemed recovered from anesthesia and are then transferred to the appropriate post-surgical floor (or are allowed to be discharged home). The following minimal standards exist:

a. An anesthesia care team member will evaluate the patient on admission to the post-anesthesia care area.

b. Adequate nursing personnel and necessary equipment must be maintained to provide for safe post-anesthesia care.

c. Personnel caring for patients in the immediate post-anesthetic period shall be informed of specific problems related to each patient and be given a résumé of pertinent factors occurring during the surgical period. The résumé shall include, but not be limited to, the patient's name, the operative procedures, the anesthetic agents used, the identities and amounts of fluids administered, the expected range for the patient's blood pressure and pulse, and any complications which may have occurred.

d. The anesthesiologist, or his/her designate, responsible for administering the anesthetic, shall remain with the patient as long as his/her presence is necessary.

e. Accurate records will be maintained of the patient's post-operative course while in the Recovery Room. Post-anesthesia documentation will include, but is not limited to: The patient's evaluation from admission to discharge, a time based record of vital signs and level of consciousness, all drugs administered in the doses, types and amounts of intravenous fluids administered (including blood and blood products), and finally, any unusual events including post-anesthesia and post-procedural complications.

f. All patients will have appropriate monitoring including, but not limited to: Pulse oximetry, BP, EKG, and temperature.

g. The policies for the discharge of patients from the Recovery Room will be made by the Chairman of the Department of Anesthesia and Perioperative Medicine. When feasible, patients will be discharged by the responsible anesthesiologist or his/her designate. The length of the post-procedural surveillance period will be determined by the responsible anesthesiologist or his/her designate.

Discharge documentation will include, but is not limited to, the status of the patient at discharge. The condition of the patient at discharge must be stated in terms distinguishing specific measurable comparisons with the patient's condition on admission. A physician's written order for discharge must be obtained prior to discharge from the post-anesthesia recovery area.

MUSC Medical Center Policy Manual

Section PC-19	No C-14	Title: Emergency Medical Response		
Owner:		Mayday Committee		
Location/File:		I:\EllisT\Data\Word\MUHA Clinical Policies\C -164.Mayday		
Date Originated: 03/93		Reviewed: 10/95, 06/97, 04/98, 06/99, 10/00, 01/03, 03/05, 11/06, 09/07	Revised: 01/04, 09/04, 12/07, 06/09	Legal Review: 06/09

Purpose:

The purpose of this policy is to state the mobilization procedure for and delineate the duties of the Mayday Teams at the Medical University of South Carolina Medical Center.

Definitions:

Mayday: A respiratory and or cardiac emergency or any other situation perceived by the care giver to be a life threatening situation including both conscious and unconscious individuals.

Main Hospital (MUH): For purposes of this policy, the Main Hospital is defined as the Clinical Science Building, the Medical University Hospital Building, the North Tower, Storm Eye and Children's Hospital.

Pediatric Patient: A pediatric patient is defined as ≤ 17 years of age or older if on pediatric subspecialty service (Pediatric Cardiology, Pediatric Hematology, etc.)

Adult Patient: An adult patient is defined as greater than 17 years of age. Exceptions may include teenagers who are inpatients on areas traditionally covered by the Adult Mayday Team (e.g. Obstetrics/Gynecology, General Surgery).

Ashley River Tower Mayday Team: The Ashley River Tower (ART) Mayday team will consist of the Coronary Care Unit (CCU) resident or designee, the CCU charge nurse or designee, house staff and representatives of anesthesiology, respiratory therapy, pharmacy, Pastoral Care and the Hospital Service Coordinator, if applicable. The ART Mayday Team responds to Maydays in the Ashley River Tower and clinics.

MUH Adult Mayday Team: The MUH Adult Mayday Team consists of the Medical Intensive Care Unit (MICU) resident or designee, the MICU charge nurse or designee, house staff and representatives of anesthesiology, respiratory therapy, pharmacy, Pastoral Care and the Hospital Service Coordinator, if applicable. The Adult Mayday Team responds to Maydays involving adults in the Main Hospital. For visitors, staff and outpatients, the MICU RN will contact the Emergency Department Charge Nurse. Emergency Department personnel will respond at that time.

BWPH 004948

MUH Pediatric Mayday Team: The MUH Pediatric Mayday Team consists of the senior pediatric physician (Pediatric Intensivist), the Pediatric Intensive Care Unit Charge RN or designee, the third and second year pediatric residents, and representatives of anesthesiology, respiratory therapy, pharmacy, Pastoral Care and the Hospital Service Coordinator, if applicable. The Pediatric Mayday Team responds to Maydays involving pediatric patients in the Main Hospital.

Emergency Response Team: The Emergency Response Team consists of Emergency Department Personnel. For unconscious patients, the team responds with a stretcher equipped with defibrillator and airway supplies. For conscious patients, the team responds with a wheelchair. The Emergency Response Team responds to all outpatients, visitors and staff in the Main Hospital, Horseshoe and Ambulance Driveway and Education Center/Library.

Rutledge Tower Mayday Teams: The Adult Rutledge Tower Mayday team will consist of a Medicine Attending or Medicine Resident, ACLS RN, respiratory therapist, pharmacist, Rutledge Tower Nursing Clinical Care Coordinator, anesthesiologist, PACU nurse and chaplaincy. Meducare, Security, and Public Safety also respond.

The Pediatric Rutledge Tower Mayday team will consist of members of the CH Pediatric Mayday team, a pediatric nurse(s), Medicine Attending or Medicine Resident, respiratory therapist, pharmacist, anesthesiologist, PACU nurse and chaplaincy. Meducare, Security, and Public Safety also respond.

Basic Science Building Mayday Team: The Basic Science Building Mayday Team consists of oral-maxillofacial surgery attendings and residents and nursing staff. The BSB Mayday Team responds to Maydays/Medical Emergencies within the Basic Science Building.

Pharmacy Response Team: The pharmacy response team may be called to Maydays in the Intensive Care Units and the Emergency Departments only. This team consists of pharmacists, a chaplain and the HSC.

Institute of Psychiatry Team: The Institute of Psychiatry (IOP) Team consists of Meducare, Public Safety/Security, the psychiatric resident on call and the house supervisor. This team responds to Maydays in the IOP.

Neonatal Stabilization Team: The Neonatal Stabilization Team (STAB Team) will be called for Maydays involving neonates in the all nurseries, Labor and Delivery, Post Partum, and the Neonatal Intensive Care Unit. This team consists of neonatal nurse practitioners, neonatal resident and intern, neonatal fellow or attending, respiratory therapy, the HSC and pharmacy.

Campus Response Team: The Campus Response Team will respond to all other areas of campus not listed above (See Appendix A). This team consists of Meducare and Public Safety.

Rapid Response Intubation Team: The Rapid Response Intubation Team will consist of anesthesia and the HSCs. This team will respond to the Intensive Care Units, the Cardiac Catheterization labs and the Emergency Department for airway management in patients with spontaneous respirations. This team does not respond to any other areas unless called for by the Medical Emergency Team.

Policy:

1. The Medical University of South Carolina Medical Center will maintain a skilled professional staff, equipment, and supplies necessary for resuscitation of victims of cardiopulmonary arrest occurring in the Medical Center Hospitals and Clinics.

2. As per the hospital policy and procedure regarding the withdrawal of medical therapy (Resuscitation Policy, C-13 (https://www.musc.edu/medcenter/policy/Med/C013.pdf)) any patient with a known written order for Do Not Resuscitate will not undergo resuscitation.

3. Standardized Adult or Adult/Pediatric Mayday equipment is accessible to all patient care areas.

4. Each Mayday is documented on the Cardiopulmonary Resuscitation Event Form (Mayday record). The Mayday record is the legal documentation of the Mayday. It accounts for physician orders and medication administration during the Mayday. It must be signed by the designated participants.

5. A Mayday Team is available for assistance in the event of a life threatening event in all areas of the Main Hospital, Ashley River Tower, Hollings Cancer Center, Rutledge Tower and Basic Science Building. These teams are activated by calling 2-3333. Meducare will respond to all other campus locations. If Meducare is not available, Charleston County EMS will be notified by the Meducare Dispatcher. All campus locations call 2-3333. See Appendix A for details of Team response.

6. Unit personnel from the following areas must give the operator the building name, room number, call back extension, and whether the patient is adult or pediatric:

   Main Hospital
   Charleston Memorial Hospital (CMH)
   McClennan Banks
   Rutledge Tower
   Basic Science Building
   IOP
   ART

7. All other campus locations (not listed above) must supply the operator with the complete address of the building and whether the patient is adult or pediatric (For example, Employee Health would give their address as 57 Bee Street). If the caller does not know their address, the operator will transfer the call to 911.

8. The page operator will activate the dedicated pager of the appropriate Mayday Team members. The pager alert will state: location; adult or pediatric.

9. For clearly non life-threatening situations (sprained ankle, etc.) Public Safety should be notified. The Public Safety officer may escort the patient to the Emergency Department. The Public Safety officer will call the Emergency Department if medical assistance is needed.

10. For Maydays in the Intensive Care Units, staff will call a Pharmacy Response Team if the patient is intubated. If the patient is not intubated, a full Mayday Team response will be called

for. The Emergency Departments (ED) and the ORs do not have to call a full Mayday. Staff may call for a full Mayday at any time they determine a need for the full team.

11. ~~For Maydays in any area other than the OR, ICUs and the ED, a full Mayday Team will be called for.~~

12. Unit personnel will be responsible for paging the patient's attending physician at the time of the cardiopulmonary arrest. The nurse manager should also be paged prior to 1600 hours Monday through Friday. The HSC is on the Mayday team(s) and should not require an additional call.

13. Placement of successfully resuscitated inpatients: In coordination with the code team RN, the ATC during normal business hours and the HSCs after normal business hours will determine which ICU the patient will be admitted to after successful resuscitation. The physician in charge of the code may instruct the ATC or the HSC for special arrangements, depending on the etiology of the arrest. If there are no available ICU beds, patients will temporarily be placed in the PACU or the Emergency Department.

Name of Home Unit	Services admitting
MICU	Dermatology, Endocrinology, Family Medicine, General Internal Medicine, Hospitalists, Nephrology, Neurology, OB/GYN, Medical Oncology, Pulmonology, Rheumatology, Urology
STICU	ENT, General and Gastrointestinal Surgery, GYN Surgery, Orthopedics, Surgical Oncology, Plastic Surgery, Transplant Surgery, Trauma Surgery, Vascular Surgery
NSICU	Neurosurgery
CCU	Cardiology
CTICU	Cardiothoracic surgery
DDICU	Gastroenterology, Medicine patients at Ashley River Tower

Procedure:

Mayday Teams: Composition and Roles

A. **Adult Team: ICU resident on call - Mayday Team Leader**
   1. Directs the administration of advanced cardiac life support according to ACLS protocols. If an attending physician present chooses to assume control of the code, he/she must clearly state they are in charge and will then be referred to as team leader.
   2. Discusses resuscitation efforts with the attending physician or designee.
   3. Orders the discontinuation of resuscitation efforts in the absence of the attending physician.
   4. Talks with the family in the absence of the attending physician.
   5. Completes and signs Cardiopulmonary Resuscitation Event Form, reviewing for accuracy and completeness. Enters record of event in progress notes.

B. **Pediatric Mayday Team Leader**
   1. Assumes overall responsibility for patient care and disposition until relieved by attending of primary service or PICU attending.
   2. Ensures satisfactory ventilation and compressions.

3. Orders administration of drug therapy and procedures to be initiated.
4. Interprets ECG, and directs use of the defibrillator.
5. Dismisses unnecessary personnel.
6. Completes and signs Cardiopulmonary Resuscitation Event Form, reviewing for accuracy and completeness. Enters record of event in progress notes.
7. Designates a physician to notify the primary attending of Mayday.

C. **Attending physician**
1. Orders the discontinuation of resuscitation efforts.
2. Talks with the family.
3. Communicates with the patient's private/referring physician, as indicated.

D. **House Staff**
1. Initiates/assists with IV access.
2. Assists with chest compressions/defibrillation.
3. Draws lab work.
4. For pediatric Maydays, senior pediatric resident assumes Team Leader role when Pediatric Attending unavailable.
5. Reviews Cardiopulmonary Resuscitation Event Form for accuracy and completeness.
6. Informs recorder of name and service.

E. **Anesthesiologist**
1. Intubates and maintains ventilation.
2. Assesses airway, breathing, and circulation.
3. Reviews Cardiopulmonary Resuscitation Event Form for accuracy and completeness.
4. Informs recorder of name and service.

F. **Respiratory Therapist**
1. Assists with maintaining airway and ventilation
2. Prepares/obtains appropriate ventilation support equipment for the patient.
3. Reviews Cardiopulmonary Resuscitation Event Form for accuracy and completeness.
4. Informs recorder of name and service.

G. **Pharmacist**
1. Acts as a resource person for drug preparation and administration.
2. Obtains additional medications, as needed.
3. Reviews Cardiopulmonary Resuscitation Event Form for accuracy and completeness.
4. Informs recorder of name and service.

H. **Chaplain**
1. Interacts with and provides support to the family.

I. **Nurse Manager/Hospital Service Coordinator (HSC)**
1. Nurse Managers respond to all Maydays on their respective units during the day shift, Monday - Friday. The Hospital Services Coordinators will respond to all Maydays and coordinate for nursing care at all other times.
2. Ensures adequate support staff for the unit, making sure remaining patients are cared for.
3. Removes extraneous people from the resuscitation area, as needed.
4. Notifies Bed Management to secure appropriate bed for the patient post-resuscitation.
5. Communicates with the critical care unit receiving the patient as to the ETA and patient status.

6. Assists with family support.

J. **Critical Care/ACLS/PALS Resource Nurse**
1. Initiates ACLS/PALS protocol until a physician responds and assists Mayday team with following ACLS/PALS protocols.
2. Assists with the establishment of IV access.
3. Assists with drug preparation and administration, if indicated.
4. Removes extraneous people form the resuscitation area, as needed.
5. Ensures that the Cardiopulmonary Resuscitation Event Form and the Mayday/Resuscitation Review Form are completed and forwarded to the appropriate location.
6. Assists with the transport of the patient to the critical care unit.

K. **Patient Care Unit Personnel**

1. First Responder
   a Calls 2-3333 at patient's bedside. Gives room location, adult or pediatric, to operator.
   b Calls out for help so co-workers can hear and know a Mayday is occurring in their area. Provides patient status/history to Mayday team.
   c Begins basic life support (BLS).

2. Other Unit Personnel
   a Brings Mayday cart to the room.
   b If patient is an adult and AED is available uses defibrillator AED function to determine indication for defibrillation. Uses hands-off pads unless contraindicated. Defibrillates with other types of defibrillators if ACLS certified. If patient is pediatric, hooks patient to monitor.
   c Places patient on a flat surface.
   d Hooks ambu bag to oxygen at 10 liters of flow and uses ambu bag to ventilate patient while waiting for the Mayday team. Ensures adequate oxygen and suction sources.
   e Provides/assists with BLS until Mayday team arrives.
   f Administers drugs and IV fluids.
   g Notifies patient's attending physician and the nurse manager (before 1600 on weekdays).
   h Records Mayday events on the Cardiopulmonary Resuscitation Event Form, places white copy on the patient's medical record, and forwards yellow copy to Risk Management.
   i Ensures Mayday cart is restocked and locked.

Standard Adult or Adult/Pediatric Mayday Cart

A. The contents of the standard Adult or Adult/Pediatric cart are to be determined by the Mayday Committee with approval from the Critical Care Committee and the Pharmacy and Therapeutics Committee. These contents will be reviewed periodically and modified as needed. A list of Mayday cart contents will be attached to every Mayday cart, along with current ACLS guidelines (adult carts) or ACLS/PALS guidelines (adult/pediatric carts). The Mayday checklist is standardized University wide. If any clinical area changes location, the Mayday Committee must be notified in writing sixty days in advance.

B. The Mayday cart drug box is secured to the cart. The drawers of the Mayday cart may be left unlocked.

C. Mayday carts will be checked by an assigned unit/area staff member twice per 24 hours to determine that the lock on the drug box is intact. Units not open 24 hours/day will check once per 24 hours during hours of operation.

D. Documentation of cart checks will be maintained on the unit for three years.

E. The respiratory therapy/intubation equipment will be checked by the Respiratory Therapy Department once a month.

F. On the first day of the month, depending on hours of operation, expiration dates of the cart contents will be checked.

G. Mayday carts and equipment are inspected weekly and cleaned as needed.

H. To Restock Mayday Cart:
   1. Call appropriate area for replacement drugs/supplies/oxygen equipment that will be delivered to MUH, CSB, Children's Hospital and Storm Eye Institute. All other areas will arrange to pick up exchange drugs/supplies/oxygen equipment. The charge nurse will be responsible for ensuring the cart is restocked promptly.

Dissemination of Mayday Forms

A. Following the MAYDAY, the Cardiopulmonary Resuscitation Event Form is faxed to Risk Management and then entered into the patient's medical record.

Defibrillators

A. Responders with BLS certification may defibrillate with an AED.
B. Clinicians with current ACLS certification may perform defibrillation or cardioversion.
C. The procedure for defibrillation should follow the American Heart Association Advanced Cardiac Life Support Guidelines.
D. The Defibrillator will be discharged by the assigned unit staff member according to the manufacturers' specifications when the patient care unit is open. All equipment checks are documented on the Mayday Cart Checklist Form kept with the Mayday Cart and Defibrillator.
E. Biomedical Engineering must be notified immediately of any problems with the function of the defibrillator.
F. Checking Defibrillators:

   a) Zoll M Series
   b) Physio Control Lifepak 12
   c) Physio Control Lifepak 20

Approvals:

As Required	Date
List Hospital Committee(s)	
Ethics Committee	
Medical Staff Executive Committee	6/17/09
Administration/Operations	
Governing Body	

Distribution:

Policy Applies to:	Physicians (Y)	Nursing (Y)
	Other Clinical Staff (Specify): All	Other Staff (Specify):
Educational Plan	Present in EROC	
Required Competencies		
Expected Implementation Date	June 30, 2009	

MUSC Medical Center
On-Campus Mayday Response Plan

Call received to 2-3333

Give Operator:
1. Location
2. Adult or pediatric

Updated
01-08

Rutledge Tower*

- Adult → RT Adult Mayday Team
- Peds → RT Peds Mayday Team

Main hospital (CSB, Main Hospital, Children's Hospital, Storm Eye, North Tower)

- If in ICU or ED → Pharmacy Response Team → If indicated
  - Adult → Adult Mayday Team
  - Pediatric → Pediatric Mayday Team
- Non-ICU Non-ED
  - Adult → Adult Mayday Team
  - Pediatric → Pediatric Mayday Team

ED Lot, Horseshoe, Education Center → ED Response Team

BSB → BSB Team

CMH/McBanks → CMH Team

IOP → IOP Team

Hollings, RT Annex, Children's Research → Adult Mayday Team

Ashley River Tower → ART Team

** If Meducare not available, Charleston County EMS will be dispatched.

*For Rutledge Tower after 1700, Mayday Team not available. MUSC Operator to call Meducare and Public Safety

- Adult Main Hospital Team
- Pediatric Main Hospital Team
- Pharmacy Response Team
- CMH Team
- ED Response
- Dental Team
- RT Pediatric Team
- RT Adult Team
- Public Safety
- Meducare
- IOP Team
- ART Team

Date	Type	Event	Comment	Action	Date/Time	User
2010/10/01 07:35:00	Transfer to Macro	Transfer to:		Created	2010/10/01 07:35:09	Embrey,Dc
2010/10/01 07:35:00	OR TIMES	Patient in Room (PIR)		Created	2010/10/01 07:35:10	Embrey,Dc
2010/10/01 07:46:00	Automatic System	Transfer	# (EVTROUT-)	Created	2010/10/01 07:46:59	Thompson
2010/10/01 07:47:00	Automatic System	Transfer	to SCsNO	Created	2010/10/01 07:47:23	Embrey,Dc
2010/10/01 07:48:00	ATTENDING...	Anesthesiologist assessed patient,...		Created	2010/10/01 07:49:04	Nelson,Eri
2010/10/01 07:48:00	ATTENDING...	Anesthesiologist medically...		Created	2010/10/01 07:49:05	Nelson,Eri
2010/10/01 07:48:00	ATTENDING...	Anesthesiologist present for...		Created	2010/10/01 07:49:05	Nelson,Eri
2010/10/01 07:48:00	ATTENDING...	Anesthesiologist present for...		Deleted	2010/10/01 08:33:07	Nelson,Eri
2010/10/01 07:48:00	ATTENDING...	Anesthesiologist present for...		Created	2010/10/01 07:49:05	Nelson,Eri
2010/10/01 07:48:00	ATTENDING...	I (or another attending...		Created	2010/10/01 07:49:05	Nelson,Eri
2010/10/01 08:27:00	CENTRAL LINE...	Central line placed by Attending...		Created	2010/10/01 08:31:10	Embrey,Dc
2010/10/01 08:25:00	CENTRAL LINE...	Central line placed by Attending...		Modified	2010/10/01 18:03:58	Embrey,Dc
2010/10/01 08:27:00	CENTRAL LINE...	Hand hygiene prior to donning...		Created	2010/10/01 08:31:10	Embrey,Dc
2010/10/01 08:25:00	CENTRAL LINE...	Hand hygiene prior to donning...		Modified	2010/10/01 18:03:59	Embrey,Dc
2010/10/01 08:27:00	CENTRAL LINE...	Maximum barrier precautions...		Created	2010/10/01 08:31:10	Embrey,Dc
2010/10/01 08:25:00	CENTRAL LINE...	Maximum barrier precautions...		Modified	2010/10/01 18:03:59	Embrey,Dc
2010/10/01 08:27:00	CENTRAL LINE...	Skin preparation with chlorhexidine		Created	2010/10/01 08:31:10	Embrey,Dc
2010/10/01 08:25:00	CENTRAL LINE...	Skin preparation with chlorhexidine		Modified	2010/10/01 18:03:59	Embrey,Dc
2010/10/01 08:27:00	CENTRAL LINE...	Blood return through all lumens....		Created	2010/10/01 08:31:11	Embrey,Dc
2010/10/01 08:25:00	CENTRAL LINE...	Blood return through all lumens....		Modified	2010/10/01 18:03:59	Embrey,Dc
2010/10/01 08:27:00	CENTRAL LINE...	Introducer needle inserted into...		Created	2010/10/01 08:31:11	Embrey,Dc
2010/10/01 08:25:00	CENTRAL LINE...	Introducer needle inserted into...		Modified	2010/10/01 18:03:59	Embrey,Dc
2010/10/01 08:27:00	CENTRAL LINE...	Landmarks indentified		Created	2010/10/01 08:31:11	Embrey,Dc
2010/10/01 08:25:00	CENTRAL LINE...	Landmarks indentified		Modified	2010/10/01 18:03:59	Embrey,Dc
2010/10/01 08:27:00	CENTRAL LINE...	Sterile transparent dressing placed...		Created	2010/10/01 08:31:11	Embrey,Dc
2010/10/01 08:25:00	CENTRAL LINE...	Sterile transparent dressing placed...		Modified	2010/10/01 18:03:59	Embrey,Dc
2010/10/01 08:27:00	CENTRAL LINE...	Triple lumen catheter	Rt. femoral vein.	Created	2010/10/01 08:31:11	Embrey,Dc
2010/10/01 08:25:00	CENTRAL LINE...	Triple lumen catheter	Rt. femoral vein.	Modified	2010/10/01 18:03:59	Embrey,Dc
2010/10/01 08:31:00	ATTENDING...	Anesthesiologist present for airway...		Created	2010/10/01 08:32:05	Nelson,Eri
2010/10/01 08:31:00	CARDIAC...	Arrhythmia identified:		Created	2010/10/01 08:32:06	Nelson,Eri
2010/10/01 08:31:00	CARDIAC...	Arrhythmia identified:	v fib	Modified	2010/10/01 08:32:19	Nelson,Eri
2010/10/01 08:11:00	CARDIAC...	Arrhythmia identified:	v fib	Modified	2010/10/01 17:52:03	Embrey,Dc
2010/10/01 08:11:00	CARDIAC...	Arrhythmia identified:	v fib noted when compressions	Modified	2010/10/01 17:53:06	Embrey,Dc
2010/10/01 08:31:00	CARDIAC...	Chest compressions initiated		Created	2010/10/01 08:32:06	Nelson,Eri
2010/10/01 08:31:00	CARDIAC...	Chest compressions initiated		Deleted	2010/10/01 17:54:57	Embrey,Dc
2010/10/01 08:31:00	CARDIAC...	CPR stopped		Created	2010/10/01 08:32:06	Nelson,Eri
2010/10/01 08:12:00	CARDIAC...	CPR stopped		Modified	2010/10/01 17:53:53	Embrey,Dc
2010/10/01 08:12:00	CARDIAC...	CPR stopped	Palpable pulse present.	Modified	2010/10/01 17:56:15	Embrey,Dc
2010/10/01 08:31:00	CARDIAC...	Defibrillation - Joules:		Created	2010/10/01 08:32:06	Nelson,Eri
2010/10/01 08:31:00	CARDIAC...	Defibrillation - Joules:	200	Modified	2010/10/01 08:32:12	Nelson,Eri
2010/10/01 08:11:00	CARDIAC...	Defibrillation - Joules:	200	Modified	2010/10/01 17:53:21	Embrey,Dc
2010/10/01 08:31:00	CARDIAC...	ETT in place		Created	2010/10/01 08:32:06	Nelson,Eri
2010/10/01 08:31:00	CARDIAC...	ETT in place	as per above.	Modified	2010/10/01 18:14:05	Embrey,Dc
2010/10/01 08:31:00	CARDIAC...	Non-palpable pulse		Created	2010/10/01 08:32:06	Nelson,Eri
2010/10/01 07:58:00	CARDIAC...	Non-palpable pulse		Modified	2010/10/01 17:55:23	Embrey,Dc
2010/10/01 07:57:00	CARDIAC...	Non-palpable pulse		Modified	2010/10/01 18:23:28	Embrey,Dc
2010/10/01 08:31:00	CARDIAC...	Patient Oxygenated w/100% 02		Created	2010/10/01 08:32:06	Nelson,Eri
2010/10/01 08:31:00	CARDIAC...	Patient Oxygenated w/100% 02	and remains on vent.	Modified	2010/10/01 18:13:52	Embrey,Dc
2010/10/01 08:31:00	CARDIAC...	Patient stabilized		Created	2010/10/01 08:32:06	Nelson,Eri
2010/10/01 08:31:00	CARDIAC...	Post resuscitation rhythm:		Created	2010/10/01 08:32:06	Nelson,Eri
2010/10/01 08:31:00	CARDIAC...	Post resuscitation rhythm:	SR.	Modified	2010/10/01 18:08:57	Embrey,Dc
2010/10/01 08:00:00	Memo	Memo	Came into room. Pt. hypoxic...	Created	2010/10/01 08:33:02	Nelson,Eri
2010/10/01 07:56:00	Memo	Memo	Came into room. Pt. hypoxic...	Modified	2010/10/01 17:34:27	Embrey,Dc
2010/10/01 08:37:00	OR TIMES	Patient Out of Room (POR)		Created	2010/10/01 08:37:15	Embrey,Dc
2010/10/01 08:37:00	To Recovery Area	Patient transported with O2		Created	2010/10/01 08:37:15	Embrey,Dc
2010/10/01 08:37:00	To Recovery Area	To recovery area in stable...		Created	2010/10/01 08:37:15	Embrey,Dc
2010/10/01 08:37:00	To Recovery Area	Transported via stretcher/bed		Created	2010/10/01 08:37:15	Embrey,Dc
2010/10/01 08:37:00	Automatic System	Transfer	from SCsNO	Created	2010/10/01 08:37:30	Embrey,Dc
2010/10/01 08:54:00	Automatic System	Transfer	to LCsAn	Created	2010/10/01 08:54:56	Embrey,Dc
2010/10/01 08:58:00	PRE-INDUCTION...	Anesthesia machine checked,...		Created	2010/10/01 08:58:27	Embrey,Dc
2010/10/01 07:25:00	PRE-INDUCTION...	Anesthesia machine checked,...		Modified	2010/10/01 17:27:44	Embrey,Dc
2010/10/01 08:58:00	PATIENT...	Airway equipment available and...		Created	2010/10/01 08:58:28	Embrey,Dc
2010/10/01 07:25:00	PATIENT...	Airway equipment available and...		Modified	2010/10/01 17:27:45	Embrey,Dc
2010/10/01 08:58:00	PRE-INDUCTION...	Anesthesia and resuscitation drugs...		Created	2010/10/01 08:58:28	Embrey,Dc
2010/10/01 07:25:00	PRE-INDUCTION...	Anesthesia and resuscitation drugs...		Modified	2010/10/01 17:27:45	Embrey,Dc
2010/10/01 08:58:00	OR TIMES	Anesthesia Start (AS)		Created	2010/10/01 08:58:28	Embrey,Dc
2010/10/01 07:20:00	OR TIMES	Anesthesia Start (AS)		Modified	2010/10/01 09:01:41	Embrey,Dc
2010/10/01 08:58:00	PRE-INDUCTION...	Integrity of Anesthesia circuit...		Created	2010/10/01 08:58:28	Embrey,Dc
2010/10/01 07:25:00	PRE-INDUCTION...	Integrity of Anesthesia circuit...		Modified	2010/10/01 17:27:45	Embrey,Dc
2010/10/01 08:58:00	PATIENT...	NPO status verified		Created	2010/10/01 08:58:28	Embrey,Dc
2010/10/01 07:25:00	PATIENT...	NPO status verified		Modified	2010/10/01 17:27:45	Embrey,Dc
2010/10/01 08:58:00	PATIENT...	Patient chart and preoperative...		Created	2010/10/01 08:58:28	Embrey,Dc
2010/10/01 07:25:00	PATIENT...	Patient chart and preoperative...		Modified	2010/10/01 17:27:45	Embrey,Dc
2010/10/01 08:58:00	PATIENT...	Patient identified by 2 methods		Created	2010/10/01 08:58:28	Embrey,Dc
2010/10/01 07:25:00	PATIENT...	Patient identified by 2 methods		Modified	2010/10/01 17:27:45	Embrey,Dc

PLAINTIFF'S EXHIBIT 10
FEIGEAD 800-631-6989

ate	Type	Event	Comment	Action	Date/Time	User
2010/10/01 08:58:00	PATIENT...	Pre-op vital signs reviewed		Created	2010/10/01 08:58:28	Embrey,Donn
2010/10/01 07:25:00	PATIENT...	Pre-op vital signs reviewed		Modified	2010/10/01 17:27:45	Embrey,Donn
2010/10/01 08:58:00	PATIENT...	Procedural site marking(s) verified...		Created	2010/10/01 08:58:28	Embrey,Donn
2010/10/01 07:25:00	PATIENT...	Procedural site marking(s) verified...		Modified	2010/10/01 17:27:45	Embrey,Donn
2010/10/01 08:58:00	PATIENT...	Risks, benefits, and complications...		Created	2010/10/01 08:58:28	Embrey,Donn
2010/10/01 07:25:00	PATIENT...	Risks, benefits, and complications...		Modified	2010/10/01 17:27:45	Embrey,Donn
2010/10/01 08:58:00	PRE-INDUCTION.	Standard monitors available,...		Created	2010/10/01 08:58:28	Embrey,Donn
2010/10/01 07:25:00	PRE-INDUCTION.	Standard monitors available,...		Modified	2010/10/01 17:27:45	Embrey,Donn
2010/10/01 08:58:00	PRE-INDUCTION.	Suction available and functioning		Created	2010/10/01 08:58:28	Embrey,Donn
2010/10/01 07:25:00	PRE-INDUCTION.	Suction available and functioning		Modified	2010/10/01 17:27:45	Embrey,Donn
2010/10/01 08:58:00	PATIENT...	Surgical consent verified and...		Created	2010/10/01 08:58:28	Embrey,Donn
2010/10/01 07:25:00	PATIENT...	Surgical consent verified and...		Modified	2010/10/01 17:27:45	Embrey,Donn
2010/10/01 09:04:00	Automatic System	Transfer	from LCsAn	Created	2010/10/01 09:04:59	Embrey,Donn
2010/10/01 09:12:00	Automatic System	Transfer	to PACU	Created	2010/10/01 09:12:19	Toohey,Jeffre
2010/10/01 09:13:00	OR TIMES	Arrival in PACU/ICU (APACU)		Created	2010/10/01 09:13:25	Toohey,Jeffre
2010/10/01 09:13:00	OR TIMES	Arrival in PACU/ICU (APACU)		Deleted	2010/10/01 09:13:49	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Connected to monitors		Created	2010/10/01 09:13:25	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Connected to monitors		Deleted	2010/10/01 09:13:49	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Phase I PACU admission		Created	2010/10/01 09:13:25	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Phase I PACU admission		Deleted	2010/10/01 09:13:49	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Report received from:		Created	2010/10/01 09:13:25	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Report received from:		Deleted	2010/10/01 09:13:49	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Side rails up		Created	2010/10/01 09:13:25	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Side rails up		Deleted	2010/10/01 09:13:49	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Wheels locked		Created	2010/10/01 09:13:25	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Wheels locked		Deleted	2010/10/01 09:13:49	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Phase I PACU admission		Created	2010/10/01 09:13:57	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Phase I PACU admission		Deleted	2010/10/01 09:14:26	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Report received from:		Created	2010/10/01 09:13:57	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Report received from:		Deleted	2010/10/01 09:14:26	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Side rails up		Created	2010/10/01 09:13:57	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Side rails up		Deleted	2010/10/01 09:14:27	Toohey,Jeffre
2010/10/01 09:13:00	OR TIMES	Arrival in PACU/ICU (APACU)		Created	2010/10/01 09:13:58	Toohey,Jeffre
2010/10/01 09:13:00	OR TIMES	Arrival in PACU/ICU (APACU)		Deleted	2010/10/01 09:14:27	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Connected to monitors		Created	2010/10/01 09:13:58	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Connected to monitors		Deleted	2010/10/01 09:14:27	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Wheels locked		Created	2010/10/01 09:13:58	Toohey,Jeffre
2010/10/01 09:13:00	PACU Phase I...	Wheels locked		Deleted	2010/10/01 09:14:27	Toohey,Jeffre
2010/10/01 09:15:00	OR TIMES	Arrival in PACU/ICU (APACU)		Created	2010/10/01 09:15:23	Toohey,Jeffre
2010/10/01 08:45:00	OR TIMES	Arrival in PACU/ICU (APACU)		Modified	2010/10/01 09:17:38	Toohey,Jeffre
2010/10/01 09:15:00	PACU Phase I...	Connected to monitors		Created	2010/10/01 09:15:23	Toohey,Jeffre
2010/10/01 08:45:00	PACU Phase I...	Connected to monitors		Modified	2010/10/01 09:17:54	Toohey,Jeffre
2010/10/01 09:15:00	PACU Phase I...	Phase I PACU admission		Created	2010/10/01 09:15:23	Toohey,Jeffre
2010/10/01 08:45:00	PACU Phase I...	Phase I PACU admission		Modified	2010/10/01 09:15:37	Toohey,Jeffre
2010/10/01 09:15:00	PACU Phase I...	Report received from:		Created	2010/10/01 09:15:23	Toohey,Jeffre
2010/10/01 08:45:00	PACU Phase I...	Report received from:		Modified	2010/10/01 09:16:37	Toohey,Jeffre
2010/10/01 08:45:00	PACU Phase I...	Report received from:	Donna Embry CRNA	Modified	2010/10/01 09:17:15	Toohey,Jeffre
2010/10/01 09:15:00	PACU Phase I...	Side rails up		Created	2010/10/01 09:15:23	Toohey,Jeffre
2010/10/01 08:45:00	PACU Phase I...	Side rails up		Modified	2010/10/01 09:18:08	Toohey,Jeffre
2010/10/01 09:15:00	PACU Phase I...	Wheels locked		Created	2010/10/01 09:15:23	Toohey,Jeffre
2010/10/01 08:45:00	PACU Phase I...	Wheels locked		Modified	2010/10/01 09:18:19	Toohey,Jeffre
2010/10/01 09:46:00	PACU FAMILY	Family at Bedside	mother	Created	2010/10/01 09:46:37	Toohey,Jeffre
2010/10/01 10:54:00	PACU FAMILY	Family at Bedside		Created	2010/10/01 10:54:12	Toohey,Jeffre
2010/10/01 10:54:00	PACU FAMILY	Family at Bedside	mother	Modified	2010/10/01 11:10:29	Toohey,Jeffre
2010/10/01 12:16:00	Memo	Memo	Dr. Guidan at bedside,...	Created	2010/10/01 12:17:43	Toohey,Jeffre
2010/10/01 12:17:00	PACU FAMILY	Family at Bedside	pastor	Created	2010/10/01 12:18:20	Toohey,Jeffre
2010/10/01 13:40:00	Transfer to ICU...	Discharge criteria not met		Created	2010/10/01 13:40:52	Toohey,Jeffre
2010/10/01 13:40:00	OR TIMES	Ready for Discharge from PACU...		Created	2010/10/01 13:40:52	Toohey,Jeffre
2010/10/01 13:40:00	Transfer to ICU...	Transfer to ICU:		Created	2010/10/01 13:40:52	Toohey,Jeffre
2010/10/01 13:40:00	Transfer to ICU...	Transported via stretcher/bed		Created	2010/10/01 13:40:52	Toohey,Jeffre
2010/10/01 13:40:00	Transfer to ICU...	Transported via stretcher/bed	stretcher	Modified	2010/10/01 13:43:40	Toohey,Jeffre
2010/10/01 13:40:00	Transfer to ICU...	With monitors		Created	2010/10/01 13:40:52	Toohey,Jeffre
2010/10/01 13:40:00	Transfer to ICU...	With Oxygen		Created	2010/10/01 13:40:52	Toohey,Jeffre
2010/10/01 13:42:00	Memo	Memo	Ice packs applied to pulse...	Created	2010/10/01 13:43:26	Toohey,Jeffre
2010/10/01 13:40:00	OR TIMES	Discharge from PACU (DPACU)		Created	2010/10/01 15:07:52	PCM,PCM
2010/10/01 17:13:00	Automatic System	Standby On		Created	2010/10/01 17:13:18	Toohey,Jeffre
2010/10/01 17:13:00	Automatic System	Transfer	# (EVTROUT-)	Created	2010/10/01 17:13:22	Thompson,An
2010/10/01 17:17:00	Automatic System	Transfer	to SCsNO	Created	2010/10/01 17:17:09	Embrey,Donn
2010/10/01 17:26:00	OR TIMES	Surgery Start time (PST)		Created	2010/10/01 17:26:28	Embrey,Donn
2010/10/01 07:42:00	OR TIMES	Surgery Start time (PST)		Modified	2010/10/01 17:26:39	Embrey,Donn
2010/10/01 17:26:00	OR TIMES	Surgery Finish (PF)		Created	2010/10/01 17:26:42	Embrey,Donn
2010/10/01 07:56:00	OR TIMES	Surgery Finish (PF)		Modified	2010/10/01 17:26:52	Embrey,Donn
2010/10/01 17:29:00	Tube Inhalation...	Atraumatic direct laryngoscopy		Created	2010/10/01 17:29:43	Embrey,Donn
2010/10/01 17:29:00	Tube Inhalation...	Atraumatic direct laryngoscopy		Deleted	2010/10/01 17:30:08	Embrey,Donn
2010/10/01 17:29:00	Tube Inhalation...	Bilateral breath sounds		Created	2010/10/01 17:29:43	Embrey,Donn

ate	Type	Event	Comment	Action	Date/Time	User
2010/10/01 17:29:00	Tube Inhalation...	Bilateral breath sounds		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Bilateral chest rise		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Bilateral chest rise		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Blade:		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Blade:		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	ETT secured at:		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	ETT secured at:		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Eye(s) taped shut		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Eye(s) taped shut		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Grade View:		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Grade View:		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Leaks at cm H2O pressure:		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Leaks at cm H2O pressure:		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Patient evaluated immediately prior...		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Patient evaluated immediately prior...		Deleted	2010/10/01 17:30:07	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Peripheral IV placed		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Peripheral IV placed		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Position supine		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Position supine		Deleted	2010/10/01 17:30:07	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Positive ETCO2		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Positive ETCO2		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Site and Gauge:		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Site and Gauge:		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Smooth Inhalation induction		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Smooth Inhalation induction		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Standard monitors applied		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Standard monitors applied		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Tube:		Created	2010/10/01 17:29:43	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Tube:		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	ANESTHESIA...	General Anesthesia		Created	2010/10/01 17:29:44	Embrey,Dc
2010/10/01 17:29:00	ANESTHESIA...	General Anesthesia		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Teeth preanesthetic condition		Created	2010/10/01 17:29:44	Embrey,Dc
2010/10/01 17:29:00	Tube Inhalation...	Teeth preanesthetic condition		Deleted	2010/10/01 17:30:08	Embrey,Dc
2010/10/01 08:01:00	CARDIAC...	Atraumatic laryngoscopy	DVL x 1 per Embrey,CRNA.	Created	2010/10/01 17:32:11	Embrey,Dc
2010/10/01 08:01:00	CARDIAC...	Breath sound equal and bilateral		Created	2010/10/01 17:32:11	Embrey,Dc
2010/10/01 08:01:00	CARDIAC...	Cuff inflated with minimum volume...		Created	2010/10/01 17:32:11	Embrey,Dc
2010/10/01 08:01:00	CARDIAC...	ETCO2 confirmed via CO2 Monitor		Created	2010/10/01 17:32:11	Embrey,Dc
2010/10/01 08:01:00	CARDIAC...	Intubation - Tube size:	#8.0 fr ETT @ 23 cm @ lips.	Created	2010/10/01 17:32:11	Embrey,Dc
2010/10/01 07:55:00	Memo	Memo	Pt turned supine from Lateral...	Created	2010/10/01 17:33:39	Embrey,Dc
2010/10/01 07:55:00	Memo	Memo	Pt turned supine from Lateral...	Modified	2010/10/01 17:34:03	Embrey,Dc
2010/10/01 07:55:00	Memo	Memo	Pt turned supine from Lateral...	Modified	2010/10/01 17:50:40	Embrey,Dc
2010/10/01 07:55:00	Memo	Memo	Pt turned supine from Lateral...	Modified	2010/10/02 16:17:56	Embrey,Dc
2010/10/01 17:34:00	Memo	Memo	Nelson,MDA in .Nasal airway...	Created	2010/10/01 17:35:10	Embrey,Dc
2010/10/01 07:50:00	Memo	Memo	Nelson,MDA in .Nasal airway...	Modified	2010/10/01 17:35:45	Embrey,Dc
2010/10/01 07:50:00	Memo	Memo	Nelson,MDA in .Nasal airway...	Modified	2010/10/01 17:36:04	Embrey,Dc
2010/10/01 07:48:00	Memo	Memo	Nelson,MDA in .Nasal airway...	Modified	2010/10/01 18:22:08	Embrey,Dc
2010/10/01 07:48:00	Memo	Memo	Nelson,MDA in .Nasal airway...	Modified	2010/10/02 16:18:24	Embrey,Dc
2010/10/01 07:58:00	CARDIAC...	Chest compressions initiated		Created	2010/10/01 17:38:58	Embrey,Dc
2010/10/01 07:58:00	CARDIAC...	Chest compressions initiated	and continuous until noted.	Modified	2010/10/01 17:52:44	Embrey,Dc
2010/10/01 07:57:00	CARDIAC...	Chest compressions initiated	and continuous until noted.	Modified	2010/10/01 18:23:03	Embrey,Dc
2010/10/01 07:58:00	CARDIAC...	Non-palpable pulse		Created	2010/10/01 17:38:58	Embrey,Dc
2010/10/01 07:58:00	CARDIAC...	Non-palpable pulse		Deleted	2010/10/01 18:22:44	Embrey,Dc
2010/10/01 07:58:00	CARDIAC...	Patient Oxygenated w/100% 02	per Bag-mask	Created	2010/10/01 17:48:50	Embrey,Dc
2010/10/01 07:57:00	CARDIAC...	Patient Oxygenated w/100% 02	per Bag-mask	Modified	2010/10/01 18:23:44	Embrey,Dc
2010/10/01 08:01:00	Memo	Memo	Eyes taped.	Created	2010/10/01 17:51:28	Embrey,Dc
2010/10/01 20:16:00	ARTERIAL LINE...	Arterial line placed by CRNA		Created	2010/10/01 17:57:10	Embrey,Dc
2010/10/01 08:16:00	ARTERIAL LINE...	Arterial line placed by CRNA		Modified	2010/10/01 17:58:43	Embrey,Dc
2010/10/01 20:16:00	ARTERIAL LINE...	Left radial artery		Created	2010/10/01 17:57:10	Embrey,Dc
2010/10/01 08:16:00	ARTERIAL LINE...	Left radial artery		Modified	2010/10/01 17:58:44	Embrey,Dc
2010/10/01 20:16:00	ARTERIAL LINE...	20 ga arterial catheter over wire		Created	2010/10/01 17:57:11	Embrey,Dc
2010/10/01 08:16:00	ARTERIAL LINE...	20 ga arterial catheter over wire		Modified	2010/10/01 17:58:44	Embrey,Dc
2010/10/01 20:16:00	ARTERIAL LINE...	Arterial catheter taped and sterile...		Created	2010/10/01 17:57:11	Embrey,Dc
2010/10/01 08:16:00	ARTERIAL LINE...	Arterial catheter taped and sterile...		Modified	2010/10/01 17:58:44	Embrey,Dc
2010/10/01 20:16:00	ARTERIAL LINE...	Attempts:	1 per Dushanko,CRNA.	Created	2010/10/01 17:57:11	Embrey,Dc
2010/10/01 08:16:00	ARTERIAL LINE...	Attempts:	1 per Dushanko,CRNA.	Modified	2010/10/01 17:58:44	Embrey,Dc
2010/10/01 20:16:00	ARTERIAL LINE...	Good arterial waveform		Created	2010/10/01 17:57:11	Embrey,Dc
2010/10/01 08:16:00	ARTERIAL LINE...	Good arterial waveform		Modified	2010/10/01 17:58:44	Embrey,Dc
2010/10/01 20:16:00	ARTERIAL LINE...	Skin prep with chlorhexadine		Created	2010/10/01 17:57:11	Embrey,Dc
2010/10/01 08:16:00	ARTERIAL LINE...	Skin prep with chlorhexadine		Modified	2010/10/01 17:58:44	Embrey,Dc
2010/10/01 20:16:00	ARTERIAL LINE...	Sterile technique		Created	2010/10/01 17:57:11	Embrey,Dc
2010/10/01 08:16:00	ARTERIAL LINE...	Sterile technique		Modified	2010/10/01 17:58:44	Embrey,Dc
2010/10/01 08:23:00	PERIPHERAL...	16 gauge peripheral IV catheter		Created	2010/10/01 18:03:31	Embrey,Dc
2010/10/01 08:23:00	PERIPHERAL...	Aseptic technique used		Created	2010/10/01 18:03:31	Embrey,Dc
2010/10/01 08:23:00	PERIPHERAL...	Left anticubital	x1 per Dushanko,CRNA.	Created	2010/10/01 18:03:31	Embrey,Dc
2010/10/01 08:23:00	PERIPHERAL...	Peripheral IV placed after induction		Created	2010/10/01 18:03:31	Embrey,Dc

)ate	Type	Event	Comment	Action	Date/Time	User
2010/10/01 18:04:00	PERIPHERAL...	22 gauge peripheral IV catheter	in situ in HA.	Created	2010/10/01 18:04:27	Embrey,Donn
2010/10/01 07:25:00	PERIPHERAL...	22 gauge peripheral IV catheter	in situ in HA.	Modified	2010/10/01 18:18:02	Embrey,Donn
2010/10/01 18:04:00	PERIPHERAL...	Peripheral IV placed preoperatively		Created	2010/10/01 18:04:27	Embrey,Donn
2010/10/01 07:25:00	PERIPHERAL...	Peripheral IV placed preoperatively		Modified	2010/10/01 18:18:02	Embrey,Donn
2010/10/01 18:04:00	PERIPHERAL...	Right hand		Created	2010/10/01 18:04:27	Embrey,Donn
2010/10/01 07:25:00	PERIPHERAL...	Right hand		Modified	2010/10/01 18:18:02	Embrey,Donn
2010/10/01 18:04:00	IV General...	ETCO2 wave form present		Created	2010/10/01 18:04:34	Embrey,Donn
2010/10/01 07:42:00	IV General...	ETCO2 wave form present		Modified	2010/10/01 18:04:48	Embrey,Donn
2010/10/01 18:04:00	ANESTHESIA...	General Anesthesia		Created	2010/10/01 18:04:34	Embrey,Donn
2010/10/01 07:42:00	ANESTHESIA...	General Anesthesia		Modified	2010/10/01 18:04:48	Embrey,Donn
2010/10/01 18:04:00	IV General...	Patient evaluated immediately prior...		Created	2010/10/01 18:04:34	Embrey,Donn
2010/10/01 07:42:00	IV General...	Patient evaluated immediately prior...		Modified	2010/10/01 18:04:47	Embrey,Donn
2010/10/01 18:04:00	IV General...	Plan spontaneous ventilation...		Created	2010/10/01 18:04:34	Embrey,Donn
2010/10/01 07:42:00	IV General...	Plan spontaneous ventilation...		Modified	2010/10/01 18:04:48	Embrey,Donn
2010/10/01 18:04:00	IV General...	Respiratory rate monitored		Created	2010/10/01 18:04:34	Embrey,Donn
2010/10/01 07:42:00	IV General...	Respiratory rate monitored		Modified	2010/10/01 18:04:48	Embrey,Donn
2010/10/01 18:04:00	IV General...	Standard monitors applied		Created	2010/10/01 18:04:34	Embrey,Donn
2010/10/01 07:42:00	IV General...	Standard monitors applied		Modified	2010/10/01 18:04:48	Embrey,Donn
2010/10/01 08:45:00	DISPOSITION OF...	To PACU in stable condition		Created	2010/10/01 18:08:22	Embrey,Donn
2010/10/01 08:45:00	DISPOSITION OF...	To PACU in stable condition	with...	Modified	2010/10/01 18:15:02	Embrey,Donn
2010/10/01 08:45:00	DISPOSITION OF...	To PACU in stable condition	with...	Modified	2010/10/01 18:15:36	Embrey,Donn
2010/10/01 09:00:00	POST...	Cardiac arrest:	during procedure.	Created	2010/10/01 18:19:10	Embrey,Donn
2010/10/01 09:15:00	POST...	Cardiac arrest:	during procedure.	Modified	2010/11/06 14:45:44	Embrey,Donn
2010/10/01 09:00:00	POST...	Mechanical ventilatory support		Created	2010/10/01 18:19:10	Embrey,Donn
2010/10/01 09:15:00	POST...	Mechanical ventilatory support		Modified	2010/11/06 14:45:44	Embrey,Donn
2010/10/01 09:00:00	POST...	Pain managed by primary care...		Created	2010/10/01 18:19:10	Embrey,Donn
2010/10/01 09:15:00	POST...	Pain managed by primary care...		Modified	2010/11/06 14:45:44	Embrey,Donn
2010/10/01 09:00:00	POST...	Postoperative Location:PACU		Created	2010/10/01 18:19:10	Embrey,Donn
2010/10/01 09:15:00	POST...	Postoperative Location:PACU		Modified	2010/11/06 14:45:44	Embrey,Donn
2010/10/01 09:00:00	POST...	Requiring vasoactive/inotropic...		Created	2010/10/01 18:19:10	Embrey,Donn
2010/10/01 09:15:00	POST...	Requiring vasoactive/inotropic...		Modified	2010/11/06 14:45:44	Embrey,Donn
2010/10/01 07:50:00	Memo	Memo	Nelson out.	Created	2010/10/02 16:19:41	Embrey,Donn
2010/10/01 07:51:00	Memo	Memo	Nelson out.	Modified	2010/10/02 16:30:57	Embrey,Donn
2010/10/01 09:12:00	OR TIMES	Anesthesia Finish (AF)		Created	2010/10/04 11:54:46	PCM,PCM
2010/11/06 14:44:00	OR TIMES	Anesthesia Finish (AF)		Created	2010/11/06 14:44:27	Embrey,Donn
2010/10/01 08:59:00	OR TIMES	Anesthesia Finish (AF)		Modified	2010/11/06 14:44:59	Embrey,Donn
2010/10/01 08:59:00	OR TIMES	Anesthesia Finish (AF)		Deleted	2010/11/06 14:45:24	Embrey,Donn
2010/11/06 14:44:00	Anes Stop/Record	SBAR report given		Created	2010/11/06 14:44:27	Embrey,Donn
2010/11/06 14:44:00	Anes Stop/Record	SBAR report given		Deleted	2010/11/06 14:44:36	Embrey,Donn

Audit Trail by Patient From 10/1/2010 00:01:00 to 10/2/2010 23:59:00

Patient Name: MIKELL, CHARLES I.

MRN: 001400764

Account Number: 270426782

Audit User	Audit Datetime	Application	Routine	Action	Facility
COOPERA	10/1/2010 14:44:40	Anesthesia Manager	Patient Record Accessed		PFACILITY
COOPERA	10/1/2010 14:44:48	Remote Access	Patient Record Accessed		PFACILITY
embrey	10/1/2010 07:34:06	OR Manager	Case Record	EDIT HDR	COURT
embrey	10/1/2010 07:34:25	OR Manager	Case Record	EDIT HDR	COURT
EMBREY	10/1/2010 07:34:57	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 07:47:14	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 07:47:18	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 08:54:53	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 08:54:58	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 09:28:36	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 09:28:50	Remote Access	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 09:28:16	Remote Access	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 09:49:07	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 09:49:10	Remote Access	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 16:54:02	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 17:03:51	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 17:04:09	Remote Access	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 17:14:01	Remote Access	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 17:17:01	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 17:17:04	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/1/2010 18:25:31	Printout Loader	Print Command Ordered		PFACILITY
EMBREY	10/2/2010 16:16:26	Anesthesia Manager	Patient Record Accessed		PFACILITY

PLAINTIFF'S EXHIBIT 11

Audit Trail by Patient From 10/1/2010 00:01:00 to 10/2/2010 23:59:00

Patient Name: MIKELL, CHARLES L
MRN: 001400764
Account Number: 270426782

Audit User	Audit Datetime	Application	Routine	Action	Facility
EMBREY	10/2/2010 18:16:41	Remote Access	Patient Record Accessed		PFACILITY
EMBREY	10/2/2010 17:51:03	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/2/2010 17:51:17	Remote Access	Patient Record Accessed		PFACILITY
EMBREY	10/2/2010 18:11:58	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/2/2010 18:12:12	Remote Access	Patient Record Accessed		PFACILITY
EMBREY	10/2/2010 18:14:02	Printout Loader	Print Command Ordered		PFACILITY
EMBREY	10/2/2010 18:14:38	Anesthesia Manager	Patient Record Accessed		PFACILITY
EMBREY	10/2/2010 18:14:50	Remote Access	Patient Record Accessed		PFACILITY
EMBREY	10/2/2010 18:15:02	Printout Loader	Print Command Ordered		PFACILITY
jonesll	10/1/2010 15:08:32	OR Manager	Case Record	VIEW SECT	COURT
jonesll	10/1/2010 15:08:34	OR Manager	Case Record	EDIT SECT	COURT
jonesll	10/1/2010 15:08:37	OR Manager	Case Record	CLOSE SECT	COURT
PETKO	10/1/2010 15:10:44	Preop Manager	Patient Record Accessed		PFACILITY
PETKO	10/1/2010 15:15:06	Preop Manager	Print Command Ordered		PFACILITY
THOMPSA	10/1/2010 09:53:33	Remote Access	Patient Record Accessed		PFACILITY
THOMPSA	10/1/2010 09:53:33	Preop Manager	Patient Record Accessed		PFACILITY
THOMPSA	10/1/2010 09:55:16	Preop Manager	Patient Record Accessed		PFACILITY
TOOHEYJ	10/1/2010 09:12:10	PACU Manager	Patient Record Accessed		PFACILITY
TOOHEYJ	10/1/2010 09:12:13	PACU Manager	Patient Record Accessed		PFACILITY
TOOHEYJ	10/1/2010 11:58:40	Preop Manager	Patient Record Accessed		PFACILITY
TOOHEYJ	10/1/2010 13:44:21	Printout Loader	Print Command Ordered		PFACILITY
TOOHEYJ	10/1/2010 13:44:27	Printout Loader	Print Command Ordered		PFACILITY

BWPH 004989

Audit Trail by Patient From 10/1/2010 00:01:00 to 10/2/2010 23:59:59

Patient Name: MIKELL, CHARLES L

MRN: 001400764

Account Number: 270428782

Audit User	Audit Datetime	Application	Routine	Action	Facility
BACKGROUND	10/1/2010 00:02:21	SmarTrack		Activated Booking	COURT
BACKGROUND	10/1/2010 07:34:14	SmarTrack		Updating Booking/CR Data	COURT
BACKGROUND	10/1/2010 07:34:30	SmarTrack		Updating Booking/CR Data	COURT
CR_FIELD	10/1/2010 07:35:21	SmarTrack		Executing Macro: IN_ROOM	COURT
CR_FIELD	10/1/2010 08:37:32	SmarTrack		Executing Macro: OUT_OF_OR	COURT
CR_FIELD	10/1/2010 09:13:40	SmarTrack		Executing Macro: PACU_TM	COURT
CR_FIELD	10/1/2010 13:41:07	SmarTrack		Executing Macro: OUT_AREA	COURT
CR_FIELD	10/1/2010 15:07:58	SmarTrack		Executing Macro: WTG_BED	COURT
CR_FIELD	10/1/2010 17:26:44	SmarTrack		Executing Macro: PROC_PROG	COURT
CR_FIELD	10/1/2010 17:26:54	SmarTrack		Executing Macro: INC_STOP	COURT

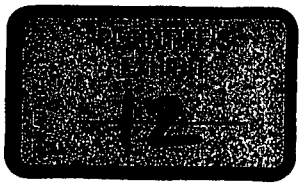
[redacted]

Recipient Messaging ID: 12727 Recipient Name: Thompson, Annette

Message Seq#: 48732521 Type: MEDICAL
Sending User: WWW_USER Sending Machine: 128.23.180.200
Date Entered: 01-OCT-2010 07:46 AM
Email Flag: F Fax Flag: F Page Flag: T Print Flag: F Urgent Flag: F
Date Archived: 01-OCT-2010 07:46 AM Archiving User: TNPP
Application Machine: TNPP-1
Message Text: hey- can u call me abck. TX! donna #6-5962/128.23.180.200
Message Remark:
Follow Ups: 01-OCT-10 07:46 12 AM PAGE QUEUED Pager: 0005356 Priority: 0 Rebeep: F Queue#: 2
01-OCT-10 07:46 12 AM PAGE QUEUED Pager: 8436934889@vtext.com Priority: 0 Rebeep: F Queue#: 3

Recipient Messaging ID: 12727 Recipient Name: Thompson, Annette

Message Seq#: 48732421 Type: MEDICAL
Sending User: WWW_USER Sending Machine: 128.23.180.200
Date Entered: 01-OCT-2010 07:39 AM
Email Flag: F Fax Flag: F Page Flag: T Print Flag: F Urgent Flag: F
Date Archived: 01-OCT-2010 07:39 AM Archiving User: SMTP
Application Machine: SMTP-1
Message Text: hey- call me re; NORA pt not in transfer bucket.TX!! Donna #6-5962/128.23.180.200
Message Remark:
Follow Ups: 01-OCT-10 07:39 08 AM PAGE QUEUED Pager: 0005356 Priority: 0 Rebeep: F Queue#: 2
01-OCT-10 07:39 08 AM PAGE QUEUED Pager: 8436934889@vtext.com Priority: 0





The Medical University of South Carolina
25 Courtenay Drive
Charleston, SC 29425
Ph 843-792-6999 Fax 843-876-44705

Colonoscopy Report 10/01/2010

Patient Name: CHARLES MIKELL
MRN: 001400764
DOB: 01/25/1961
Patcom: 270428782
Referring: NONE PER PATIENT
Attended by: KENNETH M PAYNE M.D.
Assisted by:

INDICATIONS: Constipation (564.00). Screening.

CONSENT: The benefits, risks, limitations and alternatives to the procedure were discussed and informed consent was obtained from the patient.

PREPARATION/SAFETY: Pulse, pulse oximetry and blood pressure were monitored throughout the procedure.

MEDICATIONS: MAC anesthesia see anesthesia notes.

PROCEDURE: The endoscope was passed through the anus under direct visualization and advanced to the cecum. The scope was withdrawn and the mucosa was carefully examined. The quality of the preparation was good.

FINDINGS: The colon appeared to be normal. However, about the time the endoscope reached the cecum the patient began getting hypoxic. This did not respond to routing measures and the pateint then became bradycardic with a juntional rythym. The scope was immediately withdrawn without viewing so the Anesthsia attending could resusciatate the patient. Please see Code documentation.

INTRAPROCEDURAL EVENTS: Hypoxia, bradycardia, cardiac arrest

SUMMARY:

- Normal colon.

RECOMMENDATIONS: Admission to ICU.

I was present with the patient during the entire viewing portion of the endoscopy, including insertion and removal of the scope.

Paynem

KENNETH PAYNE, M.D. Report electronically signed by Dr. KENNETH PAYNE, M.D. on 10/01/2010 at 03:03 PM



MUSC Health

"HISPHYS"
Adult Inpatient History and Physical Form
Page 1 of 7
Form Origination Date: 1990
Version: 6 Version Date: 9/08

P:270428782 DOB:01/26/1961 S M
MIKELL
Patient Name CHARLES
MRN Adm:10/01/10 M:1400764
PATIENT IDENTIFICATION LABEL
Link to SC BOME ISC Physician/Provider Lookup

MUSC Entry Method: ☐ Home ☐ ED ☐ Clinic Endoscopy Suite ☐ Outside Hospital _____
Referring Physician / Provider: _____ (print first and last names)
Referring Physician / Provider: _____ (print first and last names)
Primary Care Physician / Provider: _____ (print first and last names)
CHIEF COMPLAINT (Use patient's own words):
Cardiac arrest

HISTORY OF PRESENT ILLNESS:
49 y/o BM who was undergoing a colonoscopy today for constipation. During procedure, he became hypoxic and then bradycardic with a junctional rhythm, and then underwent cardiac arrest w/ ventricular fibrillation. He was intubated and defibrillated and regained a pulse. A right femoral central line was placed by anesthesia.

PAST MEDICAL HISTORY:
1. Nonischemic cardiomyopathy (heart failure)
~~2. CAD~~
3. Atrial ventricular nodal reentrant tachycardia s/p ablation
4. Chronic kidney disease
5. Hypertension
6. Diabetes
7. G6PD deficiency
8. Hyperlipidemia
9. Sleep apnea (treated with CPAP)

PAST SURGICAL HISTORY:
Cardiac cath 2001
Cardiac cath 2005

ALLERGIES:
NKDA

MEDICATIONS: **All medications, doses, and frequencies of administration must be listed including: prescription meds, OTC meds, transdermal patches, herbals, dietary supplements, oxygen therapy, and if patient from outside hospital, all medications given within 24 hours prior to MUSC admission.**

☐ **Medication Reconciliation form(s) completed & placed in discharge section of chart** (If box is checked, per hospital policy, it is sufficient to document on medication reconciliation form rather than on H&P.)

ah_all_docu_historyphysical OTE 700019 Rev. 9/08

Adult Medication Reconciliation Form follows on next page

PLAINTIFF'S EXHIBIT 19

SOCIAL HISTORY: unemployed, disabled

	Yes	No	Quit	Type	Amount & Duration	Last Used	Cessation Counseling (if current or used in past year)
Tobacco	☐	☐	☐	☐ Cigarettes ☐ Cigars ☐ Pipe ☐ Smokeless tobacco Age started ____ Age quit ____			☐ I have counseled patient on the harmful effects of smoking and have offered smoking cessation advice.
Alcohol	☐	☐	☐				☐ I have counseled patient on alcohol abuse and have offered cessation advice.
Drug	☐	☐	☐	☐ Marijuana ☐ Cocaine ☐ ____			☐ I have counseled patient on drug abuse and have offered cessation advice.

FAMILY HISTORY:

REVIEW OF SYSTEMS: ☐ unobtainable secondary to Pt not responding

SYSTEM	WNL	EXPLANATION OF ABNORMAL FINDINGS (List underlying diagnosis or procedure in PMH or PSH)
General	☐	
Psychiatric	☐	*☐ Self harm / suicidal intent
Skin	☐	☐ Decubitus (if yes, describe each in physician exam)
Head, Scalp, Hair	☐	
Eyes / Ears	☐	☐ Corrective lenses (glasses or contacts)
Nose & Sinus	☐	☐ Dentures
Mouth, Throat, Neck	☐	*☐ Swallowing precautions
Breasts	☐	
Respiratory	☐	*☐ Home oxygen *☐ Asthma
Cardiovascular	☐	*☐ LDL value ____ (within last 12 months) *☐ Ejection fraction value ____ % Cardiac Arrest
Peripheral Vascular	☐	
Gastrointestinal	☐	
Genitourinary	☐	*☒ Catheter use (list reason, frequency, type, & last change) foley in
Musculoskeletal	☐	
Neurology	☐	
Hematology	☐	*☐ Sickle cell *☐ Blood-borne disease (Hepatitis B, Hepatitis C, HIV, ____)
Endocrine	☐	*☒ Diabetes (last HgbA1c ____) ☐ new Diabetic ☐ type I ☐ type II ☐ type LADA ("Diabetes 1.5")

P:270428782 DOB:01/25/1961 B M
MIKELL
CHARLES
Patient Name
MRN
Adm:10/01/10 M:1400764
PATIENT IDENTIFICATION LABEL

REVIEW OF SYSTEMS (CONTINUED)

Hx/Allergy/Immunization (cont'd)	Sleep/Sleep apnea	Diet/Nutrition	ADL/Exercise
☐ Tetanus or Tdap ____	Insomnia ☐Y ☐N	☐ NPO	☐ Bedrest
☐ Annual Influenza ____ ☐ Pneumococcal ____	Drowsiness ☐Y ☐N	☐ Liquids PO ☐ PEG/TPN	☐ SOB at rest ☐ SOB with exertion
☐ Hepatitis B ____ ☐ Hepatitis A ____	Snoring ☐Y ☐N	☐ Regular diet	☐ Ambulatory
☐ MMR or measles, mumps, rubella ____	Apnea ☐Y ☐N	☐ ADA diet	☐ Ambulates with assistive device
☐ HPV ☐ Polio ☐ Meningitis	Uses CPAP ☐Y ☐N	☐ Low Na or Cardiac diet	☐ Active – run, jog, swim, team

PHYSICAL EXAM:

BP	Pulse	Respiration	Temp	Height	Weight	O2 Sat	Pain
155/93	83	22	97.6			98 ☐RA ☐40%	

		WNL	Describe
GENERAL	Intubated, minimally responsive	☐	☐
SKIN	Inspection of skin & subcutaneous tissue	☐	☐
	Palpation of skin & subcutaneous tissue	☐	☐
HEAD		☑	☐
EYES	Conjunctivae and lids	☐	☐
	Pupils and irises	☐	☐
	Optic discs and post segments	☐	☐
EAR, NOSE, & MOUTH	External inspection of ears	☐	☐
	Auditory canals and tympanic membranes	☐	☐
	Hearing	☐	☐
	Nasal mucosa, septum & turbinates	☐	☐
	Lips, teeth, gums	☐	☐
	Oropharynx	☐	☐
NECK	Trachea	☑	☐
	Thyroid	☑	☐
	Cervical nodes	☐	☐
CHEST/LUNG	Respiratory effort	☐	☐
	Palpation of chest	☑	☐
	Percussion of chest	☑	☐
	Auscultation of lungs	☑	☐

☐ Athletic ☐ Malnourished ☒ Obese ☐ BMI > 35

☐ Decubitus ulcer (list each by location & stage):
Stage: ☐ I ☐ II ☐ III ☐ IV ☐ Suspected Deep Tissue Injury ☐ Unstageable

Normocephalic

Bilateral nares c drying blood & small amt, dark oozing
Pt intubated

Ventilated
CTAB

P:270428782 DOB:01/25/1961 S M
MIKELL
Patient Name CHARLES
MRN Adm:10/01/10 M:1400764
PATIENT IDENTIFICATION LABEL

Area/System		WNL	Deferred	Explanation/Abnormal and Comments
BREAST	Inspection of breasts	☑	☐	
	Palpation of breast & axillae	☑	☐	
CARDIOVASCULAR	Carotid pulses	☑	☐	☐ JVP
	Palpation of heart	☑	☐	
	Auscultation of heart	☑	☐	
	Radial pulses	☐	☐	1+ Radial
	Femoral pulses	☐	☐	
	Popliteal pulses	☐	☐	
	Posterior tibial pulses	☐	☐	
	Dorsal pedal pulses	☐	☐	1+ DP
	Abdominal aorta	☐	☐	
GASTROINTESTINAL	Abdomen (palpation & auscultation)	☐	☐	☐ Ostomy (list type & location)
	Liver & spleen	☐	☐	Obese abd
	Anus, perineum & rectum	☐	☐	hypoactive BS
	Stool sample for occult blood	☐	☐	
GENITO-URINARY	MALE: Bladder	☐	☐	Foley in place
	Penis	☐	☐	
	Scrotal contents	☐	☐	
	Digital or rectal exam of prostate	☐	☐	
	FEMALE: Bladder	☐	☐	
	External genitalia	☐	☐	
	Cervix	☐	☐	
	Uterus	☐	☐	
	Adnexae / parametria	☐	☐	



ADDITIONAL NOTES:

MUSC Health

"HISPHYS"

Adult Inpatient History and Physical Form

Form Origination Date: 1990
Version: 6

Version Date: 9/08

P:270428782 DOB:01/25/1961 S M
MIKELL
CHARLES
Patient Name
MRN Adm:10/01/10 M:1400764

PATIENT IDENTIFICATION LABEL

	Area / System	WNL	Deferred	Explanation of Findings / Test / Comments
MUSCULOSKELETAL / EXTREMITIES	Head & neck	☐	☐	1+ pulses radial/dp
	Digits & nails	☐	☐	
	Left upper extremity	☐	☐	
	Left lower extremity	☐	☐	
	Right upper extremity	☐	☐	
	Right lower extremity	☐	☐	
	Spine, ribs, & pelvis	☐	☐	
	Gait & station	☐	☐	
NEUROLOGIC	Cranial nerves	☐	☐	Shrugs shoulders minimally c pain. Doesn't respond otherwise or follow commands
	Deep tendon reflexes	☐	☐	
	Superficial reflexes	☐	☐	
	Motor	☐	☐	
	Sensation	☐	☐	
	Cerebellar exam	☐	☐	
PSYCHIATRIC	Orientation to time, place & person	☐	☐	
	Mood & affect	☐	☐	
	Recent & remote memory	☐	☐	
	Judgment & insight	☐	☐	

ADDITIONAL NOTES:

STUDIES: (list both studies for which results are known and also those that are ordered but pending)

7. 32/46/168/23
136 | 101 | 40 / 214 E 8.3 / 2.1 / 5.3
4.9 | 24 | 2.1
12.3 / 34.1 / 185 / 1.1T
PT 15.3 / PTT 28.8

ASSESSMENT & PLAN:

49 y/o BM w/ h/o CAD, HTN, heart failure (NIDCM) with cardiac arrest during endoscopy after anesthetics/sedatives given. Pt now not responding

Resp -- Pt. intubated, will continue on SIMV/PRVC, follow ABG

CV -- NIDCM, EF 30-40%, unknown amount of time patient had a low flow cardiac state before the cardiac arrest. Judicious IVF, vasopressin if needed

Neuro -- pt was hypoxic for a period of time. Unknown if he has any acute neurologic process that contributed to the event or is a result of the event. Will get CT of the head to evaluate b/c pt remains unresponsive

Endo -- pt diabetic. Will start him on insulin gtt b/c hyperglycemic

Hypothermia protocol

Admission Orders Reminders	Order Verbiage
☐ Risk of DVT/PE - prophylaxis required? If no, specify reason	Select appropriate prophylaxis <surgery> < medicine>
☐ Risk ETOH withdrawal	Initiate "Alcohol Withdrawal Protocol"
☐ Risk for injury from fall - Initiate Fall Precautions	Initiate "Fall Precautions"
☐ Presence or risk of malnutrition	Dietician consult "Malnutrition" <Main/Children's hosp> <ART>
☐ Presence or risk of swallowing dysfunction	Speech therapy consult "Swallowing dysfunction"
☐ Special discharge needs	Case management consult "Discharge needs"
☐ Palliative care	Palliative care consult

Matos, MD — 6009 — 10/1/10 — 4pm
Physician or Licensed Independent Provider Signature with Credentials — Pager ID — Date — Time
☐ additional comments on back of this page

MUSC Health

"HISPHYS"

Adult Inpatient History and Physical Form

Page 7 of 7

Form Origination Date: 1990
Version: 6

Version Date: 9/08

P:270428782 DOB:01/25/1961 B M
MIKELL
CHARLES
Patient Name
MRN Adm:10/01/10 M:1400764

PATIENT IDENTIFICATION LABEL

Attending Admission Note: >35 min CC time

☒ I have reviewed the examiner's history and physical exam and after my examination and interview of the patient, I agree with the findings.

☒ **Simple update (within 24 hours after inpatient admission or prior to procedures)** to previous H&P (Date 10/1/10)

An H&P older than 30 days prior to admission is not valid and is NOT eligible for simple update.

- ☒ Patient reports no changes to history
- ☒ No changes to physical exam
- ☒ Updates to H&P (list below)

☒ **In addition, my comments on the HISTORY:** 49 y. underwent colonoscopy today for outpatient and had decreased O2 sats → bradycardia → then V. fib. arrest. He responded to defibrillation, was intubated, + has been transferred to ICU. He had (-) head CT + has been started on arctic sun hypothermia protocol.

☒ **In addition, my comments on the REVIEW OF SYSTEMS / PHYSICAL EXAM:** T: 98.5, 155/93, 83, 24, 100%

PMH:
~~HTN~~ CM
CAD
AVNRT s/p ablation
CKD
G6PD def.
OSA, DM

LHC '01, '05
Echo - EF 30-40%.

PLXR - ETT dz
likely mild pulm edem
Heart size - enlarged

PRVC R=15, TV=500, FiO2=40%.
Gen - Unresponsive, on vent.
HEENT - PERRLA - 3 mm sluggish, bleeding L. nare.
Lungs - CTA
CV - RRR
ABD - Obese, soft, NT, (+) BS
Ext. - 1+ edem.

☒ **In addition, my comments on the ASSESSMENT & PLAN:**

Acute Resp. Failure / V. fib arrest / encephalopathy.

1. Cont. mechanical ventilation
2. Hypothermia protocol
3. Cont. Amiodarone gtt.
4. Cautious IVF's c Protocol. Use vasopressors as needed to maintain MAP's.

☐ I have counseled the patient on the harmful effects of smoking and have offered smoking cessation advice

Mike Parkinson — 14376 — 10-1-10 — 5:20 pm

Attending Physician Signature with Credentials — Pager ID — Date — Time

☐ additional comments on back of this page

sh_all_docu_historyphysical

OTE 700019 Rev. 9/08

1400764

Kindred Hospital Charleston
326 Calhoun Street, 3rd Floor, Charleston, SC 29401

PATIENT NAME: MIKELL, CHARLES
MEDICAL RECORD #: CH00012287
DATE OF BIRTH: 01/25/1961
LOC: 3N CH.382-01
SEX: M

Scan

COPY

HISTORY AND PHYSICAL

DATE OF ADMISSION: October 26, 2010

CHIEF COMPLAINT / REASON FOR ADMISSION: Tracheostomy-dependent respiratory failure following arrest in the setting of underlying obstructive sleep apnea

HISTORY OF PRESENT ILLNESS: The patient is a 49-year-old African American male received on transfer from Medical University of South Carolina following an admission spanning October 01, to 2010 to October 26, 2010. The history is gleaned largely from the available written record with some supplementation from his mother, who is present, and occasional responses from the patient himself.

The patient has a past medical history significant for morbid obesity, obstructive sleep apnea, hypertension, nonischemic cardiomyopathy, and chronic kidney disease, who experienced a cardiac arrest during a routine colonoscopy. Apparently he initially manifested hypoxemia, subsequently bradycardia, ventricular fibrillation and subsequently asystole. He was successfully resuscitated, transferred to the ICU. He initially suffered evidence of anoxic encephalopathy with posturing. A head CT was unremarkable at that time and he has recovered neurologically and is responding appropriately to commands. He was initially treated with amiodarone and a hypothermic protocol and continues on oral amiodarone. He had acute kidney injury superimposed on chronic kidney disease, requiring hemodialysis. He was seen by the nephrology service. He has received a tunneled right IJ catheter for dialysis recently, which has reportedly been functioning appropriately. His blood pressure and heart failure have been managed with afterload reducers. According to available records, the patient failed extubation on a couple of occasions and ultimately underwent tracheostomy on October 12, 2010. The patient remains essentially anuric and dialysis dependent.

The patient was identified to have sphenoid and ethmoid sinusitis at the end of October and was placed on Augmentin, which he will complete on October 27, 2010. Swallowing evaluation confirmed that clear liquids are safe and appropriate, and he is tolerating this diet without event. Blood sugars were initially managed aggressively with insulin infusion and has subsequently been transitioned to subcutaneous administration.

REVIEW OF SYSTEMS: The patient denies any current shortness of breath. He does endorse coughing. He denies any chest pain or sensation of palpitations. He denies any headache or facial pain; no recent fevers; no nausea or vomiting or choking with swallowing. He denies any visual changes or neuropathy related to his diabetes. He denies any peripheral edema. His mother notes that he used CPAP at home to manage his obstructive sleep apnea but it was intermittent. Extensive 10-system review is otherwise negative or as described above or in the past medical history.

PAST MEDICAL HISTORY:

1. Nonischemic cardiomyopathy with history of cardiac catheterization in 2001 and 2005.
2. Chronic kidney disease with acute kidney injury, now dialysis dependent currently.
3. History of AV nodal re-entrant tachycardia status post ablation in 2009.
4. Diabetes mellitus longstanding, type 2, insulin requiring.
5. G6PD deficiency.
6. History of dyslipidemia.
7. Obstructive sleep apnea, treated intermittently with CPAP at home.

PLAINTIFF'S EXHIBIT 30

8. Recent diagnosis of sinusitis by head CT on October 20, 2010.
9. Hypertension with LVH by echocardiography, hypokinetic inferior wall with an EF estimated at 43%.
10. Anemia likely due to both chronic disease and perhaps kidney disease.
11. CODE STATUS IS FULL.

SOCIAL HISTORY: The patient was residing alone, living independently but near his mother in West Ashley. His mother is his next of kin and power of attorney, Jewell Mikell. Her number is 556-6989. He is apparently unemployed and disabled per chart review. No significant alcohol or tobacco.

FAMILY HISTORY: Significant for diabetes in both parents.

MEDICATIONS ON TRANSFER: Augmentin 500 mg orally every day through October 27, 2010; Amphojel 30 mL with each meal; Lovenox 30 mg every day subcutaneously; oxycodone 5 mg orally every four hours as needed for pain; hydralazine 100 mg orally three times a day; Colace 100 mg orally twice a day; senna one tablet orally every day; amiodarone 400 mg orally twice a day; Norvasc 5 mg orally every day; isosorbide dinitrate 30 mg orally three times a day; NPH 15 units subcutaneously twice a day; insulin sliding scale; NovoLog 3 units with meals if greater than 50% is consumed; Crestor 20 mg orally every day; Nexium 20 mg orally every day. The patient is tolerating an ADA clear liquid diet.

PHYSICAL EXAMINATION: VITAL SIGNS--the patient is afebrile. Weight 273 pounds. Blood pressure 110/64, heart rate 83 and regular, respiratory rate 24, 35% tracheostomy collar, saturation 100%. GENERAL--the patient is alert; in no acute distress; following commands; pleasant. His uncle and mother are in the room during the evaluation. HEENT--sclerae are muddy; slight conjunctival hemorrhage in the left; pale conjunctivae. Oropharynx was clear without significant thrush or oral lesions. NECK--thick; difficult to assess jugular venous pressures. No masses or thyromegaly. Tracheostomy in place. LUNGS--coarse with rhonchi, changing with cough. No expiratory wheezing. HEART--regular rate and rhythm; no murmurs, rubs or gallops appreciated. ABDOMEN--obese, nontender and nondistended. No hepatosplenomegaly but limited exam due to obesity. GU--normal external male genitalia. The patient is reportedly anuric. SKIN--small area of breakdown in the gluteal cleft but sacrum intact with dry scaling skin. MUSCULOSKELETAL--moving all extremities on command. Grip is 5-/5 bilaterally. The patient is able to plantar and dorsiflex both feet and hip flex at least 5-/5. No significant edema in the pedal area and decent pulses bilaterally x4. NEUROLOGIC--affect is normal.

ASSESSMENT AND PLAN:

1. Tracheostomy-dependent respiratory failure following cardiac arrest in the setting of underlying sleep apnea and nonischemic cardiomyopathy: The patient is currently oxygenating quite well and is quite lucid on 35% oxygen via tracheostomy collar. Pulmonologist will be consulted. Will get a baseline sputum sample and chest x-ray per protocol. Will defer to the pulmonologist regarding management of his sleep apnea as well as progressing with downsizing his tracheostomy capping and advancing diet, etc. The patient was reportedly not 100% compliant with his CPAP machine at home, per his mother's report.
2. Cardiac arrest with preceding hypoxia and ventricular fibrillation, according to available records: The patient has an underlying cardiomyopathy with an ejection fraction of 43%. He also had an AV nodal re-entrant tachycardia status post ablation last year. It is possible that hypoxia triggered this event however I do not have those records available to me. Nonetheless, the patient is presenting in normal sinus rhythm. EKG was reviewed. There is a first-degree AV block but, again, sinus rhythm. He is presenting on a high dose of amiodarone, which we can likely taper to 400 mg orally every day. Will monitor his thyroid function studies and liver function tests as well.
3. Diabetes mellitus longstanding with likely associated nephropathy at least: Check a hemoglobin A1c and continue his subcutaneous insulin regimen and modify as indicated.
4. Dyslipidemia: Will continue his statin.

5. Sinusitis as evidenced by recent head CT with involvement of the sphenoid and ethmoid sinuses: Will complete the Augmentin, renally dosed, as advised by the referring physicians on October 27, 2010.
6. Anemia at least in part due to renal insufficiency: The patient will possibly benefit from an erythropoietin-stimulating agent. I will check his iron stores before initiating.
7. Acute kidney injury superimposed on chronic kidney disease requiring hemodialysis through a right internal jugular Perm-A-Cath: Nephrology will be consulted to help manage his issues. He is continued on Amphojel and will monitor his electrolytes while he is here. Hopefully there will be signs of renal recovery however most recently he is reported to be essentially anuric.
8. Marked debility from prolonged hospitalization and critical illness: Will have physical and occupational therapy assess and treat this patient. Neurologically, he is able to follow commands and so he should be able to make good progress.
9. Dysphagia with current tracheostomy tube: Again, the patient is tolerating a clear liquid diet and will likely be able to be advanced and will defer to their expertise.
10. On review, the patient is vancomycin-resistant enterococcus-positive as well.
11. For deep venous thrombosis prophylaxis, the patient is presenting on Lovenox. I may consider transitioning him to subcutaneous heparin in the setting of concurrent renal failure. The patient will also be continued on his proton pump inhibitor.
12. For his nonischemic cardiomyopathy and hypertension, he will be continued on Isordil and hydralazine as well as Norvasc.

DICTATED BY: Athena Beldecos, MD

AB/KHT
DD: 10/26/2010 12:59 ET
DT: 10/26/2010 14:07 ET
Job #: 18975/439946964

cc: Terrill Huggins, MD

Dr. Van Bakel
Cardiology, MUSC

Kindred Hospital Charleston
326 Calhoun Street, 3rd Floor, Charleston, SC 29401

PATIENT NAME: MIKELL, CHARLES
MEDICAL RECORD #: CH00012287
DATE OF BIRTH: 01/25/1961
LOC: 3C CH.315-01
SEX: M

TRANSFER SUMMARY

COPY

DATE OF TRANSFER: November 19, 2010

DATE OF ADMISSION: October 26, 2010

REFERRING PHYSICIAN: Dr. Terrell Huggins

CHIEF COMPLAINT: At the time of admission: Tracheostomy-dependent respiratory failure following arrest in the setting of underlying obstructive sleep apnea. For history of present illness, social and family history and physical examination, see the dictated admission history and physical.

PAST MEDICAL HISTORY: At the time of admission in addition to the tracheostomy-dependent respiratory failure includes nonischemic cardiomyopathy with history of cardiac catheterization 2001, 2005; chronic kidney disease with acute kidney injury on admission on hemodialysis, history of AV nodal re-entrant tachycardia status post ablation 2009, diabetes mellitus, longstanding, type 2, insulin requiring; G6PD deficiency, history of dyslipidemia, obstructive sleep apnea with CPAP at home, sinusitis diagnosed 10/20/10, hypertension with left ventricular hypertrophy by echocardiography, hypokinetic inferior wall with an ejection fraction estimated at 43%, anemia likely of chronic kidney disease.

CODE STATUS: FULL CODE.

HOSPITAL COURSE:

1. Again patient was admitted with tracheostomy-dependent respiratory failure after cardiac arrest in the setting of underlying sleep apnea and nonischemic cardiomyopathy. The patient arrived at Kindred Hospital oxygenating well on 35% tracheostomy collar. Pulmonary consult was obtained with Charleston Pulmonary. The patient did well during his hospitalization and advanced to capping trials and he was capped successfully with using his CPAP machine at night. He was subsequently decannulated on 11/11/10.
2. Acute-on-chronic kidney injury, stage III chronic kidney disease prior to October. He was begun on hemodialysis at the university. He was followed by Dr. Browder in nephrology and he began holding dialysis on 11/03/10. The patient did well with that with as needed Bumex. He did not require any further hemodialysis and per Dr. Browder's recommendation, Permcath was discontinued prior to discharge. Most recent creatinine on 11/15/10 was 3.1. Basic metabolic panel at that time also showed sodium 138, potassium 4.0, BUN 62, creatinine 3.1. The patient will follow as outpatient with Dr. Browder, again at Charleston Nephrology.
3. Anemia of chronic disease, chronic kidney disease. She was transfused 2 units of packed red cells on 10/27/10. IV iron was given by nephrology. He has been receiving darbepoetin weekly. He will be followed again in the nephrology clinic for this as well as to reassess for need.
4. History of sinusitis. He was on Augmentin through 10/27/10. He is on Flonase as needed at the time of discharge.
5. Nonischemic cardiomyopathy with an ejection fraction of 43% with left ventricular hypertrophy, history of ventricular fibrillation arrest in the setting of hypoperfusion. Amiodarone was stopped. He is on metoprolol and at this time for his blood pressure, he is on metoprolol, Isordil, alprazolam.
6. History of atrioventricular nodal re-entrant tachycardia status post ablation 2009, dyslipidemia. He is on

PLAINTIFF'S EXHIBIT 31

7. Diabetes. He is on NPH and patient has reported that he had 70/30 at the time of discharge. He will likely resume that. I have agreed with the patient to begin that but he needs to check his sugars 2-3 times a day and periodically to make sure he is stable and report to Dr. Akhtar, his primary care physician. His hemoglobin A1c is 4.9.
8. History of G6PD deficiency.
9. Hypertension has been stable again on new agents, these having converted from his prior medications.
10. History of VRE positive colonization.
11. He has had concerns with constipation. He is on a bowel regimen.
12. History of anxiety and low-dose Ativan is given at the time of discharge.

LABORATORY DATA: Most recent laboratory data: Sodium again 138, potassium 4.0, BUN 62, creatinine 3.1, with peak creatinine of 5.8. White count 6300, hemoglobin 9.7, hematocrit 27.6, platelets 189,000. Most recent magnesium again on 11/15/10 was 1.9 and phosphorus 3.8.

MEDICATIONS: Medications at the time of discharge are: Aranesp 150 mcg every Tuesday, he is instructed that this will be followed by nephrology, the patient will be dosed as needed; Colace 100 mg twice a day; Flonase 2 sprays at bedtime as needed; Lasix 80 mg once a day; hydralazine 50 mg three times a day; NPH insulin 30 units in the morning, 10 units at night; he did convert at the time of discharge to 70/30; Isordil 30 mg three times a day; metoprolol 25 mg twice a day; MiraLax as needed; Crestor 20 mg once a day; Senokot once at bedtime; topical Aquaphor; Ativan .5 mg by mouth twice a day as needed.

FOLLOWUP: Followup is set up already with Dr. Akhtar, his primary care physician, on 11/29/10 at 11:00 a.m. and he needs to call for appointment with Dr. Van Bakel for further recommendations on whether to resume and the need for resumption of anticoagulation therapy. Patient has been in sinus rhythm during his hospitalization without any problems on telemetry, and lastly he is to follow with Dr. Rick Browder in nephrology and he will go for an appointment for that.

PHYSICAL EXAMINATION: VITAL SIGNS: On the day of discharge, blood pressure 123/67, heart rate 71, temperature maximum 98, respiratory rate 20, blood sugar 83 this morning. GENERAL: Alert and oriented times 3. Morbid obesity. No rashes are noted. He does have the right upper PICC removed and the right chest Permcath removed. The site is clean. HEENT: Pupils are equal and reactive to light. NECK: Stoma site is clean and healing. CHEST: Clear to auscultation. CARDIOVASCULAR: Regular rhythm and rate, did not appreciate any murmur, rub or gallop. ABDOMEN: Benign. LOWER EXTREMITIES: Do not have any ulcer or pedal edema. He is wearing support stockings.
It has taken greater than 30 minutes in discharge planning. His mother is at the bedside. The patient is pleased and

they are both informed of the discharge plan. Medications are reviewed and again, it has taken greater than 30 minutes in discharge planning.

DICTATED BY: Sofia Barbosa, MD

SB/KHT
DD: 11/19/2010 11:48 ET
DT: 11/19/2010 13:44 ET
Job #: 975441/443180970

cc: Dr Van Bakel
Cardiology at MUSC

Dr Ahktar
Patient's PCP at MUSC

Dr Rick Browder
Charleston Nephrology

Dr Huggins



PLAINTIFF'S
EXHIBIT
45h


PLAINTIFF'S
EXHIBIT
46
03/01/2016

DEFENDANT'S EXHIBIT 2 4-18-16

274

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Cardiopulmonary Resuscitation Event Form

Form Origination Date: **Version:** **Version Date:**

Patient Name _____
MRN _____
STAMP PLATE AREA

Date _____ **Time** _____ **Location** _____ **Weight** _____ **2-3333 called** ☐ Yes ☐ No **Time** ____ **Witnessed** ☐ Yes ☐ No **Patient Conscious at** ☐ Yes ☐ No ☐ Unknown
Type of Event ☐ Respiratory ☐ Respiratory leading to Cardiopulmonary ☐ Cardiopulmonary **Monitors present at onset** ☐ EKG ☐ SaO_2 ☐ Apnea ☐ None **Resuscitation event ended at** _____ (time)
Reason event ended: ☐ Return of circulation ☐ Return of ventilation ☐ DNR ☐ Unresponsive to ALS ☐ Family request/restrictions **Outcome Status** ☐ Death ☐ Alive, same location ☐ Alive, transferred to ____

Airway/Ventilation

Initial ☐ Spontaneous ☐ Apnea ☐ Agonal ☐ Assisted
Time of first assisted ventilation _____
Ventilation type ☐ Mouth to Mouth ☐ Mouth/Mask ☐ BVM ☐ Ambu/ET
Existing Airway ☐ ETT ☐ Tracheotomy
Airway Inserted ☐ ETT ☐ LMA Other _____
ETT Intubation Time _____ Size _____
By whom _____
Secondary confirmation ☐ Auscultation ☐ End-tidal CO_2

Circulation

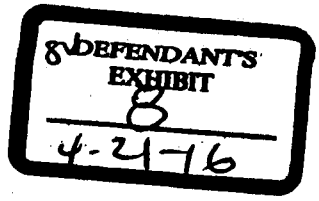
Initial rhythm _____
Time chest compressions started _____
Rhythm when chest compressions started _____
Return of circulation time _____
AED applied ☐ Yes ☐ No ☐ N/A Time, if applied _____
AED shock ☐ Advised ☐ Delivered
Pacemaker ☐ None ☐ Permanent ☐ Transcutaneous ☐ Epicardial ☐ Transvenous ☐ Transesophogeal Settings: _____

Team Members / Name (print)

Anesthesia _____
MD Mayday Leader _____
Mayday team RN _____
Patient's nurse _____
Pharmacist _____
Respiratory Therapist _____
Recorder _____

Time	Compressions performed	Ventilations performed	Pulse	Respirations	Blood pressure	O_2 saturation	Rhythm	Actions / Narrative All medication doses given IV, unless specified otherwise	Defibrillation/ Cardioversion Joules	Epinephrine mg	Atropine mg	Vasopressin units	Amiodarone mg	Sodium Bicarb mEq	Calcium Chloride mg	Lidocaine mg		
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																
	☐ yes ☐ no	☐ yes ☐ no																

Recorder signature _____ DateTime _____ Physician signature/Pager ID _____ Date/time _____
Fax completed form to Risk Management at 2-5119
Page ___ of ___
cpriform



MUSC Medical Center
HOSPITAL DISCHARGE SUMMARY
Patient Name: MIKELL, CHARLES L
MRN: 001400764
Patcom: 102629714
Admitted: 08/17/2003
Discharged: 08/27/2003
Service:
Attending: MICHAEL R ZILE, MD

Referring:

FINAL DIAGNOSES:
1. Nonischemic cardiomyopathy.
2. Atrioventricular node reentrant tachycardia.
3. Acute renal failure secondary to hypotension.
4. Hypertension.
5. Diabetes.
6. G6PD deficiency.

PROCEDURES:
1. Echocardiogram was performed on 08/18/2003 which showed normal sinus rhythm, left ventricle was dilated, end-diastolic diameter was 6.3, end-systolic diameter was 4.8 cm. He had an eccentric left ventricular hypertrophy. There was mild global hypokinesis of the left ventricle. The global EF was 40-50%, left atrium was dilated 5.8 cm. Right ventricle was dilated. There was mild tricuspid regurgitation with peak right ventricular systolic pressure of 55.
2. Lower extremity Dopplers were done, which were negative.
3. Abdominal ultrasound was done, which showed hepatomegaly, thickened gallbladder without pericholecystic fluid to be consistent with cholecystitis. There was no ascites. There was sludge in the gallbladder. No ascites. That was done on 08/18/2003.
4. On 08/26/2003, a CT IVP was done, which showed diffuse bladder wall thickening with perivesicular fat stranding to the right and left hemipelvis and into the left perirenal space.
5. An EP study was done on 08/25/2003, which did not show inducible ventricular tachycardia. It did show 2 supraventricular arrhythmias, one with AVNRT and the second was atrial tachycardia.

HOSPITAL COURSE: The patient was transferred from Roper Hospital. The patient was initially admitted there. He had complained of a cough with yellowish sputum production for several weeks. He had had some hypoglycemic episodes and had had hypoglycemic episodes during the morning before admission. His family then left him and later called him back with no answer on the phone and then called EMS. The EMS arrived and he was found down on the floor for a time that was ultimately estimated to be around 2-1/2 hours. He was first found with a blood sugar of around 33.

The events surrounding this initial event are unclear per the record, but apparently the initial rhythm when he was found was ventricular tachycardia; however, it does not appear that he was cardioverted or that CPR was performed, so this is ultimately uncertain.

The patient was initially admitted to Roper Hospital where he was hypotensive requiring pressors. He had a history of a cardiomyopathy nonischemic with a normal heart catheterization in 2001. An echo at Roper showed an EF around 20-30%. He was transferred here for a possible heart transplant.

Also, he had acute renal failure with a creatinine rise to around 4. He had markedly elevated LFTs in the 1000 range on admission.

The patient was admitted with an increased creatinine to around 4, his LFTs were increased in the 1000 range. The patient did appear to be in decompensated heart failure at the time. Over the next day, we were able to wean his dopamine, and the patient's blood pressure remained stable. He appeared to have decompensated heart failure, however, he was oxygenating well and we felt that his increased creatinine and LFT increase were due to the hypotensive episode that he had sustained.

A renal consult was obtained, and they agreed with this and felt that there could be possible other causes such as allergic interstitial nephritis as he was on antibiotics in the outside hospital. We kept his ins and outs even for several days, and his creatinine started to decline and continued to decline throughout his hospitalization. Ultimately, his creatinine was 1.2 on discharge. His LFTs continued to decline as well, and on discharge they were normal at 39 and 25, his total bilirubin was 2.6, and his direct was 1.1, which were decreased, as well as alkaline phosphatase was 193. An ultrasound was done on initial presentation of his abdomen to evaluate his liver and bile ducts. He had a thickened gallbladder with sludge but no evidence of cholecystitis.

As his initial course was unclear, we did initially treat him for possible acalculous cholecystitis, but his blood cultures and white count were never significantly elevated, and this was ultimately stopped.

Ultimately, the patient was diuresed with Lasix. He was restarted on his heart failure regimen as his creatinine decreased. However, the patient diuresed many liters over the next several days and on discharge was feeling much better, able to ambulate without much shortness of breath, and felt back to his baseline.

Due to his history of systolic dysfunction and report of ventricular tachycardia on presentation, EP study was ultimately done. It showed no inducible ventricular tachycardia and did show atrial tachycardia and AVNRT. The patient was then loaded with sotalol and followed for 4 doses and his QTC was not prolonged. The patient is ultimately to have an EP study for ablation of AVNRT as this could possibly be a reason for his dilated cardiomyopathy. Of note, during the hospital, his heart rate was normally in the 80s, but would increase to 120 range and had a long RP interval. He was given adenosine once for this and broke back to normal sinus rhythm.

The patient will follow up for AVNRT ablation.

Before discharge, the patient was having pain with urination. A UA was checked and showed no evidence of infection. Ultimately, he did have some red blood cells. He ultimately had a CTIVP, which showed thickening of the gallbladder. The patient said consistent with possible hemorrhagic cystitis. Urology was consulted. They felt that this was most likely Foley trauma and that it would resolve, but felt that he should follow up in the urology clinic.

DISCHARGE MEDICATIONS:
Lasix 40 mg p.o. q. day.

2. Lopressor XL 50 mg p.o. q. day.
3. Spironolactone 25 mg p.o. q. day.
4. Aspirin 81 mg p.o. q. day.
5. Sotalol 80 mg p.o. b.i.d.
6. Pravachol 40 mg p.o. q. day.
7. Monopril 10 mg p.o. q. day.
8. 70/30 insulin, 20 units q.a.m. and 10 units q.p.m.

PHYSICAL ACTIVITY: The patient is not to lift heavy objects greater than 10 pounds for the next 10-14 days. He has been told that if his groin area if he has swelling or increased bleeding or pain, he is to call his doctor or report the the emergency room.

DIET: A low fat, low salt diet.

FOLLOWUP:
1. With Dr. Amy Steed in 4 to 6 weeks.
2. With Dr. Leman for AVNRT ablation on 09/17/2003.
3. He is to follow up in the renal fellows clinic in 4 to 6 weeks.
4. Follow up with urology in 4 to 6 weeks.
5. With Dr. Zile in 4 to 6 weeks.

Dictated by: Weems Pennington, III, MD

_____
Weems Pennington, III, MD

_____
MICHAEL R ZILE, MD
Attending

234675 / 32922 /
JOB: 90768
DD: 09/10/03 05:08 PM
DT: 09/11/03 10:21 AM

cc: Amy H. Steed, MD
Additional CC:_____

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Medical University of South Carolina
Charleston, SC
843-792-2123

ECHOCARDIOGRAPHY REPORT

Patient: MIKELL, CHARLES **MRN: 001400764**

Attending:

Date: 8/18/2003
Status: INITIAL

Patient Info
Patient:MIKELL, CHARLES
Patient ID:001400764
Birthdate:01:25:1961
Sex:M
Ward: CCU PORT

2D/M-Mode/Doppler
LVd Mass (ASE) 319.41 g
LVd Mass Ind (ASE) 0.00 g/m2
TR Vmax -3.25 m/s
RVSP 52.32 mmHg
AV Vmax -1.42 m/s
AV Vmean -1.16 m/s
AV maxPG 8.02 mmHg
AV meanPG 5.40 mmHg
AV VTI 34.16 cm
RAP 10.00 mmHg
TR Vmax -3.36 m/s
TR maxPG 45.14 mmHg
RVSP 55.14 mmHg
Ao Diam 3.13 cm
LA Diam 5.81 cm
AV Cusp 1.72 cm
LA/Ao 1.86 NoUnit
TR maxPG 42.32 mmHg
IVSd 1.10 cm
LVIDd 6.50 cm
LVPWd 1.10 cm
IVSs 1.67 cm
LVIDs 4.66 cm
LVPWs 1.49 cm
EDV(Teich) 216.09 ml
ESV(Teich) 100.15 ml
EF(Teich) 53.65 %
%FS 28.38 %
SV(Teich) 115.94 ml

Printed: 10/27/2003 10:57:17
Printed by: LISICKI, MARTHA

ECHOCARDIOGRAPHY REPORT

Patient: MIKELL, CHARLES
MRN: 001400764
Attending:
Date: 8/18/2003
Status: INITIAL

NORMAL VALUES
LAD - (1.0 - 4.0)
AO - (1.5 - 2.6)
LVDd - (3.5 - 5.6)
LVSs - (0.6 - 1.1)
LVPWs - (0.6 - 1.1)
LV_Mass - (Female < 110 g/m2; Male < 134 g/m2)
LVEF - (50 - 80%)

DOPPLER COLOR FLOW IMAGING
THERE IS MILD TRICUSPID VALVE REGURGITATION. THE ESTIMATED PEAK RIGHT VENTRICULAR SYSTOLIC PRESSURE IS 55 mmHg. NEITHER INSUFFICIENCY NOR STENOSIS OF THE OTHER CARDIAC VALVES IS IDENTIFIED.

INTERPRETATION
THIS IS A TECHNICALLY EXCELLENT STUDY. THE PATIENT HAD NORMAL SINUS RHYTHM THROUGHOUT THE STUDY. THE LEFT VENTRICLE IS DILATED. THE LEFT VENTRICULAR END DIASTOLIC DIAMETER IS 6.3 cm. THE LEFT VENTRICULAR END SYSTOLIC DIAMETER IS 4.8 cm. THERE IS ECCENTRIC LEFT VENTRICULAR HYPERTROPHY AS DETERMINED BY LEFT VENTRICULAR MASS WITH NORMAL WALL THICKNESS. THERE IS MILD GLOBAL HYPOKINESIS OF THE LEFT VENTRICLE. THE GLOBAL LEFT VENTRICULAR EJECTION FRACTION IS 40-50%. THE LEFT ATRIUM IS DILATED AT 5.8 cm. THE RIGHT VENTRICLE IS DILATED. THE FOUR CARDIAC VALVES APPEAR STRUCTURALLY NORMAL. THERE ARE NO INTRACARDIAC MASSES IDENTIFIED AND A PERICARDIAL EFFUSION IS NOT VISUALIZED. MICHAEL G. ESCANO, MD, FELLOW IN CARDIOLOGY MARY B. FRANKIS, M.D. ATTENDING

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Medical University of South Carolina
Charleston, SC
843-792-2123

ECHOCARDIOGRAPHY REPORT

Patient: MIKELL, CHARLES MRN: 001400764

Attending:

Date: 10/30/2003
Status: INITIAL

Patient Info
Patient:MIKELL, CHARLES
Patient ID:001400764
Birthdate:01:25:1961
Sex:M
Ward: PDC
Weight:239.00 lb
Height:68.90 in

2D/M-Mode/Doppler
Ao Diam 3.29 cm
LA Diam 5.33 cm
AV Cusp 2.21 cm
LA/Ao 1.62 NoUnit
IVSd 1.25 cm
LVIDd 6.18 cm
LVPWd 1.08 cm
IVSs 1.93 cm
LVIDs 4.14 cm
LVPWs 1.65 cm
EDV(Teich) 192.88 ml
ESV(Teich) 76.03 ml
EF(Teich) 60.58 %
%FS 33.03 %
SV(Teich) 116.85 ml
LVd Mass (ASE) 316.68 g
LVd Mass Ind (ASE) 142.01 g/m2
AV Vmax -1.17 m/s
AV Vmean -0.84 m/s
AV maxPG 5.52 mmHg
AV meanPG 2.82 mmHg
AV VTI 29.19 cm

NORMAL VALUES
LAD - (1.0 - 4.0)
AO - (1.5 - 2.6)
LVDd - (3.5 - 5.6)
LVSs - (0.6 - 1.1)
LVPWs - (0.6 - 1.1)
LV_Mass - (Female < 110 g/m2; Male < 134 g/m2)
LVEF - (50 - 80%)

DOPPLER COLOR FLOW IMAGING

Printed: 11/03/2003 14:15:42
Printed by: MCCULLOUGH, DEBORAH

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Medical University of South Carolina
Charleston, SC
843-792-2123

Discharge Summary

Patient: MIKELL, CHARLES
Attending:

MRN: 001400764
Date: 8/27/2003
Status: INITIAL

Patient Name: MIKELL, CHARLES L

MRN: 001400764

Patcom: 102629714

Admitted: 08/17/2003

Discharged: 08/27/2003

Service:

Attending: MICHAEL R ZILE, MD

Referring:

FINAL DIAGNOSES:

1. Nonischemic cardiomyopathy.
2. Atrioventricular node reentrant tachycardia.
3. Acute renal failure secondary to hypotension.
4. Hypertension.
5. Diabetes.
6. G6PD deficiency.

PROCEDURES:

1. Echocardiogram was performed on 08/18/2003 which showed normal sinus rhythm, left ventricle was dilated, end-diastolic diameter was 6.3, end-systolic diameter was 4.8 cm. He had an eccentric left ventricular hypertrophy. There was mild global hypokinesis of the left ventricle. The global EF was 40-50%, left atrium was dilated 5.8 cm. Right ventricle was dilated. There was mild tricuspid regurgitation with peak right ventricular systolic pressure of 55.
2. Lower extremity Dopplers were done, which were negative.
3. Abdominal ultrasound was done, which showed hepatomegaly, thickened gallbladder without pericholecystic fluid to be consistent with cholecystitis. There was no ascites. There was sludge in the

gallbladder. No ascites. That was done on 08/18/2003.

4. On 08/26/2003, a CT IVP was done, which showed diffuse bladder wall thickening with perivesicular fat stranding to the right and left hemipelvis and into the left perirenal space.

5. An EP study was done on 08/25/2003, which did not show inducible ventricular tachycardia. It did show 2 supraventricular arrhythmias, one with AVNRT and the second was atrial tachycardia.

HOSPITAL COURSE: The patient was transferred from Roper Hospital. The patient was initially admitted there. He had complained of a cough with yellowish sputum production for several weeks. He had had some hypoglycemic episodes and had had hypoglycemic episodes during the morning before admission. His family then left him and later called him back with no answer on the phone and then called EMS. The EMS arrived and he was found down on the floor for a time that was ultimately estimated to be around 2-1/2 hours. He was first found with a blood sugar of around 33.

The events surrounding this initial event are unclear per the record, but apparently the initial rhythm when he was found was ventricular tachycardia; however, it does not appear that he was cardioverted or that CPR was performed, so this is ultimately uncertain.

The patient was initially admitted to Roper Hospital where he was hypotensive requiring pressors. He had a history of a cardiomyopathy nonischemic with a normal heart catheterization in 2001. An echo at Roper showed an EF around 20-30%. He was transferred here for a possible heart transplant.

Also, he had acute renal failure with a creatinine rise to around 4. He had markedly elevated LFTs in the 1000 range on admission.

The patient was admitted with an increased creatinine to around 4, his LFTs were increased in the 1000 range. The patient did appear to be in decompensated heart failure at the time. Over the next day, we

were able to wean his dopamine, and the patient's blood pressure remained stable. He appeared to have decompensated heart failure, however, he was oxygenating well and we felt that his increased creatinine and LFT increase were due to the hypotensive episode that he had sustained.

A renal consult was obtained, and they agreed with this and felt that there could be possible other causes such as allergic interstitial nephritis as he was on antibiotics in the outside hospital. We kept his ins and outs even for several days, and his creatinine started to decline and continued to decline throughout his hospitalization. Ultimately, his creatinine was 1.2 on discharge. His LFTs continued to decline as well, and on discharge they were normal at 39 and 25, his total bilirubin was 2.6, and his direct was 1.1, which were decreased, as well as alkaline phosphatase was 193. An ultrasound was done on initial presentation of his abdomen to evaluate his liver and bile ducts. He had a thickened gallbladder with sludge but no evidence of cholecystitis.

As his initial course was unclear, we did initially treat him for possible acalculous cholecystitis, but his blood cultures and white count were never significantly elevated, and this was ultimately stopped.

Ultimately, the patient was diuresed with Lasix. He was restarted on his heart failure regimen as his creatinine decreased. However, the patient diuresed many liters over the next several days and on discharge was feeling much better, able to ambulate without much shortness of breath, and felt back to his baseline.

Due to his history of systolic dysfunction and report of ventricular tachycardia on presentation, EP study was ultimately done. It showed no inducible ventricular tachycardia and did show atrial tachycardia and AVNRT. The patient was then loaded with sotalol and followed for 4 doses and his QTC was not prolonged. The patient is ultimately to have an EP study for ablation of AVNRT as this could possibly be a

3WPH 004660

reason for his dilated cardiomyopathy. Of note, during the hospital, his heart rate was normally in the 80s, but would increase to 120 range and had a long RP interval. He was given adenosine once for this and broke back to normal sinus rhythm.

The patient will follow up for AVNRT ablation.

Before discharge, the patient was having pain with urination. A UA was checked and showed no evidence of infection. Ultimately, he did have some red blood cells. He ultimataly had a CTIVP, which showed thickening of the gallbladder. The patient said consistent with possible hemorrhagic cystitis. Urology was consulted. They felt that this was most likely Foley trauma and that it would resolve, but felt that he should follow up in the urology clinic.

DISCHARGE MEDICATIONS:

1. Lasix 40 mg p.o. q. day.
2. Lopressor XL 50 mg p.o. q. day.
3. Spironolactone 25 mg p.o. q. day.
4. Aspirin 81 mg p.o. q. day.
5. Sotalol 80 mg p.o. b.i.d.
6. Pravachol 40 mg p.o. q. day.
7. Monopril 10 mg p.o. q. day.
8. 70/30 insulin, 20 units q.a.m. and 10 units q.p.m.

PHYSICAL ACTIVITY: The patient is not to lift heavy objects greater than 10 pounds for the next 10-14 days. He has been told that if his groin area if he has swelling or increased bleeding or pain, he is to call his doctor or report the the emergency room.

DIET: A low fat, low salt diet.

FOLLOWUP:

1. With Dr. Amy Steed in 4 to 6 weeks.
2. With Dr. Leman for AVNRT ablation on 09/17/2003.

3. He is to follow up in the joint fellows clinic in 4 to 6 weeks.
4. Follow up with urology in 4 to 6 weeks.
5. With Dr. Zile in 4 to 6 weeks.

Dictated by: Weems Pennington, III, MD

Weems Pennington, III, MD

MICHAEL R ZILE, MD
Attending

234675 / 32922 /
JOB: 90768
DD: 09/10/03 05:08 PM
DT: 09/11/03 10:21 AM

cc: Amy H. Steed, MD
Additional CC:

ECHOCARDIOGRAPHY REPORT

Patient: MIKELL, CHARLES **MRN:** 00140078

Attending:

Date: 10/30/2003
Status: INITIAL

NEITHER INSUFFICIENCY NOR STENOSIS OF THE VALVES IS IDENTIFIED.

INTERPRETATION

THIS IS A TECHNICALLY EXCELLENT STUDY.THE PATIENT HAD NORMAL SINUS RHYTHM THROUGHOUT THE STUDY. THE LEFT VENTRICLE IS DILATED. THE LEFT VENTRICULAR END DIASTOLIC DIAMETER IS 6.2cm. THE LEFT VENTRICULAR END SYSTOLIC DIAMETER IS 4.1cm. THERE IS CONCENTRIC LEFT VENTRICULAR HYPERTROPHY WITH INCREASED WALL THICKNESS AND MYOCARDIAL MASS. THERE IS HYPOKINESIS OF THE INFERIOR WALL. THE GLOBAL LEFT VENTRICULAR EJECTION FRACTION IS ~50%. THE RIGHT VENTRICLE AND RIGHT ATRIUM APPEAR NORMAL IN SIZE. THE LEFT ATRIUM IS DILATED AT 5.3cm. THE FOUR CARDIAC VALVES APPEAR STRUCTURALLY NORMAL.THERE ARE NO INTRACARDIAC MASSES IDENTIFIED AND A PERICARDIAL EFFUSION IS NOT VISUALIZED. BRUCE USHER, M.D. ATTENDING

MUSC Health
Medical University of South Carolina
Charleston, SC
843-792-2123

ECHOCARDIOGRAPHY REPORT

Patient: MIKELL, CHARLES
Attending:

MRN: 001400764
Date: 10/30/03 3:28 PM
Status: INITIAL

Patient Info
Patient:MIKELL, CHARLES
Patient ID:001400764
Birthdate:01:25:1961
Sex:M
Ward: PDC
Weight:239.00 lb
Height:68.90 in
2D/M-Mode/Doppler
Ao Diam 3.29 cm
LA Diam 5.33 cm
AV Cusp 2.21 cm
LA/Ao 1.62 NoUnit
IVSd 1.25 cm
LVIDd 6.18 cm
LVPWd 1.08 cm
IVSs 1.93 cm
LVIDs 4.14 cm
LVPWs 1.65 cm
EDV(Teich) 192.88 ml
ESV(Teich) 76.03 ml
EF(Teich) 60.58 %
%FS 33.03 %
SV(Teich) 116.85 ml
LVd Mass (ASE) 316.68 g
LVd Mass Ind (ASE) 142.01 g/m2
AV Vmax -1.17 m/s
AV Vmean -0.84 m/s
AV maxPG 5.52 mmHg
AV meanPG 2.82 mmHg
AV VTI 29.19 cm
NORMAL VALUES
LAD - (1.0 - 4.0)
A0 - (1.5 - 2.6)
LVDd - (3.5 - 5.6)
LVSs - (0.6 - 1.1)
LVPWs - (0.6 - 1.1)
LV_Mass - (Female < 110 g/m2; Male < 134 g/m2)
LVEF - (50 - 80%)
DOPPLER COLOR FLOW IMAGING

This document should not be filed in the paper medical record and should be confidentially destroyed when it is no longer needed.

Printed by: KNIGHT, MARGARET
Date Printed: 06/11/2013

MUSC Health
Medical University of South Carolina
Charleston, SC
843-792-2123

ECHOCARDIOGRAPHY REPORT

Patient: MIKELL, CHARLES
MRN: 001400764
Attending:
Date: 10/30/03 3:28 PM
Status: INITIAL

NEITHER INSUFFICIENCY NOR STENOSIS OF THE VALVES IS IDENTIFIED.
INTERPRETATION
THIS IS A TECHNICALLY EXCELLENT STUDY.THE PATIENT HAD NORMAL SINUS RHYTHM THROUGHOUT THE STUDY. THE LEFT VENTRICLE IS DILATED. THE LEFT VENTRICULAR END DIASTOLIC DIAMETER IS 6.2cm. THE LEFT VENTRICULAR END SYSTOLIC DIAMETER IS 4.1cm. THERE IS CONCENTRIC LEFT VENTRICULAR HYPERTROPHY WITH INCREASED WALL THICKNESS AND MYOCARDIAL MASS. THERE IS HYPOKINESIS OF THE INFERIOR WALL. THE GLOBAL LEFT VENTRICULAR EJECTION FRACTION IS ~50%. THE RIGHT VENTRICLE AND RIGHT ATRIUM APPEAR NORMAL IN SIZE. THE LEFT ATRIUM IS DILATED AT 5.3cm. THE FOUR CARDIAC VALVES APPEAR STRUCTURALLY NORMAL.THERE ARE NO INTRACARDIAC MASSES IDENTIFIED AND A PERICARDIAL EFFUSION IS NOT VISUALIZED. BRUCE USHER, M.D. ATTENDING

This document should not be filed in the paper medical record and should be confidentially destroyed when it is no longer needed.

Discharge Summary

Patient: MIKELL, CHARLES
Attending:

MRN: 001400764
Date: 11/5/03 12:00 AM
Status: INITIAL

Patient Name: MIKELL, CHARLES L
MRN: 001400764
Patcom: 480109909
Admitted: 11/04/2003
Discharged: 11/05/2003
Service: Cardiology EP
Attending: Robert B. Leman, MD
Referring: Amy H. Steed, MD

HISTORY OF PRESENT ILLNESS: Mr. Mikell is a 42-year-old gentleman with a history of nonischemic dilated cardiomyopathy, AV node reentry tachycardia, acute renal failure secondary to hypertension, hypertension, diabetes, hyperlipidemia, who is admitted for RF ablation of AV nodal reentry tachycardia. Recall this gentleman had a syncopal episode at home in 09/03 with hypoglycemia, was admitted to Roper and transferred to MUSC. An EP study at that time induced AV nodal reentry tachycardia. There was no syncope and no prior complaints of palpitations.

PAST MEDICAL HISTORY: Positive for an MI 4 years ago, diabetes mellitus, hypertension.

FAMILY HISTORY: Positive for diabetes mellitus in father.

SOCIAL HISTORY: The patient is divorced with 3 children. He is a nonsmoker, admits to occasional alcohol use, and is employed as a technical director at a local TV station.

ALLERGIES: There are no known drug allergies.

HOSPITAL COURSE: Mr. Mikell was admitted to the fifth floor heart and vascular center where he underwent an RF ablation of AV nodal reentry tachycardia which was successful. He was transferred to the ninth floor where he had an uneventful overnight stay. EKG done on a.m. following the ablation revealed a normal sinus rhythm as did telemetry monitoring. The patient was discharged to home with instructions to follow up with Dr. Leman on 01/12/04 at 2 o'clock in Rutledge Tower.

DISCHARGE MEDICATIONS:

1. Lasix 40 mg p.o. daily.
2. Aspirin 81 mg p.o. daily.
3. Spironolactone 25 mg p.o. daily.
4. Pravachol 40 mg p.o. daily.
5. Monopril 10 mg p.o. daily.
6. Lopressor 50 mg p.o. daily.
7. 70/30 insulin 20 units subcu b.i.d.

DISPOSITION: The patient was instructed to continue resting for 2

This document should not be filed in the paper medical record and should be confidentially destroyed when it is no longer needed.

Discharge Summary

Patient: MIKELL, CHARLES **MRN:** 001400764
Attending: Date: 11/5/03 12:00 AM
Status: INITIAL

days, resume moderate activity for the next 2 weeks, and full activity after 2 weeks. There is to be no tub bath for 7 days, no heavy lifting for 2 weeks. He is to call us for temperature of greater than 101.5 or if he notes redness, swelling, drainage or discharge from groin site.
Dictated by: Tammy L. Barnes, FNP

Tammy L. Barnes, FNP

Robert B. Leman, MD
Attending
399068 / 34804 / 33290
JOB: 101909
DD: 11/07/03 07:54 AM
DT: 11/08/03 08:23 AM
cc: Amy H. Steed, MD
Robert B. Leman, MD
Additional CC:

This document should not be filed in the paper medical record and should be confidentially destroyed when it is no longer needed.

MUSC Health
MEDICAL UNIVERSITY of SOUTH CAROLINA
ADULT ECHOCARDIOGRAPHY LAB
(843) 876- 5146 Phone
(843) 876-5140 Fax

Patient Name: MIKELL, CHARLES
Patient Id: 1400764
Date of birth: 01/25/1961
Sex: Male
Date: 02/04/2005
Height: 175.0 cm
Weight: 127.0 kg
Indication: 401.9
PALPITATIONS
Sonographer: SK
BP:
Ward/Referring Physician: PDC

NORMAL VALUES

LVDd- (3.5-5.6)
LVDs- (2.3-3.9)
LV Mass (ASE) g/m^2 (Female 43-95 g/m^2 ; Male 49-115 g/m^2)
LVEF- (50-80%)
LVEDV INDEX (ASE) 35-75 ml/m2
LVESV INDEX (ASE) 12-30 ml/m2
RVD-BASAL (<4.2 cm)
RA AREA (<18 cm2)
TAPSE (> 1.6 cm)

M-MODE

Ao Diam	3.32 cm
LA Diam	5.55 cm
AV Cusp	2.81 cm
LA/Ao	1.67
IVSd	1.63 cm
LVIDd	6.33 cm
LVPWd	1.09 cm
IVSs	2.17 cm
LVIDs	4.58 cm
LVPWs	1.51 cm
%FS	27.62%
LVd Mass Ind (ASE)	170.07 g/m²

TWO DIMENSIONAL

TWO DIMENSIONAL

DOPPLER

AV maxPG	4.23 mmHg
AV meanPG	2.65 mmHg

CONVENTIONAL AND DOPPLER COLOR FLOW IMAGING

THERE IS MILD TRICUSPID VALVE REGURGITATION. WE ARE UNABLE TO ESTIMATE THE PEAK RIGHT VENTRICULAR PRESSURE DUE TO THE INABILITY TO OBTAIN AN ADEQUATE VELOCITY ENVELOPE OF THE TRICUSPID REGURGITATION. THERE IS PHYSIOLOGIC PULMONIC INSUFFICIENCY. NEITHER INSUFFICIENCY NOR STENOSIS OF THE OTHER CARDIAC VALVES IS IDENTIFIED.

INTERPRETATION

THIS IS A TECHNICALLY EXCELLENT STUDY. THE PATIENT HAD NORMAL SINUS RHYTHM THROUGHOUT THE STUDY. THE LEFT VENTRICLE IS DILATED. THERE IS CONCENTRIC LEFT VENTRICULAR HYPERTROPHY WITH INCREASED WALL THICKNESS AND MYOCARDIAL MASS. THERE IS INFERIOR HYPOKINESIS OF THE LEFT VENTRICLE. THE GLOBAL LEFT VENTRICULAR EJECTION FRACTION IS 40-50%. THE RIGHT VENTRICLE AND RIGHT ATRIUM APPEAR NORMAL IN SIZE. THE LEFT

ATRIUM IS DILATED AT 5.6 cm. THE AORTIC VALVE IS A TRICUSPID VALVE. THE FOUI CARDIAC VALVES APPEAR STRUCTURALLY NORMAL. THERE ARE NO INTRACARDIAC MASSES IDENTIFIED AND A PERICARDIAL EFFUSION IS NOT VISUALIZED.

SINCE LAST ECHO DATED 10/30/03, THERE HAS BEEN NO MAJOR CHANGE.

DREW H. POWLER, M.D. CARDIOLOGY FELLOW
SAL CHIARAMIDA, M.D. ATTENDING

CC

MUSC
HEART & VASCULAR CENTER
ADULT ECHOCARDIOGRAPHY LAB
(843) 792-4577 Phone
(843) 792-8601 Fax
ICAEL
Accredited Echocardiography Laboratory

Patient Name : MIKELL, CHARLES
Date of birth : 01/25/1961
Patient Id : 1400764
Sex : Male
Height : 68.9 inch
Weight : 274.0 lb
Date 10/07/2005
Sonographer RCH
Ward/Dept. 9W
Diagnosis CAD

NORMAL VALUES

LAD- (1.0-4.0)
AO- (1.5-2.6)
LVDd- (3.5-5.6)
LVSs- (0.6-1.1)
LVPWs- (0.6-1.1)
LV Mass g/m^2 (Female < 110gm/m^2 ; Male < 134 gm/m^2)
LVEF- (50-80%)

M-MODE/DOPPLER MEASUREMENTS

IVSd	1.45 cm	Ao Diam	3.44 cm	AV maxPG	3.20 mmHg RVSP	43.27 mmHg
LVIDd	6.44 cm	LA Diam	4.78 cm	AV meanPG	2.34 mmHg	
LVPWd	0.70 cm	AV Cusp	2.49 cm			
IVSs	1.54 cm					
LVIDs	5.74 cm					
LVPWs	0.79 cm					
EF(Teich)	23.10 %					
LVd Mass (ASE)	304.45 g					

DOPPLER COLOR FLOW IMAGING

THERE IS MILD TRICUSPID VALVE REGURGITATION. THE ESTIMATED PEAK RIGHT VENTRICULAR SYSTOLIC PRESSURE IS 40-50mmHg. THERE IS MILD MITRAL REGURGITATION. NEITHER INSUFFICIENCY NOR STENOSIS OF THE OTHER CARDIAC VALVES IS IDENTIFIED.

INTERPRETATION

THE TECHNICAL QUALITY OF THE STUDY IS ADEQUATE. THE PATIENT HAD NORMAL SINUS RHYTHM WITH WHAT APPEARS TO BE AN INTERVENTRICULAR CONDUCTION DISTURBANCE THROUGHOUT THE STUDY. THE LEFT VENTRICLE IS DILATED. THE LEFT VENTRICULAR END DIASTOLIC DIAMETER IS 6.4cm. THE LEFT VENTRICULAR END SYSTOLIC DIAMETER IS 5.8cm. THERE IS HYPOKINESIS OF THE INFERIOR POSTERIOR WALL AND THINNING OF THE WALL SEGMENT. THE LEFT VENTRICULAR EJECTION FRACTION IS ESTIMATED TO BE 20 TO 30%. THE RIGHT ATRIUM AND RIGHT VENTRICLE APPEAR DILATED. THE LEFT ATRIUM IS DILATED AT 4.8cm. THE FOUR CARDIAC VALVES APPEAR STRUCTURALLY NORMAL. THERE ARE NO INTRACARDIAC MASSES IDENTIFIED AND A PERICARDIAL EFFUSION IS NOT VISUALIZED.
ELECTRONICALLY SIGNED BY:
BRUCE W. USHER, M.D. CARDIOLOGY ATTENDING

[redacted] Division

FILE COPY

P.2/2
TO:8437926593
OCT-11-2005 03:07 FROM:

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

Special Studies

09/08/06 : 08:09am
2D/M-Mode/Doppler

20060908080951219278108
Accession number: 20060908080951219278108

Name	Value	Range	Flag	Probability	Reference
WARD	PDC				PDC
Body Weight	124.28 kg				
Height	1.7526 m				

Interpretation: THE TECHNICAL QUALITY OF THE STUDY IS ADEQUATE. THE PATIENT HAD SINUS TAC HYCARDIA THROUGHOUT THE STUDY. THERE IS CONCENTRIC LEFT VENTRICULAR HYPERTROPHY WI TH INCREASED WALL THICKNESS AND MYOCARDIAL MASS INDEX. THE LEFT VENTRICLE IS DILATED. THE LEFT VENTRICULAR END DIASTOLIC DIAMETER IS 5.7 cm. THE LEFT VENTRICULAR END SYSTOLI C DIAMETER IS 5.2 cm. THERE IS GLOBAL HYPOKINESIS OF THE LEFT VENTRICLE THAT IS MORE PRO NOUNCED IN THE INFEROSEPTAL WALL. THE 2D GLOBAL LEFT VENTRICULAR EJECTION FRACTI ON IS ESTIMATED TO BE 20 TO 30%. THE M MODE LEFT ATRIAL DIAMETER IS ABNORMAL AT 6.4 cm. THE RIGHT ATRIUM AND RIGHT VENTRICLE ARE MARKEDLY DILATED. THE FOUR CARDIAC VALVES APPEAR STRUCTURALLY NORMAL. THERE IS AN ATRIAL SEPTAL ANEURYSM WHICH IS IMMOBILE AND BOWS TOWARD THE RIGHT ATRIUM CONSISTENT WITH AN ELEVATED LEFT ATRIAL PRESSURE. THER E ARE NO INTRACARDIAC MASSES IDENTIFIED AND A PERICARDIAL EFFUSION IS NOT VISUALIZED. TH E INFERIOR VENA CAVA IS DILATED (>1.7cm) WITH NORMAL INSPIRATORY COLLAPSE(>50%) SUGGESTI VE OF MILDLY ELEVATED RIGHT ATRIAL PRESSURE(6-10mmHg). MICHAEL CRAIG, MD CARDIOLO GY FELLOW I HAVE REVIEWED THE IMAGES AND AGREE WITH THE REPORT. ELECTRONICALLY SIGN ED BY: BRUCE W. USHER M.D. CARDIOLOGY ATTENDING

Referral Reason: THERE IS MILD TRICUSPID REGURGITATION. THE ESTIMATED PEAK RIGHT VENTRI CULAR SYSTOLIC PRESSURE IS 40-45 mmHg. THERE IS MILD MITRAL REGURGITATION. THE MITRAL R EGURGITANT JET IS ECCENTRIC AND DIRECTED TO THE LATERAL AND POSTERIOR WALLS CONSISTE NT WITH ANTERIOR LEAFLET DYSFUNCTION. THERE IS PHYSIOLOGIC PULMONIC INSUFFICIENCY. THE RE IS TRACE AORTIC VALVE REGURGITATION. THE E AND A WAVES ARE FUSED THEREFORE WE ARE UNABLE TO COMMENT ON DIASTOLIC FUNCTION. BY DOPPLER COLOR FLOW THERE ARE NO INTRAC ARDIAC SHUNTS IDENTIFIED.

Name	Value	Range	Flag	Probability	Reference
LAD	(1.0 - 4.0)				RANGE
A0	(1.5 - 2.6)				RANGE
LVDd	(3.5 - 5.6)				RANGE
LVSs	(0.6 - 1.1)				RANGE
LVPWs	(0.6 - 1.1)				RANGE
LV_Mass	(Female < 110 g/m2; Male < 134 g/m2)				RANGE

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

LVEF	(50 - 80%)	RANGE
Ao Diam	3.120567 cm	Average
Ao Diam	3.120567 cm	Measurement 1
AV Cusp	2.106383 cm	Average
AV Cusp	2.106383 cm	Measurement 1
LA Diam	6.241135 cm	Average
LA Diam	6.241135 cm	Measurement 1
LA/Ao	2.000000 NoUnit	Average
LA/Ao	2.000000 NoUnit	Measurement 1
%FS	8.235294 %	Average
%FS	8.235294 %	Measurement 1
EDV(Teich)	161.785902 ml	Average
EDV(Teich)	161.785902 ml	Measurement 1
EF(Teich)	17.966482 %	Average
EF(Teich)	17.966482 %	Measurement 1
ESV(Teich)	132.718667 ml	Average
ESV(Teich)	132.718667 ml	Measurement 1
IVSd	1.212766 cm	Average
IVSd	1.212766 cm	Measurement 1
IVSs	1.482269 cm	Average
IVSs	1.482269 cm	Measurement 1
LVd Mass Ind (ASE)	125.056302 g/m2	Average
LVd Mass Ind (ASE)	125.056302 g/m2	Measurement 1
LVd Mass (ASE)	295.132873 g	Average
LVd Mass (ASE)	295.132873 g	Measurement 1
LVIDd	5.726950 cm	Average
LVIDd	5.726950 cm	Measurement 1
LVIDs	5.255319 cm	Average
LVIDs	5.255319 cm	Measurement 1
LVPWd	1.212766 cm	Average
LVPWd	1.212766 cm	Measurement 1
LVPWs	1.347518 cm	Average
LVPWs	1.347518 cm	Measurement 1
SV(Teich)	29.067235 ml	Average
SV(Teich)	29.067235 ml	Measurement 1
RAP	10.000000 mmHg	Average
RAP	10.000000 mmHg	Measurement 1
RVSP	43.339837 mmHg	Average
RVSP	43.339837 mmHg	Measurement 1
TR maxPG	33.339837 mmHg	Average
TR maxPG	33.339837 mmHg	Measurement 1
TR Vmax	2.887033 m/s	Average
TR Vmax	-2.887033 m/s	Measurement 1

09/20/06 : 00:00am
OPERATIVE NOTE

Accession number: 18213937762

MUSC Medical Center
OPERATIVE NOTE
Patient Name: MIKELL, CHARLES L
MRN: 001400764
Patcom: 843077223
Date of Surgery: 09/20/2006
Surgeon: Michael R. Gold, MD, PhD
Assistant(s): Matthew H. Klein, MD
Frank Cuoco, MD
PROCEDURES: Electrophysiology study.
INDICATIONS FOR PROCEDURE: Non-ischemic cardiomyopathy.
DESCRIPTION OF PROCEDURE: Written informed consent was obtained. The patient was brought to the electrophysiology lab in a fasting state. The patient was prepped and draped in the usual sterile fashion. For the duration of the procedure, the patient was attached to the external defibrillator. The patient's vital signs, oxygen saturation, and heart rhythm were monitored throughout the procedure. Conscious sedation was induced by a combination of intravenous fentanyl and Versed. Approximately 10 cc of 0.25% bupivacaine was injected into the right inguinal area. Percutaneous access to the right common femoral vein was achieved using modified Seldinger technique. A 12-French Triport vascular hemostasis sheath was placed in the vein. The following catheters were advanced to the respective heart chambers:
1. A 6-French quadripolar deflectable catheter was placed in the right ventricular apex for ventricular stimulation.
2. A 5-French quadripolar catheter was placed in the high right atrium
3. A 5-French His bundle catheter was placed in the His bundle area.
With all the catheters in place, physiological study was performed. An atrial tachycardia with 2:1 block was observed with a cycle length of 272 msec. Overdrive pacing was performed at a cycle length between 250 and 200 msec with entrainment, but no termination of the arrhythmia. Programmed ventricular stimulation was then performed. Ventricular effective refractory period was 210 msec at a 400-msec basic cycle drive train in the RV apical location. Premature extrastimuli was introduced with single, double, and triple extrastimuli. No ventricular tachycardia was inducible. The right ventricular catheter was then manipulated at several locations in the right atrium. The atrial tachyarrhythmia appeared to originate from a location in the lower right atrium.
At this point, the patient was adequately sedated and a 100-J DC cardioversion was performed. This converted the patient to a sinus rhythm. Basic intervals were then recorded, and were as follows: PA interval 38 msec, AH interval 134 msec, HV interval 70 msec, PR interval 254 msec, QRS interval 92 msec, QT interval 344 msec, RR interval 778 msec. Corrected sinus node recovery time was measured and was found to be 498 msec at 600-msec basic drive train and 524 msec at 400-msec basic cycle drive train. Atrial decremental pacing

was performed and revealed Wenckebach AV block at 330 msec. Programmed atrial stimulation was then performed. AV node effective refractory period was 280 msec at a 600-msec basic cycle drive train and atrial effective refractory period was 230 msec at 600-msec basic cycle drive train. At this point, the procedure was considered complete. The patient was allowed additional time in the lab to recover from conscious sedation. Upon recovery from conscious sedation, the patient was transferred in stable condition to the observational area for further monitoring. The patient tolerated the procedure well, and no complications were noted. The attending physician, Dr. Michael Gold, was present for the entire procedure.

IMPRESSION:

1. Atrial tachycardia.
2. Successful cardioversion to normal sinus rhythm.
3. No inducible ventricular tachycardia.

Dictated by: Matthew H. Klein, MD

Michael R. Gold, MD, PhD
Surgeon
937762 / 31185 / 33290
JOB: 294626
DD: 09/20/06 04:38 PM
DT: 09/21/06 09:00 AM
Additional CC:
Electronically signed by MICHAEL R GOLD, MD, PhD on 10-05-2006

09/29/06 : 00:00am
HOSPITAL DISCHARGE SUMMARY

Accession number: 18214307272

MUSC Medical Center
HOSPITAL DISCHARGE SUMMARY
Patient Name: MIKELL, CHARLES L
MRN: 001400764
Patcom: 843077223
Admitted: 09/19/2006
Discharged: 09/29/2006
Service: Cardiology
Attending: VALERIAN L FERNANDES, MD
Referring:
DISCHARGE DIAGNOSES:
1. Congestive heart failure.
2. Cardiac systolic dysfunction.
3. Atrial tachycardia.
4. Diabetes mellitus.
5. Hypertension.
6. Non-ischemic cardiomyopathy.
7. G6PD deficiency.
8. Renal insufficiency.

PROCEDURES DURING HOSPITALIZATION:
1. Chest x-ray dated 09/18/2006. The PA and lateral chest x-rays demonstrated enlarged cardiomediastinal silhouette. The lungs were clear without evidence of focal airspace disease, effusion or pneumothorax.
2. Dated 09/20/2006, electrophysiology study. Atrial tachycardia was identified during the electrophysiology study. The patient underwent subsequent successful cardioversion to normal sinus rhythm. No inducible ventricular tachycardia was reported.

HISTORY OF PRESENT ILLNESS: Patient is a 45-year-old African American male with a history of non-ischemic cardiomyopathy. Patient was admitted through the emergency department at Medical University of South Carolina to the Cardiology service for evaluation of increased abdominal girth, increased dyspnea with activity, and weight gain. Patient reports that he has been compliant with medications, though some dietary indiscretion has been of late. He denies any palpitations, diaphoresis, chest pain.

PAST MEDICAL HISTORY:
1. A history of AV nodal reentry tachycardia with ablation and recurrent tachycardia in October 2005, treated with cardioversion.
2. Diabetes mellitus type 2.
3. Hypertension.
4. Non-ischemic dilated cardiomyopathy.
5. G6PD deficiency.

PAST SURGICAL HISTORY:
1. Past surgical history includes the ablation.

Echocardiogram in September 2005, mild TR; right ventricular systolic pressure was 40 to 50. Mild mitral regurgitation, left ventricular hypertrophy with an LVIDD equal to 5.7 mL with global hypokinesis reported worse in the inferior septal wall. Ejection fraction was

listed at 20% to 30%.
2. Left heart catheterization in October 2005, with an LVEDP of 30. Left main was normal. Left anterior descending was angiographically normal. Circumflex artery was nondominant and angiographically normal. The right coronary artery was angiographically normal and labeled as dominant.
MEDICATIONS ON ADMISSION: See H
FAMILY HISTORY: Father and mother with type 2 diabetes mellitus.
SOCIAL HISTORY: Patient lives in Charleston. Denies alcohol or tobacco, no cocaine use since 2000. Currently on disability.
PHYSICAL EXAMINATION ON ADMISSION: HEENT: Jugular venous distention extending to the angle of the jaw, 45-degree angle. Cardiovascular Examination: S1, S2, and S3 were noted. No murmurs were identified. Respiratory Examination: Chest is clear to auscultation. Abdominal Examination: Obese, nontender. Liver was palpable. Musculoskeletal: Lower extremities: Pitting edema was identified.
HOSPITAL COURSE: Patient was admitted to the Cardiology service at Medical University of South Carolina for evaluation and treatment of congestive heart failure. Patient was treated with appropriate guideline medications including beta blocker, ACE inhibitor, Aldactone, and diuretic therapy. Patient did require multiple days' use of additional diuresis with nesiritide with excellent results. At time of discharge, patient was felt to be near euvolemia with excellent tolerance to ambulation through the hospital corridors.
Patient with a history of tachycardia. It has been determined that patient's cardiomyopathy is not secondary to ischemia. However, its etiology remains unknown. He does have a history of multiple interventions previous to this admission for tachycardias. Patient was found to be tachycardic at time of admission with heart rates ranging from 110 to 120. He was evaluated by the Electrophysiology Team; brought to the Electrophysiology Laboratory, where he was electrically cardioverted from an atrial tachycardia to a sinus rhythm. His rate was able to be maintained in the 70s and 80s throughout the rest of his hospital stay. In an effort to control patient's heart rate, he was given sotalol in addition to his Toprol. Patient did not tolerate this medication, as his volume status and symptoms of congestive heart failure increased dramatically. Subsequently he was given a sotalol holiday and then initiated on Tikosyn at appropriate creatinine clearance doses. Patient did tolerate Tikosyn without issue. His QTs remained in appropriate range throughout the recommended 3-day monitoring period. He will have close followup with his primary cardiologist, Dr. Michael R. Zile, for appropriate QT monitoring.
With his atrial tachycardia, there may be some question of some atrial flutter involvement. Patient will remain on Coumadin and be followed in Pharmacotherapy Clinic for appropriate prothrombin time levels.
Patient with history of poorly controlled diabetes mellitus with an A1c considerably greater than target. Patient was evaluated by the Diabetes Management Team as a part of the Endocrinology Division at Medical University of South Carolina. With their assistance, patient's blood glucose control became much better. He will be discharged home on insulin at the doses listed below, with followup to Endocrinology Clinic.
Patient with a degree of renal insufficiency during hospitalization, felt to be secondary to low cardiac output. This worsened slightly during hospitalization but did return back to baseline levels at time

of discharge.
DISCHARGE MEDICATIONS:
1. Aspirin 81 mg p.o. every day.
2. Toprol XL 50 mg p.o. every day.
3. Monopril 10 mg p.o. every day.
4. Pravachol 40 mg p.o. q. at bedtime.
5. Aldactone 25 mg p.o. every day.
6. Lasix 40 mg p.o. b.i.d.
7. Tikosyn 0.5 mg p.o. b.i.d.
8. Coumadin 10 mg p.o. every day except 15 mg on Mondays and Fridays.
9. Insulin NovoLog 70/30 fifty-five units q. a.m. and 30 units q. supper time.
10. Insulin aspartate sliding scale with meals and at bedtime.
11. Albuterol 2 puffs q.i.d. p.r.n.
12. Magnesium oxide 400 mg p.o. every day.
13. Potassium chloride 40 mEq p.o. every day.

Patient has been counseled on discharge medications at time of discharge. Patient has been counseled on cardiac fit, low-sodium, Coumadin-friendly diet. Patient has been counseled on congestive heart failure outpatient management including daily weights, contacting his physician with 3-pound weight gain overnight or 5 pounds in 1week. Patient has been counseled on appropriate followup appointments. First appointment is to be with Pharmacotherapy Clinic. Next appointment is to be with Endocrinology. The following appointment is to be with Dr. Cheri Franklin and finally with Dr. Michael R. Zile. Patient has been given contact numbers for all these appointments.
Dictated by: David D. Bonnema, MD

David D. Bonnema, MD

VALERIAN L FERNANDES, MD
Attending
307272 / 37989 /
JOB: 296807
DD: 10/03/06 07:28 AM
DT: 10/04/06 07:58 AM
cc: Cheri L Franklin, MD
30 B Street
Michael R. Zile, MD
Medical University of South Carolina Cardiology
Additional CC:

Edited By DAVID BONNEMA on 10-05-2006
Electronically signed by VALERIAN FERNANDES, MD on 10-13-2006

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Progress Notes

10/20/06 : 08:23am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
mz

CHARLES MIKELL
45 Year male
MRN# 1400764

October 20, 2006

Cheri Franklin, M.D./Jeff Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE:Charles Mikell
MRN:1400764

Dear Dr. Franklin and Akhtar:

Mr. Charles Mikell returns today for reassessment of his chronic heart failure. As you recall, his clinical problems include:

1. Non ischemic dilated cardiomyopathy.
a. normal cardiac catheterization in 2001.
b. echocardiogram in 2003, ejection fraction 50%, enlarged LVdiastolic diameter and large left atrial diameter.
3. Repeat cardiac catheterization on 10/7/05. Normal coronary arteries, LVEDP 30.
d. echocardiogram 10/7/05 dilated left ventricle 6.4 cm, hypokinesis of the posterior wall, ejection fraction 20 - 30%.
e. Echocardiogram 9/8/06 concentric left ventricular hypertrophy, dilated left ventricle 5.7cm, global hypokinesis, enlarged left atrium 6.4 cm, ejection fraction 20 – 30%
f. Echocardiogram 10/20/06 concentric left ventricular hypertrophy, global hypokinesis, ejection fraction 35%, left ventricular end diastolic dimension 5.4, left atrial diameter 5.5.
2. Atrial-ventricular nodal reentrant tachycardia.
a. Ablation.
b. Recurrent tachycardia 10/05 treated with cardioversion.
c. Recurrent atrial tachycardia 9/06, treated with cardioversion and Tikosyn.
3. Acute renal failure secondary to hypertension (resolved).
4. Chronic renal insufficiency, creatinine 1.4 BUN 28 (10/18/06).
5. Hypertension.
6. Diabetes.
7. G6 PD deficiency
8. Gallbladder disease (a calculus cholecystitis on ultrasound demonstrating thickened gallbladder and sludge.)
9. Diffuse bladder thickening with peri-vascular inflammation and possible mass.
10. Hypoglycemia induced ventricular tachycardia (resolved).

11. Acute hepatic failure (resolved).
12. Hyperlipidemia.
13. Sleep apnea (treated with C-PAP).
14. Chronic systolic heart failure.

I last saw this patient as an out patient on February 1st 2006. However, since that time he has been admitted to the hospital from 9/19/06 to 9/29/06. During this hospitalization he underwent electrophysiology study and was discovered to have an atrial tachycardia. This was converted to sinus rhythm with a cardioversion. He was then started on Tikosyn. In addition, it was discovered that he had dilated cardiomyopathy probably related to this tachycardia induced cardiomyopathy. His medications to treat chronic heart failure were adjusted. He was extensively diuresed with intravenous diuretics and nesiritide. He was discharged in moderately good shape, New York Heart Association Class III-a. Since hospital discharge three weeks ago he has had no chest pain. He has had only mild dyspnea on exertion. He states he can walk two miles in about one hour and a half. He can walk two flights of stairs. He can mow his front lawn. He does get shortness of breath with these activities but does not have to stop because of the shortness of breath. In addition, he has 2+ peripheral edema which is continuously there but not worse than at time of hospital discharge. He also had abdominal distention which is constant but maybe related to constipation. He denies PND or orthopnea, pre syncope, or syncope.

Cardiac review of systems is above. All other systems is negative.

Past medical history, family history and social history are as mentioned above.

PHYSICAL EXAMINATION: Blood pressure is 114/91 with a heart rate of 74. He weighs 131.3 kilograms.
HEENT: Shows mild jugular venous distention. Carotid upstrokes are normal without bruits. Chest is clear to auscultation and percussion.
Cardiac exam reveals a normal 1st and 2nd heart sound. There is a paradoxical splitting of the second heart sound and a soft S3. There is a 1/6 systolic ejection murmur heard throughout the precordium. I do not hear a diastolic murmur. Abdominal exam reveals obesity. I do not feel a liver or a spleen tip. Bowel sounds are normal. He has some mild abdominal wall edema. Extremities reveal no clubbing or cyanosis. He has 2+ pitting edema in his lower extremities. Cutaneous and neurologic exams are normal.

EKG: Shows normal sinus rhythm.

ECHOCARDIOGRAM: Shows dilated cardiomyopathy with global hypokinesis, concentric left ventricular hypertrophy and an ejection fraction of about 35%. This when compared to the echocardiogram performed a month earlier is mildly improved.

Medications:

1. Lasix 40mg q/d.
2. coumadin 10mg q/d.
3. Aldactone 25mg q/d.
4. aspirin 81mg q/d.
5. Pravachol 40mg q/d.
6. Magnesium
7. Insulin
8. Albuterol 2 puffs every 4 hours
9. potassium
10. Toprol XL 50mg q/d.
11. Tikosyn 0.5mg bid.

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

IMPRESSION/PLAN: I called Dr. Jeff Akhtar and discussed this patient's continuing care with him. Dr. Akhtar is acting in place of Dr. Franklin who is out on maternity leave. I made the following suggestions:

1. Gradually increase the beta blocker dose. I would suggest that we increase from 50 of Toprol to 62.5 then 75 then 85.5 then 100. These up-titrations should be done no more rapidly than once every two weeks and it is possible that he will need even a slower titration with making these changes every two to four weeks.
2. Up-titrate his ace Inhibitor.
3. I do not think we should increases diuretics at this point. His BUN and creatinine are already increased. He seems to be tolerating the lower extremity edema and while this does not represent uvolemia. I believe this represents optivolemia.
4. Return to my office in three months.
5. I told the patient in an extensive conversation that if he stays in sinus rhythm it would be twelve to eighteen months before we would know whether his ventricular function would recover after we up titrated his mediations to optimal doses.

Thank you for allowing me to help take care of this patient. If you have further questions please do not hesitate to contact me.

Sincerely,

Michael R. Zile, M.D.
Charles Ezra Daniel Professor of Medicine

MZ:kt

CARD CC: Zile

SIGNED BY MICHAEL ZILE, MD (MZ) 10/30/2006 02:06PM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA
Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Special Studies

10/20/06 : 3:24pm
2D/M-Mode/Doppler

20061020152426221226376
Accession number: 20061020152426221226376

Name	Value	Range	Flag	Probability	Reference
WARD	PDC				PDC
Body Weight	130.63 kg				
Height	1.7526 m				
Blood Pressure Systolic	122 mmHg				
Blood Pressure Diastolic	80 mmHg				

Interpretation: THE TECHNICAL QUALITY OF THE STUDY IS ADEQUATE. THE PATIENT HAD NORMAL SI NUS RHYTHM THROUGHOUT THE STUDY. THE LEFT VENTRICULAR END DIASTOLIC DIAMETER IS 5.4cm . THE LEFT VENTRICULAR END SYSTOLIC DIAMETER IS 4.5cm. THERE IS CONCENTRIC LEFT VENTRI CULAR HYPERTROPHY WITH INCREASED WALL THICKNESS BUT NORMAL MYOCARDIAL MASS INDEX. THERE IS GLOBAL HYPOKINESIS OF THE LEFT VENTRICLE. THE TWO DIMENSIONAL LEFT VENTRICULAR EJECTION FRACTION BY USING SIMPSON'S BIPLANE METHOD IS CALCULATED TO BE 34 %. SUBJECTIVELY, THE RIGHT ATRIUM AND RIGHT VENTRICLE APPEAR DILATED. THE 2D LEFT ATRIA L VOLUME INDEX IS SEVERELY ABNORMAL (>40ml/m2). THE M MODE LEFT ATRIAL DIAMETER IS ABNO RMAL AT 5.5cm. THERE IS AN ATRIAL SEPTAL ANEURYSM. THE FOUR CARDIAC VALVES APPEAR STRUCTURALLY NORMAL. THERE ARE NO INTRACARDIAC MASSES IDENTIFIED AND A PERICA RDIAL EFFUSION IS NOT VISUALIZED. THE INFERIOR VENA CAVA IS DILATED (>1.7cm) WITH NORMAL INSPIRATORY COLLAPSE(>50%) SUGGESTIVE OF MILDLY ELEVATED RIGHT ATRIAL PRESSURE(6-10mm Hg). I HAVE REVIEWED THE IMAGES AND AGREE WITH THE FINDINGS IN THIS REPORT. ELECT RONICALLY SIGNED BY: MARIAN H. TAYLOR, M.D CARDIOLOGY ATTENDING

Referral Reason: THERE IS MILD MITRAL REGURGITATION. THERE IS MILD TRICUSPID REGURGITATI ON. THE ESTIMATED PEAK RIGHT VENTRICULAR SYSTOLIC PRESSURE IS 35-45mmHg. THERE IS PHYS IOLOGIC PULMONIC INSUFFICIENCY. NEITHER INSUFFICIENCY NOR STENOSIS OF THE OTHER CARDI AC VALVES IS IDENTIFIED. BY DOPPLER COLOR FLOW THERE ARE NO INTRACARDIAC SHUNTS IDENTI FIED. THERE IS A RESTRICTIVE MITRAL INFLOW PATTERN WHICH IS CONSISTENT WITH AN ELEVATED LEFT ATRIAL PRESSURE. THE E/e RATIO IS 10-15 SUGGESTIVE OF AN ELEVATED LEFT VENTRICULAR FILLING PRESSURE.

Name		Value	Range	Flag	Probability	Reference
LAD	(1.0 - 4.0)					RANGE
A0	(1.5 - 2.6)					RANGE
LVDd	(3.5 - 5.6)					RANGE
LVSs	(0.6 - 1.1)					RANGE
LVPWs	(0.6 - 1.1)					RANGE

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

LV_Mass	(Female < 110 g/m2; Male < 134 g/m2)	RANGE
LVEF	(50 - 80%)	
EF A-L A2C	0.000000 %	RANGE
EF A-L A2C	0.000000 %	Average
LVEF MOD A2C	34.988758 %	Measurement 1
LVEF MOD A2C	34.988758 %	Average
SV A-L A2C	0.000000 ml	Measurement 1
SV A-L A2C	0.000000 ml	Average
SV MOD A2C	66.759588 ml	Measurement 1
SV MOD A2C	66.759588 ml	Average
EF A-L A4C	0.000000 %	Measurement 1
EF A-L A4C	0.000000 %	Average
LVEF MOD A4C	35.036054 %	Measurement 1
LVEF MOD A4C	35.036054 %	Average
SV A-L A4C	0.000000 ml	Measurement 1
SV A-L A4C	0.000000 ml	Average
SV MOD A4C	50.903372 ml	Measurement 1
SV MOD A4C	50.903372 ml	Average
EF Biplane	33.824884 %	Measurement 1
EF Biplane	33.824884 %	Average
LVEDV MOD BP	172.307157 ml	Measurement 1
LVEDV MOD BP	172.307157 ml	Average
LVESV MOD BP	114.024461 ml	Measurement 1
LVESV MOD BP	114.024461 ml	Average
LVDisks	0.000000 ml	Measurement 1
LVDisks	0.000000 ml	Average
LVEDV MOD A2C	190.802967 ml	Measurement 1
LVEDV MOD A2C	190.802967 ml	Average
LVLd A2C	9.302294 cm	Measurement 1
LVLd A2C	9.302294 cm	Average
LVDisks	0.000000 ml	Measurement 1
LVDisks	0.000000 ml	Average
LVEDV MOD A4C	145.288543 ml	Measurement 1
LVEDV MOD A4C	145.288543 ml	Average
LVLd A4C	8.644660 cm	Measurement 1
LVLd A4C	8.644660 cm	Average
LVDisks	0.000000 ml	Measurement 1
LVDisks	0.000000 ml	Average
LVESV MOD A2C	124.043378 ml	Measurement 1
LVESV MOD A2C	124.043378 ml	Average
LVLs A2C	8.136209 cm	Measurement 1
LVLs A2C	8.136209 cm	Average
LVDisks	0.000000 ml	Measurement 1
LVDisks	0.000000 ml	Average
LVESV MOD A4C	94.385171 ml	Measurement 1
		Average

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

LVESV MOD A4C	94.385171 ml	Measurement 1
LVLs A4C	7.268990 cm	Average
LVLs A4C	7.268990 cm	Measurement 1
LAESV(A-L)	99.332118 ml	Average
LAESV(A-L)	99.332118 ml	Measurement 1
LAESV Index (A-L)	41.216647 ml/m2	Average
LAESV Index (A-L)	41.216647 ml/m2	Measurement 1
LAAs A2C	27.072037 cm2	Average
LAAs A2C	27.072037 cm2	Measurement 1
LAESV A-L A2C	101.070220 ml	Average
LAESV A-L A2C	101.070220 ml	Measurement 1
LAESV MOD A2C	97.766691 ml	Average
LAESV MOD A2C	97.766691 ml	Measurement 1
LALs A2C	6.155134 cm	Average
LALs A2C	6.155134 cm	Measurement 1
LAAs A4C	29.271551 cm2	Average
LAAs A4C	29.271551 cm2	Measurement 1
LAESV A-L A4C	98.439768 ml	Average
LAESV A-L A4C	98.439768 ml	Measurement 1
LAESV MOD A4C	90.559931 ml	Average
LAESV MOD A4C	90.559931 ml	Measurement 1
LALs A4C	7.388219 cm	Average
LALs A4C	7.388219 cm	Measurement 1
Ao Diam	3.217617 cm	Average
Ao Diam	3.217617 cm	Measurement 1
AV Cusp	2.284974 cm	Average
AV Cusp	2.284974 cm	Measurement 1
LA Diam	5.455959 cm	Average
LA Diam	5.455959 cm	Measurement 1
LA/Ao	1.695652 NoUnit	Average
LA/Ao	1.695652 NoUnit	Measurement 1
%FS	17.647059 %	Average
%FS	17.647059 %	Measurement 1
EDV(Teich)	141.402259 ml	Average
EDV(Teich)	141.402259 ml	Measurement 1
EF(Teich)	36.374248 %	Average
EF(Teich)	36.374248 %	Measurement 1
ESV(Teich)	89.968251 ml	Average
ESV(Teich)	89.968251 ml	Measurement 1
IVSd	1.323888 cm	Average
IVSd	1.323888 cm	Measurement 1
IVSs	1.429799 cm	Average
IVSs	1.429799 cm	Measurement 1
LVd Mass Index	151.401305 g/m2	Average
LVd Mass Index	151.401305 g/m2	Measurement 1
LVd Mass Ind (ASE)	125.884529 g/m2	Average

Printed using Practice Partner®

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

LVd Mass Ind (ASE)	125.884529 g/m2	Measurement 1
LVd Mass (ASE)	303.381716 g	Average
LVd Mass (ASE)	303.381716 g	Measurement 1
LVIDd	5.401464 cm	Average
LVIDd	5.401464 cm	Measurement 1
LVIDs	4.448264 cm	Average
LVIDs	4.448264 cm	Measurement 1
LVPWd	1.323888 cm	Average
LVPWd	1.323888 cm	Measurement 1
LVPWs	1.482755 cm	Average
LVPWs	1.482755 cm	Measurement 1
LVs Mass Index	128.479389 g/m2	Average
LVs Mass Index	128.479389 g/m2	Measurement 1
LVs Mass Ind (ASE)	107.546997 g/m2	Average
LVs Mass Ind (ASE)	107.546997 g/m2	Measurement 1
SV(Teich)	51.434009 ml	Average
SV(Teich)	51.434009 ml	Measurement 1
AV CI	0.000000 l/minm2	Average
AV CI	0.000000 l/minm2	Measurement 1
AV CO	0.000000 l/min	Average
AV CO	0.000000 l/min	Measurement 1
AV Env.TI	210.720887 ms	Average
AV Env.TI	210.720887 ms	Measurement 1
AV maxPG	2.853965 mmHg	Average
AV maxPG	2.853965 mmHg	Measurement 1
AV meanPG	1.548705 mmHg	Average
AV meanPG	1.548705 mmHg	Measurement 1
AV SI	0.000000 ml/m2	Average
AV SI	0.000000 ml/m2	Measurement 1
AV SV	0.000000 ml	Average
AV SV	0.000000 ml	Measurement 1
AV Vmax	0.844684 m/s	Average
AV Vmax	-0.844684 m/s	Measurement 1
AV Vmean	0.575219 m/s	Average
AV Vmean	-0.575219 m/s	Measurement 1
AV VTI	12.121076 cm	Average
AV VTI	-12.121076 cm	Measurement 1
RAP	10.000000 mmHg	Average
RAP	10.000000 mmHg	Measurement 1
RVSP	40.381065 mmHg	Average
RVSP	36.987823 mmHg	Measurement 1
RVSP	43.774307 mmHg	Measurement 2
TR maxPG	30.381065 mmHg	Average
TR maxPG	26.987823 mmHg	Measurement 1
TR maxPG	33.774307 mmHg	Measurement 2
TR Vmax	2.751637 m/s	Average

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

TR Vmax	-2.597490 m/s	Measurement 1
TR Vmax	-2.905783 m/s	Measurement 2

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

Progress Notes

12/15/06 : 10:19am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
mz

CHARLES MIKELL
45 Year male
MRN# 1400764

December 15, 2006

Cheri Franklin, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764

Dear Dr. Franklin:

Mr. Charles Mikell returns today for reassessment of his arrhythmias and cardiomyopathy. As you recall, his clinical problems include:

1. Non ischemic dilated cardiomyopathy.
a. normal cardiac catheterization in 2001.
b. echocardiogram in 2003, ejection fraction 50%, enlarged LV diastolic diameter and enlarge left atrial diameter.
c. repeat cardiac catheterization on 10/7/05. Normal coronary arteries, LVEDP 30.
d. repeat echocardiogram, dilated left ventricle 6.4cm, hypokinesis the posterior wall, ejection fraction 20 - 30%.
2. Atrial ventricular nodal reentrant tachycardia
a. status post ablation
b. recurrent tachycardia 10/05 treated with Cardioversion.
c. repeat atrial tachycardia 9/06 treated with cardioversion.
3. Acute renal failure secondary to hypertension (resolved).
4. Hypertension diabetes
5. Diabetes
6. G6 PD deficiency
7. Gallbladder disease. (a calculus cholecystitis ultrasound demonstrating thickened gallbladder and sluge).
8. Diffuse bladder thickening with peri-vascular inflammation and possible mass.
9. Hypoglycemia induced ventricular tachycardia (resolved).
10. Acute hepatic failure (resolved).
11. Hyperlipidemia.
12. Sleep apnea (treated with CPAP)

I last saw this patient in February 1st 2006. Since that time he has had one hospital admission from 9/19/06 to 9/29/06 precipitated by acute decompenstated heart failure associated with an atrial tachycardia. His heart failure was treated in standard fashion with good resolution. His atrial tachycardia was treated with electrical cardioversion. Since hospital discharge he underwent an echocardiogram and repeat EKG on 10/20/06. The echocardiogram showed mild mitral regurgitation, RV peak systolic pressure of 35 – 45, restrictive mitral inflow pattern consistent with elevated left ventricular diastolic pressure, concentric left ventricular hypertrophy, global hypokinesis, ejection fraction 34% and normal sinus rhythm.

Today this patient is completely without symptoms. He denies chest pain, dyspnea on exertion, PND, orthopnea, peripheral edema, syncope, or pre syncope. He walks two miles five times a week over a one hour period. He has lost twenty pounds. He feels quite well.

Cardiac review of systems is above all. All other systems are negative.

Past medical history, family history, and social history are outlined above in the problem list.

MEDICATIONS

1. Toprol XL 37.5mg
2. Monopril 40mg bid.
3. Glumetza
4. Coumadin
5. Insulin
6. Albuterol
7. Tikosyn
8. Potassium
9. Novolog
10. Magnesium Oxide
11. Lasix 40mg q/d.
12. Naftin
13. Pravochol 40mg q/d.
14. Aspirin 81mg q/d.
15. Spironolactone 25mg q/d.

PHYSICAL EXAMINATION: Blood pressure 130/76, heart rate of 78. He weighs 129.9 kilograms. HEENT: Is unremarkable. He has no jugular venous distention. Carotid upstrokes are normal without bruits. Chest is clear to auscultation and percussion.
Cardiac exam reveals a paradoxical split second heart sound and a soft S3. There is a 2/6 systolic murmur heard throughout the precordium. There is no diastolic murmur. Abdominal exam besides obesity is normal. I do not feel a liver or a spleen tip. Bowel sounds are normal. Extremities reveal no clubbing, cyanosis or edema. Cutaneous and neurologic exams are normal.

EKG: Normal sinus rhythm.

IMPRESSION/PLAN: I believe that this patient is doing very well from the cardiac point of view. I do not think any further diagnostic tests are necessary at this time nor do I think any change in his medications are necessary at this time. This patient's principal problems are financial. He is having a difficult time affording his medications and his care. We have endeavored to give him samples of those medications which we have on hand and in addition we gave him a consult to financial counseling. In addition, we gave him a series of web sites to look for job applications. I would like to see this patient again in approximately six moths.

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Thank you for allowing me to help take care of this patient. If you have further questions please do not hesitate to contact me.

Sincerely,

Michael R. Zile, M.D.
Charles Ezra Daniel Professor of Medicine

MZ:kt

CARD CC: Zile

SIGNED BY MICHAEL ZILE, MD (MZ) 12/28/2006 11:13AM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Progress Notes

06/15/07 : 10:20am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
mz

CHARLES MIKELL
46 Year male
MRN# 1400764

June 15, 2007

Jeffrey Akhtar, M.D. and Cheri Franklin, MD
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764

Dear Dr's Akhtar and Franklin:

Mr. Charles Mikell returns today for reassessment of his cardiomyopathy. As you recall, his clinical problems include:

1. Non ischemic dilated cardiomyopathy.
a. normal cardiac catheterization in 2001.
b. echocardiogram in 2003, ejection fraction 50%, enlarged LV diastolic diameter and enlarge left atrial diameter.
c. repeat cardiac catheterization on 10/7/05. Normal coronary arteries, LVEDP 30.
d. repeat echocardiogram, dilated left ventricle 6.4cm, hypokinesis the posterior wall, ejection fraction 20 - 30%.
2. Atrial ventricular nodal reentrant tachycardia
a. status post ablation
b. recurrent tachycardia 10/05 treated with Cardioversion.
c. repeat atrial tachycardia 9/06 treated with cardioversion.
3. Acute renal failure secondary to hypertension (resolved).
4. Hypertension diabetes
5. Diabetes
6. G6 PD deficiency
7. Gallbladder disease. (a calculus cholecystitis ultrasound demonstrating thickened gallbladder and sluge).
8. Diffuse bladder thickening with peri-vascular inflammation and possible mass.
9. Hypoglycemia induced ventricular tachycardia (resolved).
10. Acute hepatic failure (resolved).
11. Hyperlipidemia.
12. Sleep apnea (treated with CPAP)

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

MEDICATIONS

1. Toprol XL 62.5mg q/d.
2. Pravachol 80mg q/d.
3. Lasix 40mg bid.
4. Monopril 20mg bid.
5. Metformin 500mg q/d.
6. Potassium
7. Magnesium
8. Coumadin
9. Insulin
10. Tikosyn
11. Aldactone

I last saw this patient on December 15, 2006. I am happy to report he is nearly asymptomatic from the cardiac point of view. He denies chest pain, dyspnea on exertion, PND, orthopnea, peripheral edema, syncope or pre syncope. He is now swimming once a week and plans to work out at boot camp on Tuesday. He is now working as a bus driver for the Canterbury House. He has been able to work with appropriate agencies to obtain funding for his medications.

Just to review his cardiomyopathy history, his last episode of tachy arrhythmia was September. He had an echocardiogram in October. I saw him in the office in December. From September 2006 through the current date, June 2007 he has had progressive titration of his medications, including beta blockade, ace inhibitors and aldosterone antagonist. We have not examined his ejection fraction since his visit in October and will plan to do that today. The results will be at the end of this note.

PHYSICAL EXAMINATION: Blood pressure 124/74, heart rate of 79 normal sinus rhythm. He weighs 126.5 kilograms. HEENT: Is unremarkable. He has no jugular venous distention. Carotid upstrokes are normal without bruits. Chest is clear to auscultation and percussion.
Cardiac exam reveals a paradoxical split 2nd heart sound. I do not hear an S3 or an S4. There is a II/VI systolic ejection murmur heard throughout the precordium. I do not hear a diastolic murmur. Abdominal exam reveals central obesity. I do not feel a liver or a spleen tip. Bowel sounds are normal. Extremities reveal no clubbing, cyanosis or edema. Cutaneous and neurologic exams are normal.

ECHOCARDIOGRAM: Reveals increased left ventricular end diastolic diameter, estimated ejection fraction 32%. This is basically unchanged from his echocardiogram performed in October.

IMPRESSION/PLAN: I believe that this patient is stable from the cardiac point of view. I would encourage Dr's. Akhtar and Franklin to continue to alter his medications until we reach target doses of beta blockade, ace inhibitors and aldosterone antagonist. In fact, we are quite close to that point at this time. I would not be discouraged at this point that his ejection fraction has not normalized or increased significantly. This may in fact take an entire year after he reaches target does of his medications. Fortunately, despite his low ejection fraction and large end diastolic volume, this patient is asymptomatic from the cardiac point of view. Therefore he is a compensated class II New York Heart Association. I do not think any further diagnostic tests are necessary today. I will leave final adjustments of his medications to the capable hands of Dr.'s Akhtar and Franklin. I would like to see this patient again in approximately six months.

Thank you for allowing me to help take care of this patient. If you have further questions please do not hesitate to contact me.

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Sincerely,

Michael R. Zile, M.D.
Charles Ezra Daniel Professor of Medicine

MZ:kt

CARD CC: none

Rx: TIKOSYN 0.5mg 1 twice a day , 30, Ref: 6

SIGNED BY MICHAEL ZILE, MD (MZ) 08/27/2007 08:47AM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

Nursing-Messages-PtEd

06/15/07 : 02:25pm
NURSE INTAKE NOTE CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA

CHARLES MIKELL, 46 Year old male

ANNUAL SCREEN DONE: 10/19/06

T 98.9* : Height : Weight 126.5kg

Syst. BP 124 : Diast. BP 74 : P. 79

REASON FOR VISIT: CHF follow-up

PAIN SCREENING: No problems with pain reported.
PAIN SCORE TODAY: 0
Pain Score determined by MUHA Adult scale 0= no pain, 10=extreme pain
Patient educated on use of pain scale.

CHANGES SINCE LAST VISIT: none

ER/HOSP VISITS : none

CURRENT MEDICATIONS:
Rx: ALDACTONE 25mg 1 qd
Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: LASIX 40mg 1 twice a day
Rx: NOVOLOG
Rx: INSULIN 70/30 55U/30U bid
Rx: WARFARIN SODIUM 10mg 1 daily
Rx: COUMADIN 5mg daily
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 2 daily
Rx: METFORMIN HCL 500 MG 1 TABLET daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: PRAVACHOL 80mg 1 daily
Rx: TOPROL XL 62.5mg daily
Rx: TIKOSYN 0.5mg 1 twice a day

Patient reports this is correct.

KNOWN ALLERGIES: NKA
Any **NEW** allergies to:
MEDICINES: no

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

FOODS: no
HERBALS: no
LATEX: no
Allergy: NKA

SIGNED BY CATHERINE D. PEGRAM, RN, BSN (KN4) 06/15/2007 02:28PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Special Studies

06/15/07 : 2:56pm
2D/M-Mode/Doppler

20070615145640228228748
Accession number: 20070615145640228228748

Name	Value	Range	Flag	Probability	Reference
WARD	PDC				PDC
Body Weight	126.5 kg				
Height	1.752 m				
Blood Pressure Systolic	124 mmHg				
Blood Pressure Diastolic	74 mmHg				

Interpretation: THIS IS A TECHNICALLY EXCELLENT STUDY. THE PATIENT HAD SINUS BRADYCARDIA THROUGHOUT THE STUDY. THE LEFT VENTRICLE IS DILATED. THE LEFT VENTRICULAR END DIASTOLIC DIAMETER IS 6.4cm. THE LEFT VENTRICULAR END SYSTOLIC DIAMETER IS 5.4cm. THERE IS PSEUDO ASYMMETRIC SEPTAL HYPERTROPHY. THERE IS AKINESIS OF THE INFERIOR POSTERIOR WALL WITH THINNING AND INCREASED DENSITY CONSISTENT WITH SCAR FORMATION. THE TWO DIMENSIONAL LEFT VENTRICULAR EJECTION FRACTION BY USING SIMPSON'S BIPLANE METHOD IS CALCULATED TO BE 32%. THE RIGHT VENTRICLE AND RIGHT ATRIUM APPEAR NORMAL IN SIZE. THE M MODE LEFT ATRIAL DIAMETER IS ABNORMAL AT 4.8cm. THE 2D LEFT ATRIAL VOLUME INDEX IS SEVERELY ABNORMAL (>40ml/m2).THE FOUR CARDIAC VALVES APPEAR STRUCTURALLY NORMAL. THERE ARE NO INTRACARDIAC MASSES IDENTIFIED AND A PERICARDIAL EFFUSION IS NOT VISUALIZED. THE INFERIOR VENA CAVA DIAMETER IS <1.7cm AND THERE IS 50% OR GREATER DECREASE IN DIAMETER WITH INSPIRATION CONSISTENT WITH NORMAL RIGHT ATRIAL PRESSURE (<5mmHg). I HAVE REVIEWED THE IMAGES AND AGREE WITH THE FINDINGS IN THIS REPORT. ELECTRONICALLY SIGNED BY: BRUCE W. USHER M.D. CARDIOLOGY ATTENDING

Referral Reason: NEITHER INSUFFICIENCY NOR STENOSIS OF THE VALVES IS IDENTIFIED, THEREFORE THE PEAK RIGHT VENTRICULAR SYSTOLIC PRESSURE CAN NOT BE DETERMINED.BY DOPPLER COLOR FLOW THERE ARE NO INTRACARDIAC SHUNTS IDENTIFIED.THERE IS PSEUDONORMALIZATION OF THE MITRAL INFLOW PATTERN CONSISTENT WITH IMPAIRED LEFT VENTRICULAR RELAXATION. THE E/e RATIO IS 10-15 SUGGESTIVE OF AN ELEVATED LEFT VENTRICULAR FILLING PRESSURE.

Name	Value	Range	Flag	Probability	Reference
LAD	(1.0 - 4.0)				RANGE
AO	(1.5 - 2.6)				RANGE
LVDd	(3.5 - 5.6)				RANGE
LVSs	(0.6 - 1.1)				RANGE
LVPWs	(0.6 - 1.1)				RANGE
LV_Mass	(Female < 110 g/m2; Male < 134 g/m2				RANGE

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

	)	RANGE
LVEF	(50 - 80%)	Average
EF A-L A2C	39.147646 %	Measurement 1
EF A-L A2C	39.147646 %	Average
LVEF MOD A2C	40.070727 %	Measurement 1
LVEF MOD A2C	40.070727 %	Average
SI A-L A2C	29.557751 ml/m2	Measurement 1
SI A-L A2C	29.557751 ml/m2	Average
SI MOD A2C	30.263936 ml/m2	Measurement 1
SI MOD A2C	30.263936 ml/m2	Average
SV A-L A2C	70.347449 ml	Measurement 1
SV A-L A2C	70.347449 ml	Average
SV MOD A2C	72.028167 ml	Measurement 1
SV MOD A2C	72.028167 ml	Average
EF A-L A4C	29.604162 %	Measurement 1
EF A-L A4C	29.604162 %	Average
LVEF MOD A4C	27.941217 %	Measurement 1
LVEF MOD A4C	27.941217 %	Average
SI A-L A4C	24.025283 ml/m2	Measurement 1
SI A-L A4C	24.025283 ml/m2	Average
SI MOD A4C	22.206883 ml/m2	Measurement 1
SI MOD A4C	22.206883 ml/m2	Average
SV A-L A4C	57.180174 ml	Measurement 1
SV A-L A4C	57.180174 ml	Average
SV MOD A4C	52.852382 ml	Measurement 1
SV MOD A4C	52.852382 ml	Average
EF Biplane	31.708830 %	Measurement 1
EF Biplane	31.708830 %	Average
LVEDV MOD BP	186.600227 ml	Measurement 1
LVEDV MOD BP	186.600227 ml	Average
LVESV MOD BP	127.431478 ml	Measurement 1
LVESV MOD BP	127.431478 ml	Average
SI Biplane	24.860819 ml/m2	Measurement 1
SI Biplane	24.860819 ml/m2	Average
SV Biplane	59.168748 ml	Measurement 1
SV Biplane	59.168748 ml	Average
LVAd A2C	45.323522 cm2	Measurement 1
LVAd A2C	45.323522 cm2	Measurement 1
LVDisks	0.000000 ml	Average
LVEDV A-L A2C	179.697773 ml	Measurement 1
LVEDV A-L A2C	179.697773 ml	Average
LVEDV MOD A2C	179.752583 ml	Measurement 1
LVEDV MOD A2C	179.752583 ml	Average
LVLd A2C	9.703389 cm	Measurement 1
LVLd A2C	9.703389 cm	Average
LVAd A4C	46.231081 cm2	

Printed using Practice Partner®

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

LVAd A4C	46.231081 cm2	Measurement 1
LVDisks	0.000000 ml	Measurement 1
LVEDV A-L A4C	193.149107 ml	Average
LVEDV A-L A4C	193.149107 ml	Measurement 1
LVEDV MOD A4C	189.155621 ml	Average
LVEDV MOD A4C	189.155621 ml	Measurement 1
LVLd A4C	9.392782 cm	Average
LVLd A4C	9.392782 cm	Measurement 1
LVAs A2C	32.482258 cm2	Average
LVAs A2C	32.482258 cm2	Measurement 1
LVDisks	0.000000 ml	Measurement 1
LVESV A-L A2C	109.350324 ml	Average
LVESV A-L A2C	109.350324 ml	Measurement 1
LVESV MOD A2C	107.724416 ml	Average
LVESV MOD A2C	107.724416 ml	Measurement 1
LVLs A2C	8.190138 cm	Average
LVLs A2C	8.190138 cm	Measurement 1
LVAs A4C	38.183298 cm2	Average
LVAs A4C	38.183298 cm2	Measurement 1
LVDisks	0.000000 ml	Measurement 1
LVESV A-L A4C	135.968933 ml	Average
LVESV A-L A4C	135.968933 ml	Measurement 1
LVESV MOD A4C	136.303239 ml	Average
LVESV MOD A4C	136.303239 ml	Measurement 1
LVLs A4C	9.101774 cm	Average
LVLs A4C	9.101774 cm	Measurement 1
LAESV(A-L)	107.458635 ml	Average
LAESV(A-L)	107.458635 ml	Measurement 1
LAESV Index (A-L)	45.150687 ml/m2	Average
LAESV Index (A-L)	45.150687 ml/m2	Measurement 1
LAAs A2C	29.628990 cm2	Average
LAAs A2C	29.628990 cm2	Measurement 1
LAESV A-L A2C	101.070678 ml	Average
LAESV A-L A2C	101.070678 ml	Measurement 1
LAESV MOD A2C	97.062017 ml	Average
LAESV MOD A2C	97.062017 ml	Measurement 1
LALs A2C	7.372714 cm	Average
LALs A2C	7.372714 cm	Measurement 1
LAAs A4C	31.501601 cm2	Average
LAAs A4C	31.501601 cm2	Measurement 1
LAESV A-L A4C	113.881008 ml	Average
LAESV A-L A4C	113.881008 ml	Measurement 1
LAESV MOD A4C	106.230701 ml	Average
LAESV MOD A4C	106.230701 ml	Measurement 1
LALs A4C	7.396611 cm	Average
LALs A4C	7.396611 cm	Measurement 1

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Ao Diam	3.080779 cm	Average
Ao Diam	3.080779 cm	Measurement 1
AV Cusp	2.355890 cm	Average
AV Cusp	2.355890 cm	Measurement 1
LA Diam	4.832595 cm	Average
LA Diam	4.832595 cm	Measurement 1
LA/Ao	1.568627 NoUnit	Average
LA/Ao	1.568627 NoUnit	Measurement 1
%FS	15.000000 %	Average
%FS	15.000000 %	Measurement 1
EDV(Teich)	207.265223 ml	Average
EDV(Teich)	207.265223 ml	Measurement 1
EF(Teich)	31.073736 %	Average
EF(Teich)	31.073736 %	Measurement 1
ESV(Teich)	142.860176 ml	Average
ESV(Teich)	142.860176 ml	Measurement 1
IVSd	1.340426 cm	Average
IVSd	1.340426 cm	Measurement 1
IVSs	1.404255 cm	Average
IVSs	1.404255 cm	Measurement 1
LVd Mass Index	154.073680 g/m2	Average
LVd Mass Index	154.073680 g/m2	Measurement 1
LVd Mass Ind (ASE)	128.082474 g/m2	Average
LVd Mass Ind (ASE)	128.082474 g/m2	Measurement 1
LVd Mass (ASE)	304.836287 g	Average
LVd Mass (ASE)	304.836287 g	Measurement 1
LVIDd	6.382979 cm	Average
LVIDd	6.382979 cm	Measurement 1
LVIDs	5.425532 cm	Average
LVIDs	5.425532 cm	Measurement 1
LVPWd	0.829787 cm	Average
LVPWd	0.829787 cm	Measurement 1
LVPWs	0.765957 cm	Average
LVPWs	0.765957 cm	Measurement 1
LVs Mass Index	115.996729 g/m2	Average
LVs Mass Index	115.996729 g/m2	Measurement 1
LVs Mass Ind (ASE)	97.620912 g/m2	Average
LVs Mass Ind (ASE)	97.620912 g/m2	Measurement 1
SV(Teich)	64.405048 ml	Average
SV(Teich)	64.405048 ml	Measurement 1
AV Env.TI	260.628466 ms	Average
AV Env.TI	260.628466 ms	Measurement 1
HR	68.481013 BPM	Average
HR	68.481013 BPM	Measurement 1
AV maxPG	5.206968 mmHg	Average
AV maxPG	5.206968 mmHg	Measurement 1

Printed using Practice Partner®

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

AV meanPG	2.883694 mmHg	Average
AV meanPG	2.883694 mmHg	Measurement 1
AV Vmax	1.140939 m/s	Average
AV Vmax	-1.140939 m/s	Measurement 1
AV Vmean	0.805915 m/s	Average
AV Vmean	-0.805915 m/s	Measurement 1
AV VTI	21.004446 cm	Average
AV VTI	21.004446 cm	Measurement 1
MV A Vel	0.494766 m/s	Average
MV A Vel	0.494766 m/s	Measurement 1
MV Dec Slope	2.221652 m/s2	Average
MV Dec Slope	2.221652 m/s2	Measurement 1
MV DecT	228.246920 ms	Average
MV DecT	228.246920 ms	Measurement 1
MV E Vel	0.507085 m/s	Average
MV E Vel	0.507085 m/s	Measurement 1
MV E/A Ratio	1.024900 NoUnit	Average
MV E/A Ratio	1.024900 NoUnit	Measurement 1
MV Time	121.996303 ms	Measurement 1
MV Velocity	0.236052 m/s	Measurement 1

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA
Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Orders/Requests/Referrals

02/20/08 : 03:22pm
REFERRAL to referral to cardiac rehab.

MEDICAL UNIVERSITY OF SOUTH CAROLINA
REFERRING CLINIC: MUSC CARDIOLOGY

REFERRING PROVIDER: DR.ZILE Beeper:

ATTENDING PHYSICIAN: Same as above

PATIENT'S NAME:
CHARLES MIKELL

PATIENT'S ADDRESS:
1332 VINE ST

CHARLESTON, SC 29407

REASON FOR REFERRAL: 47 year old male .CHF

Other medical problems: DIABETES.

NKA
CURRENT MEDICATIONS:
Rx: ALDACTONE 25mg 1 qd
Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: LASIX 40mg 1 twice a day
Rx: NOVOLOG
Rx: WARFARIN SODIUM 10mg 1 daily
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 2 daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: COUMADIN 5mg
Rx: CRESTOR 20mg 1 at bedtime
Rx: INSULIN 70/30 50U/50U bid
Rx: METOPROLOL SUCCINATE 50mg 1 daily
Rx: OMEPRAZOLE 20mg 1 daily
Rx: TIKOSYN .25mg 2 twice a day

Consult and continued management needed.

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

REQUEST FORM COMPLETED BY: GERI CANTRELL

SIGNED BY GERALDINE CANTRELL, PCT (L13) 02/20/2008 03:27PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Special Studies

02/20/08 : 3:52pm
Echo Adult Complete Transthoracic Echo Doppler
20080220155218235810546
Accession number: 20080220155218235810546

Name	Value	Range	Flag	Probability	Reference
WARD	PDC				
Blood Pressure	126/70 mmHg				
Height	1.75 m				
Weight	136.0 kg				

Interpretation: THE TECHNICAL QUALITY OF THE STUDY IS ADEQUATE. THE PATIENT HAD NORMAL SI NUS RHYTHM THROUGHOUT THE STUDY. THE LEFT VENTRICLE IS DILATED. THE LEFT VENTRIC ULAR END DIASTOLIC DIAMETER IS 6.7 cm. THE LEFT VENTRICULAR END SYSTOLIC DIAMETER IS 4.9 cm. THERE IS ECCENTRIC LEFT VENTRICULAR HYPERTROPHY AS DETERMINED BY INCREASED MASS INDEX WITH NORMAL WALL THICKNESS. THERE IS MILD APICAL-SEPTALHYPOKINESIS POSSIBLY REL ATED TO A BUNDLE BRANCH BLOCK. THE 2D GLOBAL LEFT VENTRICULAR EJECTION FRACTION IS EST IMATED AT 50%. THE 2D LEFT ATRIAL VOLUME INDEX IS SEVERELY ABNORMAL (>40ml/m2).THE RIGHT ATRIUM AND RIGHT VENTRICLE APPEAR MILDLY DILATED. THE FOUR CARDIAC VALVES APPEAR STRU CTURALLY NORMAL. THE INFERIOR VENA CAVA IS DILATED (>1.7cm) WITH <50% INSPIRATORY COLLAP SE CONSISTENT WITH A RIGHT ATRIAL PRESSURE OF 10-15mmHg.THERE ARE NO INTRACARDIAC MAS SES IDENTIFIED AND A PERICARDIAL EFFUSION IS NOT VISUALIZED. THERE IS AN ATRIAL SEPTAL AN EURYSM. I HAVE REVIEWED THE IMAGES AND AGREE WITH THE FINDINGS IN THIS REPORT. ELECTR ONICALLY SIGNED BY: PETER ZWERNER, M.D. CARDIOLOGY ATTENDING

Conventional And Doppler Color Flow Imaging: THERE IS MILD TRICUSPID REGURGITATION. WE ARE UNABLE TO ESTIMATE THE PEAK RIGHT VENTRICULAR PRESSURE DUE TO THE INABILITY TO OBTAIN AN ADEQUATE VELOCITY ENVELOPE OF THE TRICUSPID REGURGITATION. THERE IS MILD MITRA L REGURGITATION. THE MITRAL VALVE DOPPLER INFLOW VELOCITY IS NORMAL INDICATING NORM AL LEFT VENTRICULAR DIASTOLIC FUNCTION. BY DOPPLER COLOR FLOW THERE ARE NO INTRACARDI AC SHUNTS IDENTIFIED.NEITHER INSUFFICIENCY NOR STENOSIS OF THE OTHER CARDIAC VALV ES IS IDENTIFIED.

Name	Value	Range	Flag	Probability	Reference
LAD	(1.0 - 4.0)				RANGE
LAD	(1.0 - 4.0)				RANGE
A0	(3.5 - 5.6)				RANGE
LVDd	(0.6 - 1.1)				RANGE
LVSs	(0.6 - 1.1)				RANGE
LVPWs	(0.6 - 1.1)				RANGE

LV_Mass: (Female less than 110 g/m2; Male less than 134 g/m2) *Reference: RANGE*

Printed using Practice Partner®

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

Name	Value	Range	Flag	Probability	Reference
LVEF	(50 - 80%)				RANGE
LVEF MOD A2C	39.62634001 %				Average
SI MOD A2C	23.89873532 ml/m2				Average
SV MOD A2C	58.55190154 ml				Average
LVEF MOD A4C	52.45055194 %				Average
SI MOD A4C	55.64863541 ml/m2				Average
SV MOD A4C	136.33915675 ml				Average
EF Biplane	45.58208483 %				Average
LVEDV MOD BP	199.41294269 ml				Average
LVESV MOD BP	108.51636599 ml				Average
SI Biplane	37.10064355 ml/m2				Average
SV Biplane	90.8965767 ml				Average
LVEDV MOD A2C	147.76005436 ml				Average
LVLd A2C	9.02276064 cm				Average
LVEDV MOD A4C	259.93845957 ml				Average
LVLd A4C	9.44239334 cm				Average
LVESV MOD A2C	89.20815282 ml				Average
LVLs A2C	7.57320925 cm				Average
LVEDV INDEX	81.39303783 ml/m2				Average
LVESV INDEX	44.29239428 ml/m2				Average
LVESV MOD A4C	123.59930282 ml				Average
LVLs A4C	8.35925404 cm				Average
LAESV(A-L)	150.49824873 ml				Average
LAESV Index (A-L)	61.42785663 ml/m2				Average
LAAs A2C	32.50864363 cm2				Average
LAESV A-L A2C	122.76217935 ml				Average
LAESV MOD A2C	117.46572907 ml				Average
LALs A2C	7.3072164 cm				Average
LAAs A4C	39.84394355 cm2				Average
LAESV A-L A4C	184.45674729 ml				Average
LAESV MOD A4C	174.91251183 ml				Average
LALs A4C	7.30548319 cm				Average
Ao Diam	3.31011747 cm				Average
AV Cusp	2.6506549 cm				Average
LA Diam	5.88892149 cm				Average
LA/Ao	1.77906722				Average
%FS	27.27272727 %				Average
EDV(Teich)	229.03381895 ml				Average
EF(Teich)	51.88199071 %				Average
ESV(Teich)	110.20651429 ml				Average
IVSd	1.22879797 cm				Average
IVSs	2.08865246 cm				Average
LVd Mass Ind (ASE)	162.10694382 g/m2				Average
LVd Mass (ASE)	397.16201235 g				Average

Printed using Practice Partner®

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

LVIDd	6.67021268 cm	Average
LVIDs	4.85106377 cm	Average
LVPWd	1.28014183 cm	Average
LVPWs	1.07801417 cm	Average
SV(Teich)	118.82730466 ml	Average
AV Env.Ti	332.71719039 ms	Average
AV maxPG	6.39202675 mmHg	Average
AV meanPG	3.30009507 mmHg	Average
AV Vmax	1.26412289 m/s	Average
AV Vmean	0.82030935 m/s	Average
AV VTI	27.29310228 cm	Average
MV A Vel	0.33110328 m/s	Average
MV Dec Slope	6.33050998 m/s2	Average
MV DecT	148.73437438 ms	Average
MV E Vel	0.94156444 m/s	Average
MV E/A Ratio	2.84371823	Average

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

Progress Notes

07/18/08 : 09:04am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
mz

CHARLES MIKELL
47 year male
MRN# 1400764

July 18, 2008

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764

Dear Dr. Akhtar:

Mr. Charles Mikell returns to cardiology for re-evaluation of his cardiomyopathy. As you recall, his clinical problems include:

1. Non ischemic dilated cardiomyopathy.
   a. normal cardiac catheterization in 2001.
   b. echocardiogram in 2003, ejection fraction 50%, enlarged LV diastolic diameter and enlarge left atrial diameter.
   c. repeat cardiac catheterization on 10/7/05. Normal coronary arteries, LVEDP 30.
   d. repeat echocardiogram, dilated left ventricle 6.4cm, hypokinesis the posterior wall, ejection fraction 20 - 30%.
   e. repeat echocardiogram 2/20/08, LV end diastolic diameter 6.7 eccentric hypertrophy ejection fraction 50%.
2. Atrial ventricular nodal reentrant tachycardia
   a. status post ablation
   b. recurrent tachycardia 10/05 treated with cardioversion.
   c. repeat atrial tachycardia 9/06 treated with cardioversion.
3. Acute renal failure secondary to hypertension (resolved).
4. Hypertension diabetes
5. Diabetes
6. G6 PD deficiency
7. Gallbladder disease. (a calculus cholecystitis ultrasound demonstrating thickened gallbladder and sludge).
8. Diffuse bladder thickening with peri-vascular inflammation and possible mass.
9. Hypoglycemia induced ventricular tachycardia (resolved).
10. Acute hepatic failure (resolved).

11. Hyperlipidemia.
12. Sleep apnea (treated with CPAP)

MEDICATIONS

1. Toprol XL 62.5mg q/d.
2. Omeprazole.
3. Insulin.
4. Crestor.
5. Coumadin.
6. Potassium.
7. Magnesium.
8. Fosinopril.
9. Lasix.
10. Naftin.
11. Aspirin.
12. Aldactone.

I last saw this patient on 2/20/08. I am happy to report that he has been successful in attending cardiac rehabilitation and obtaining a nutrition consult. In addition he has been successful in losing 5 pounds. He continues to be a New York Heart Association Class II in a sense that with extra ordinary exertion, such as walking up two flights of stairs he does develop some dyspnea. On the other hand, outside of this activity he is completely asymptomatic. He denies chest pain, PND, orthopnea, peripheral edema, syncope, or pre-syncope.

Cardiac review of systems is above. All other systems are negative.

Past medical history, family history, and social history are unchanged from my last evaluation.

PHYSICAL EXAMINATION: Blood pressure 130/79, heart rate of 80, weight 1364kg. HEENT: Is unremarkable. He has no jugular venous distention. Carotid upstrokes are normal without bruits. Chest is clear to auscultation and percussion. Cardiac exam reveals a normal 1st and 2nd heart sound. I do not hear an S3 or an S4. There is a II/VI systolic ejection murmur heard throughout the precordium. I do not hear a diastolic murmur. Abdominal exam reveals central obesity. I do not feel a liver or a spleen tip. Bowel sounds are normal. Extremities reveal no clubbing, cyanosis or edema. Cutaneous and neurologic exams are normal.

IMPRESSION/PLAN: I believe that this patient is doing exceedingly well from the cardiac point of view. I do not think any further diagnostic tests are necessary today nor do I think any change in his medications is necessary. I would like for him to continue to work on weight loss and exercise. I will see him again in my office in six months.

Thank you for allowing me to help take care of this patient. If you have further questions please do not hesitate to contact me.

Sincerely,

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Michael R. Zile, M.D.
Charles Ezra Daniel Professor of Medicine
MZ:kt

CARD CC: none

SIGNED BY MICHAEL ZILE, MD (ATTENDING) (MZ) 07/30/2008 12:48PM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA
Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Nursing-Messages-PtEd

07/18/08 : 01:04pm
NURSE INTAKE NOTE CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA

CHARLES MIKELL 47 year old male	**ANNUAL SCREEN DONE: 02/20/08**

CHIEF COMPLAINT/REASON FOR VISIT: FOLLOW UP DIASTOLIC DISEASE

PAIN SCREENING: Has ongoing pain problems, being followed by another healthcare provider.
PAIN SCORE TODAY: N/A TO VISIT RIGHT SHOULDER

CHANGES SINCE LAST VISIT: none

T 100f : Ht. : Wt. 134 Kg
07/18/08:01:04 PM: WEIGHT IN LBS: 295 lbs
Syst. BP 142 : Diast. BP 79 : P. 86
BP Method: Machine
BP Side: left
BP Location Taken: arm
BP Cuff Size: Adult Long
BP Position: sitting
BP Activity: Calm

CURRENT MEDICATIONS (Prescribed, Herbal or OTC):
Rx: ALDACTONE 25mg 1 qd
Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: LASIX 40mg 1 twice a day
Rx: NOVOLOG
Rx: WARFARIN SODIUM 10mg 1 daily
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 2 daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: COUMADIN 5mg
Rx: CRESTOR 20mg 1 at bedtime
Rx: INSULIN 70/30 50U/50U bid
Rx: METOPROLOL SUCCINATE 50mg 1 daily
Rx: OMEPRAZOLE 20mg 1 daily
Rx: TIKOSYN .25mg 2 twice a day

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Medication Reconciliation: reconciled per patient report.

KNOWN ALLERGIES:
NKA

Any **NEW** allergies to medicines, foods, herbals or latex? no

EDUCATION DOCUMENTATION -
Learning Needs/Content Taught: Patient's Plan of Care, Medications

Person(s) Taught: Patient

Readiness to Learn: No barriers

Department: Nursing, Physician

Teaching/Learning Method: Verbal

Outcome/Comprehension: Able to state understanding and/or return demonstration

SIGNED BY MARTHA HOLMES, RN (N90) 07/18/2008 01:06PM

Progress Notes

01/30/09 : 02:26pm
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
mz

CHARLES MIKELL
48 year male
MRN# 1400764

January 30, 2009

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764

Dear Jeff:

Mr. Charles Mikell returns to cardiology for re-evaluation of his cardiomyopathy. As you recall, his clinical problems include:

1. Non ischemic dilated cardiomyopathy.
   a. normal cardiac catheterization in 2001.
b. echocardiogram in 2003, ejection fraction 50%, enlarged LV diastolic diameter and enlarge left atrial diameter.
c. repeat cardiac catheterization on 10/7/05. Normal coronary arteries, LVEDP 30.
d. repeat echocardiogram, dilated left ventricle 6.4cm, hypokinesis the posterior wall, ejection fraction 20 - 30%.
e. repeat echocardiogram 2/20/08, LV end diastolic diameter 6.7 eccentric hypertrophy ejection fraction 50%.
2. Atrial ventricular nodal reentrant tachycardia
   a. status post ablation
   b. recurrent tachycardia 10/05 treated with cardioversion.
   c. repeat atrial tachycardia 9/06 treated with cardioversion.
3. Acute renal failure secondary to hypertension (resolved).
4. Hypertension diabetes
5. Diabetes
6. G6 PD deficiency
7. Gallbladder disease. (a calculus cholecystitis ultrasound demonstrating thickened
   gallbladder and sludge).
8. Diffuse bladder thickening with peri-vascular inflammation and possible mass.

9. Hypoglycemia induced ventricular tachycardia (resolved).
10. Acute hepatic failure (resolved).
11. Hyperlipidemia.
12. Sleep apnea (treated with CPAP)

MEDICATIONS

1. Toprol XL 62.5mg q/d.
2. Omeprazole.
3. Insulin.
4. Crestor.
5. Coumadin.
6. Potassium.
7. Magnesium.
8. Fosinopril.
9. Lasix.
10. Naftin.
11. Aspirin.
12. Aldactone.

I last saw this patient on 7/18/08. I am happy to report that this patient is quite stable from the cardiac point of view. He continues to go to cardiac rehab and is making progress in his exercise tolerance. He walks on the treadmill 2-1/2 miles an hour and an elevation of 5% for 11 minutes. I believe he is New York Heart Association Class II in the sense that only extra ordinary exertion such as walking up two flights of stairs produces symptoms of dyspnea. Otherwise he denies chest pain, PND, orthopnea, peripheral edema, syncope, or pre-syncope.

Cardiac review of systems is as above. All other systems are negative.

Past medical history, family history, and social history are unchanged from my last evaluation.

PHYSICAL EXAMINATION: Blood pressure 129/69, heart rate of 77, weight 296 lbs. HEENT: Is unremarkable. He has no jugular venous distention. Carotid upstrokes are normal without bruits. Chest is clear to auscultation and percussion. Cardiac exam reveals a normal 1st and 2nd heart sound. I do not hear an S3 or an S4. There is a II/VI systolic ejection murmur heard throughout the precordium. I do not hear a diastolic murmur. Abdominal exam reveals central obesity. I do not feel a liver or a spleen tip. Bowel sounds are normal. Extremities reveal no clubbing, cyanosis or edema. Cutaneous and neurologic exams are normal.

Impression/Plan: I believe that this patient is doing exceedingly well from the cardiac point of view. I do not think any further diagnostic tests are necessary today nor do I think any change in his medications is necessary. I would like to see this patient again in approximately six months.

Thank you for allowing me to help take care of this patient. If you have further questions please do not hesitate to contact me.

Sincerely,

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Michael R. Zile, M.D.
Charles Ezra Daniel Professor of Medicine
MZ:kt

CARD CC: none

SIGNED BY JANEANE SMITH (N4L) 02/06/2009 02:29PM

CO-SIGNED BY MICHAEL ZILE, MD (ATTENDING) (MZ) 02/10/2009 01:36PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Nursing-Messages-PtEd

01/30/09 : 03:35pm
NURSE INTAKE NOTE CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA

CHARLES MIKELL 48 year old male	**ANNUAL SCREEN DONE: 02/20/08**

CHIEF COMPLAINT/REASON FOR VISIT: atrial fib

PAIN SCREENING: No problems with pain reported.
PAIN SCORE TODAY: 0
Pain Score determined by MUSC Pain Scale 0= no pain, 10=extreme pain
Patient educated on use of pain scale.

CHANGES SINCE LAST VISIT: none

T98.4 : Ht. : Wt. 134.6 Kg
01/30/09:03:35 PM: WEIGHT IN LBS: 296 lbs
Syst. BP 129 : Diast. BP 69 : P. 77
BP Method: Machine
BP Side: right
BP Location Taken: arm
BP Cuff Size: Large Adult
BP Position: sitting
BP Activity: Calm

CURRENT MEDICATIONS (Prescribed, Herbal or OTC):
Rx: ALDACTONE 25mg 1 qd
Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: LASIX 40mg 1 twice a day
Rx: NOVOLOG
Rx: WARFARIN SODIUM 10mg 1 daily
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 2 daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: CRESTOR 20mg 1 at bedtime
Rx: INSULIN 70/30 50U/50U bid
Rx: METOPROLOL SUCCINATE 50mg 1 daily
Rx: OMEPRAZOLE 20mg 1 daily

Rx: TIKOSYN 0.25mg 2 twice a day
Rx: LASIX 40mg 1 at bedtime

Medication Reconciliation: reconciled per patient report.

KNOWN ALLERGIES:
NKA

Any **NEW** allergies to medicines, foods, herbals or latex? no

Does patient want to receive Influenza immunization today? Vaccine not given in this clinic.
FLUSHOTRESPONSE08/09: Vaccine not given in this clinic

SIGNED BY JUDITH VELLA, R.N. (D2N) 01/30/2009 03:37PM

Progress Notes

06/26/09 : 09:02am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
mz

CHARLES MIKELL
48 year old male
MRN# 1400764

June 26, 2009

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764

Dear Jeff:

Mr. Mikell returns to cardiology for follow-up of his cardiomyopathy. As you recall, his medical problems include:

1. Non ischemic dilated cardiomyopathy.
   a. normal cardiac catheterization in 2001.
   b. echocardiogram in 2003, ejection fraction 50%, enlarged LV diastolic diameter and enlarge left atrial diameter.
   c. repeat cardiac catheterization on 10/7/05. Normal coronary arteries, LVEDP 30.
   d. repeat echocardiogram, dilated left ventricle 6.4cm, hypokinesis the posterior wall, ejection fraction 20 - 30%.
   e. repeat echocardiogram 2/20/08, LV end diastolic diameter 6.7 eccentric hypertrophy ejection fraction 50%.
2. Atrial ventricular nodal reentrant tachycardia
   a. status post ablation
   b. recurrent tachycardia 10/05 treated with cardioversion.
   c. repeat atrial tachycardia 9/06 treated with cardioversion.
3. Acute renal failure secondary to hypertension (resolved).
4. Hypertension
5. Diabetes
6. G6 PD deficiency

7. Gallbladder disease. (a calculus cholecystitis ultrasound demonstrating thickened gallbladder and sludge).
8. Diffuse bladder thickening with peri-vascular inflammation and possible mass.
9. Hypoglycemia induced ventricular tachycardia (resolved).
10. Acute hepatic failure (resolved).
11. Hyperlipidemia.
12. Sleep apnea (treated with CPAP)

MEDICATIONS

1. Lasix 80 mg in morning
2. Lasix 40 mg in evening
3. Tikosyn 0.25 mg twice a day
4. Omeprazole 20 mg a day
5. Metoprolol 50 mg a day
6. Insulin
7. Crestor 20 mg a day
8. Potassium 20 meq bid
9. Magnesium 400 mg twice a day
10. Fosinopril 20 mg twice a day
11. Warfarin 10 mg a day
12. Novolog
13. Naftin
14. Aspirin 31 mg a day
15. Aldactone 25 mg a day

Latest laboratories: INR 3.3 on 6/15/09
3/09/09 BUN 40; creatinine 1.6

I last saw this patient on 1/30/09. I am happy to report that his cardiovascular status is stable. He no longer goes to rehab and he is not walking on a treadmill. He is swimming for an hour and a half on Monday and Friday. I believe his symptoms are New York Heart Association Class II and that he has shortness of breath only extraordinary activities such as walking up more than two flights of stairs otherwise he denies chest pain, PND, orthopnea, peripheral edema, syncope, or pre-syncope.

Cardiac review of systems is as above. All other systems are negative.

Past medical history, family history, and social history are unchanged from my last evaluation.

PHYSICAL EXAMINATION: Blood pressure 135/78, heart rate of 78, weight 300 lbs. HEENT: Is unremarkable. He has no jugular venous distention. Carotid upstrokes are normal without bruits. Chest is clear to auscultation and percussion. Cardiac exam reveals a normal 1st and 2nd heart sound. I do not hear an S3 or an S4. There is a II/VI systolic ejection murmur heard throughout the precordium. I do not

hear a diastolic murmur. Abdominal exam reveals central obesity. I do not feel a liver or a spleen tip. Bowel sounds are normal. Extremities reveal no clubbing, cyanosis but there is trace peripheral edema. Cutaneous and neurologic exams are normal.

Impression/Plan: I believe that this patient is doing exceedingly well from the cardiac point of view. He is stable from the heart failure point of view and stable from the chronic kidney disease point of view. However, since it has been three months since we checked his BUN Creatinine I have asked for a complete metabolic profile to be drawn today. I will check this and communicate with Dr. Akhtar. My concern is that he is on Spironolactone and an ACE inhibitor with a creatinine of 1.6. We need to be extraordinarily careful with the titration of these medications, vis-a-vie his chronic kidney disease. In addition his potassium is 5.3 which may be a little bit higher that we would like to see it. None-the-less the CMP will be drawn today and we will make adjustments accordingly. I would like to see this patient again in my office in six months.
Thank you for allowing me to help take care of this patient. If you have further questions please do not hesitate to contact me.

ADDENDUM: We performed a complete metabolic profile on Mr. Mikell. To our surprise, this was significantly abnormal. His serum sodium was 130, potassium was 6.3, blood sugar was 590, creatinine 1.9, BUN 45. On the basis of this we called Mr. Mikell and asked him to discontinue his Aldactone, re-check his blood sugar and treat himself with insulin as appropriate, to call Dr. Akhtar's office on Monday and schedule a repeat basic metabolic profile to re-check these values. I attempted to call Dr. Akhtar's office and to page him but he was not available for discussion. We explained the meaning of all of these finding and the serious nature of them to Mr. Mikell. Both Dr. Zile and Martha Holmes participated in this discussion with him.

Sincerely,

Michael R. Zile, M.D.
Charles Ezra Daniel Professor of Medicine
MZ:js

CARD CC: none

SIGNED BY MICHAEL ZILE, MD (ATTENDING) (MZ) 07/08/2009 09:59AM

MUSC Medical Center
HOSPITAL DISCHARGE SUMMARY
Patient Name: MIKELL, CHARLES L
MRN: 001400764
Patcom: 103904801
Admitted: 08/03/2009
Discharged: 08/11/2009
Service:
Attending: Michael Zile, MD

Referring: Jeffrey Akhtar, MD
Michael Zile, MD

CHIEF COMPLAINT: "I've been swelling up."

HISTORY OF PRESENT ILLNESS: Mr. Mikell is a 48-year-old gentleman with a history of nonischemic dilated cardiomyopathy, AVNRT status post ablation, hypertension, dyslipidemia, diabetes mellitus, and OSA who presents with a 3-week history of increasing edema. Mr. Mikell states that a few weeks ago he visited his cardiologist (Dr. Zile) and on routine bloodwork was found to be hyponatremic, hypokalemic, with an increasing creatinine. Secondary to this his spironolactone was held. On followup with his primary care physician (Dr. Ahktar) his Lasix regimen was adjusted from 80 in the morning and 40 at night to 40 b.i.d. (secondary to the electrolyte abnormalities and the fact that Mr. Mikell was asymptomatic at this time from a CHF prospective). Over the next 2 weeks Mr. Mikell noticed increasing edema of his lower extremities, abdomen, and scrotum and was found to have a 7-pound weight gain during his followup appointment with Dr. Ahktar. His Lasix regimen was returned to his prior dosing schedule and his spironolactone continued to be held. Over the next week Mr. Mikell experienced no significant decrease in his edema. His spironolactone was started the Friday before admission by his PCP. Over the weekend there continued to be no improvement in his edema and on the day of admission Dr. Zile and Dr. Ahktar felt that it would be in the patient's best interest to be admitted to the hospital for further evaluation and diuresis. Mr. Mikell endorses some increasing exertional dyspnea and fatigue but he denies any shortness of breath, PND, orthopnea, or chest pain. He also complains of increased swelling, most pronounced in lower extremities, and scrotal edema.

PAST MEDICAL HISTORY:
1. NIDCM.
2. AVNRT status post ablation. Has had recurrent tachycardia treated with cardioversion in October 2005 and September 2006.
3. Hypertension.
4. Dyslipidemia.
5. Diabetes mellitus.
6. Obstructive sleep apnea.
7. G6PD deficiency.

PAST SURGICAL HISTORY: Cardiac catheterization in 2001 and repeat cardiac catheterization in 2005.

ALLERGIES: No known drug allergies.

SOCIAL HISTORY: Currently unemployed on disability secondary to his heart failure. He denies any history of tobacco, alcohol, or drug use.

HYSICAL EXAMINATION:
VITAL SIGNS ON ADMISSION: Blood pressure 147/82, pulse 84, respirations 22, temperature 99 degrees Fahrenheit, oxygen saturation 95% on room air.
GENERAL: An obese, well-developed, well-nourished gentleman sitting on the side of the bed in no acute distress, alert and oriented x4.
SKIN: Inspection and palpation of the skin within normal limits.
HEENT: Normocephalic, atraumatic. Pupils equal, round, reactive to light. Oropharynx is clear.
NECK: Trachea midline. There is no appreciable cervical adenopathy.
CHEST: Clear to auscultation bilaterally with no crackles or wheezes. Good air movement without use of accessory muscles. Percussion was normal.
CARDIOVASCULAR: Regular rate and rhythm. No rubs or gallops heard but a 2/6 systolic murmur is present. JVD. No carotid bruits, 2+ distal pulses in extremities. GASTROINTESTINAL: Obese abdomen with mild distention. No tenderness to palpation. Active bowel sounds.
GENITOURINARY EXAM: There was significant scrotal edema.
MUSCULOSKELETAL: Extremities: Significant pitting edema in bilateral lower extremities extending up to the thigh. Upper extremities were mildly edematous.
NEUROLOGIC: Alert and oriented x4. No focal neurologic deficits.
PSYCHIATRIC: He was appropriate.

PERTINENT STUDIES ON ADMISSION: An echocardiogram from 02/20/2008 which showed dilated left ventricle, left ventricle end-diastolic diameter 6.7 cm, left ventricle end-systolic diameter 4.9 cm, eccentric left ventricular hypertrophy. Ejection fraction estimated t 50%. Left atrial volume index severely abnormal. Also reviewed rdiac catheterization from 2005 which showed normal epicardial oronaries and elevated left-sided filling pressure, LVEDP of 30.

EKG on admission showed sinus rhythm with first-degree AV block, no significant change from the patient's last EKG which was dated 12/15/2006.

PERTINENT LABORATORIES ON ADMISSION: Hemoglobin Alc 6%, INR 2.26, BNP 172, troponin 0.07, creatinine 2.3, PFTs within normal limits.

STUDIES PERFORMED IN HOSPITAL: An echo on 08/04 showed eccentric left ventricular hypertrophy, ventricular ejection fraction estimated at greater than 40%, mild global hypokinesis of the left ventricle with relatively worse function of the inferior posterior wall and incoordinate septal motion, left atrium severely dilated to 5.9 cm, right atrium mildly dilated, rightward bowing of the inner-atrial septum indicating elevated left atrial pressure. The right ventricle appeared normal in size and systolic function. No pericardial effusion identified. The inferior vena cava was dilated at 1.7 cm without inspiratory collapse consistent with a right atrial pressure of over 15 mmHg. Since the patient's last echo dated February 2008 there has been a decline in the left ventricular function with accentuation of regional wall-motion abnormalities. DE/e ratio is over 15, consistent with an elevated left ventricular filling pressure. The mitral valve inflow Doppler and mitral annulus tissue Doppler are consistent with stage III or severe left ventricular diastolic dysfunction (restrictive physiology).

Ultrasound of scrotum, impression: Severe scrotal edema with _____ agnostic quality visualization of the inter-scrotal contents. There

re bilateral enlarged epididymis of uncertain clinical significance. ecommend clinical correlation instead of repeat ultrasound once edema and anasarca have resolved.

CONSULTATIONS OBTAINED DURING HOSPITAL STAY:
1. Neurology.
2. Vascular surgery.
3. Dietician.

HOSPITAL COURSE: Mr. Mikell was admitted to the Cardiology Red service for observation and diuresis of his worsening edema. It was felt that this was likely secondary to medication changes. He was started on IV Lasix 40 mg b.i.d. to assist with diuresis, strict in's and out's, follow daily weights, and 2g sodium-restricted diet. We followed his cardiac enzymes which trended out negative and his EKG showed no evidence of an ischemic etiology. BNP was mildly elevated and chest x-ray showed mild pulmonary edema. On admission we kept Mr. Michael on his home Tikosyn dose, which he takes for his history of AVNRT. We also kept him on his home Coumadin dose.He had a therapeutic INR of over 2 on admission to the hospital. His home hypertension medications were continued and he was started on 50 units of NPH insulin 2 times a day covered with sliding scale for his diabetes mellitus. Mr. Mikell diuresed well on the Lasix regimen that we started with a net output of roughly 5-6 L in his first 2 days. There was significant improvement in Mr. Mikell's peripheral edema. There was less improvement, though, in his scrotal edema. Mr. Mikell continued to complain of pain in that area secondary to this and was beginning to get concerned over his lack of improvement. While we felt that this edema was just probably secondary to his volume overload, we did consult with Urology to come take a look at him to make sure that there was no underlying pathology occurring. They came and saw the patient on 08/06/2009. It was their initial impression that this was secondary to his CHF exacerbation but in light of the massive amounts of edema it was difficult for them to adequately assess the epididymidis, so they recommended that we get a scrotal ultrasound to confirm that it was soft- tissue edema and rule out any epididymidis. Ultrasound of the scrotum was obtained and it was read as showing severe scrotal edema with bilateral enlarged epididymis, uncertain clinical significance and recommended clinical correlation. Repeat ultrasound once edema and anasarca had resolved. We discussed these results with Urology and their belief was that this was secondary to his CHF exacerbation but recommended that he does have a followup ultrasound as an outpatient once his scrotal edema has resolved. Mr. Mikell continued to diurese well and as he mobilized his fluid his creatinine also began to trend down, going from 2.3 on admission to 1.8 about halfway through his hospital stay and remaining relatively stable. He continued to remain asymptomatic from a cardiovascular standpoint as far as shortness of breath, orthopnea, PND, or chest pain was concerned. The only continuing complaint was his scrotal edema. On 08/10 Mr. Mikell had continued to diurese extremely well, net output roughly 14-15 L at that time and it was felt that we could transition him to IV Lasix to p.o. Lasix. He was switched over from 40 IV b.i.d. to 80 mg of Lasix p.o. b.i.d. Over that night he continued to have good urine output with a net deficit of about almost 1.5 L. The next day, 08/11, he had a net total output of approximately 16 L over the duration of his hospital stay. He was now on p.o. diuretics and it was felt that we could discharge him home with very close followup. Mr. Mikell was going to have his first followup appointment with Dr. Zile at his clinic on the Friday after discharge, that would be 3 days following discharge. He will see Dr. Zile every Friday and every Tuesday for the foreseeable future. During this period of time he is to carefully measure his urine output and his fluid intake, not to exceed 1500 cc per day and he was supposed to weigh himself daily. All of this is supposed to be recorded and he was supposed to bring it with him to Dr. Zile's clinic. Mr. Mikell was provided with a urinal

for which to measure his urine output and sheet on which to record this various data that we had asked of him. We also had a dietician come to see Mr. Mikell and talk to him about how to adhere to a heart-failure diet. On day of discharge his mother, who appears to do most of the cooking for him at his house, had several questions and we had the dietician follow up with him right before discharge to answer any questions that she might have had about instituting the low- sodium heart- failure diet.

On the 2nd day of Mr. Mikell's stay in the hospital he complained of swelling of his second toe on his right foot with an associated color change, but denied any pain. On exam the second toe did have some fluctuance and no tenderness to palpation. He had palpable DP and PT pulses in that foot and it felt well perfused and was warm. There was some mild color change around the toe. No evidence of any obvious necrosis. As Mr. Mikell has a long history of diabetes mellitus we felt that it was pertinent to consult Vascular Surgery to take a look at his toe and see what they thought. They considered at the time that it could be an infectious etiology versus ischemic etiology. Vascular surgeons came by and it was their impression that this was probably a subungual hematoma secondary to trauma. They I and D'd the toe and saw no pus but just a little bit of blood-tinged fluid. They sent it off for cultures and sensitivities just to be safe. These came back negative. They recommended a dry dressing and observation. They came back and visited with Mr. Mikell twice, last on his day of discharge and they felt that his toe was much improved. When they had first seen it they had checked Doppler signals on his DP and PT which was positive and they advised him just to call back if there was any increased drainage, purulence, fever, red streaks, emanating out from the toe. They did not feel that an outpatient surgical followup will be necessary.

DISCHARGE DIAGNOSIS(ES):
1. Acute congestive heart failure exacerbation (chronic heart failure with systolic and diastolic components).
2. Nonischemic dilated cardiomyopathy (NIDCM).
3. AV-nodal reentrant tachycardia status post ablation.
4. Acute kidney injury on CRI.
5. Hypertension.
6. Dyslipidemia.
7. Diabetes mellitus.
8. OSA G6PD deficiency.
9. Subungual hematoma

DISCHARGE MEDICATIONS:
1. Tikosyn 2.5 mg p.o. b.i.d.
2. Metoprolol 50 mg p.o. daily.
3. Lasix 80 mg p.o. b.i.d.
4. Lisinopril 20 mg p.o. b.i.d.
5. Warfarin 5 mg p.o. (3 tablets Monday, Wednesday, and Friday; 2 tablets Tuesday, Thursday, Sunday).
6. Omeprazole 20 mg p.o. daily.
7. Crestor 20 mg p.o. daily.
8. Aspirin 81 mg p.o. daily.
9. Magnesium oxide 400 mg p.o. b.i.d.
10. Biotin 1 tablet p.o. b.i.d.
11. Continue his previous home insulin 70/30, 50 units a.m. and at bedtime.

DISCHARGE DISPOSITION: Discharge to home.

DISCHARGE PLANS: As previously stated, Mr. Mikell will be following up with Mr. Zile on every Friday and Tuesday in clinic. His first visit will be this coming Friday after discharge.

Dictated by: Scott Hebreth Witt, MD

_____

Scott Hebreth Witt, MD

_____

Michael Zile, MD
Attending

671444 / 44076 /
JOB: 5000944
DD: 08/11/09 01:48 PM
DT: 08/12/09 07:30 AM

Additional CC:_____
Authenticated and Edited by SCOTT H. WITT, MD On 8/21/09 2:20:16 PM
Authenticated by MICHAEL ZILE, MD On 08/24/2009 11:45:35 AM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Progress Notes

08/14/09 : 11:40am
Jackie Sebastian, RN, MSN, ANP-C

August 14, 2009
Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403
RE: Charles Mikell
MRN: 1400764
DOB: 1/25/1961

Dear Dr. Akhtar:
History of present illness: on-going scrotal pain and edema.
Mr. Mikell was recently hospitalized from August 8, 2009 and discharged August 11, 2009. Briefly Mr. Mikell is a 48 year-old gentleman with a history of non ischemic dilated cardiomyopathy, AVNRT status-post AVNRT ablation, hypertension, dyslipidemia, diabetes mellitus, and obstructive sleep apnea. He presented with a three week history of increasing edema. As you are aware Mr. Mikell had seen Dr. Zile several weeks before and on routine blood work was found to be hyponatremic, hypokalemic and was found to have an increase in creatinine. Because of this his spironolactone was held. Upon follow-up with you his Lasix regimen was adjusted from 80 mg in the morning and 40 mg at night to 40 mg bid secondary to electrolyte abnormalities. Over the next few weeks Mr. Mikell noticed increasing edema of his lower extremities, abdomen, and scrotum and was found to have a 17 pound weight gain during his follow-up with you. Therefore the patient was diuresed with IV Lasix and actually diuresed with a net output roughly of 14 to 15 liters and he was then transferred to po Lasix. Dr. Zile had asked that I follow-up with the patient related to his scrotal edema and bilateral lower extremity edema on a q 4 day basis to just check labs and to make sure that the edema was actually improving. Therefore he was seen on August 14, 2009 for his first outpatient appointment with me. He denied any chest pain, shortness of breath, PND, orthopnea, and stated he felt that his bilateral lower extremity edema, his abdomen, and his scrotal edema has slightly improved however he was still in quite a bit of pain from the scrotal edema. Prior to his discharge from the hospital he was asked to keep accurate intake and output measurements and to take daily weights at home. He has been very compliant with this and today brings in a chart demonstrating this. Again, his review of systems if fairly negative for anything except the on-going scrotal pain and edema.
Physical exam: head normal cephalic. Sclera anicteric. Neck supple without JVD, or thyromegaly. No carotid bruits. Lungs sound clear bilaterally without wheezes, rales or rhonchi. Heart sounds regular with S1 and S2 no murmur, rubs or gallops. Abdomen obese. Somewhat firm on palpation. Extremities demonstrated peripheral pulses 2+ throughout, 2+ pitting edema to bilateral lower extremities. Scrotum has improved somewhat from when I saw him in the hospital on Tuesday, August 11. However it is still the size of a cantaloupe.
Assessment:

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

1. Edema to lower extremities and scrotum secondary to congestive heart failure exacerbation.
2. Chronic renal insufficiency.

Plan: Please note this was all discussed with Dr. Zile and he actually assessed the patient before I saw him. The plan is to get a basic metabolic panel today and pending these results if the BUN, creatinine, and potassium are stable the patient is to continue 80 mg of Lasix po bid and continue to monitor daily weights and intake and output. Of note, he is negative approximately ½ liter of fluid a day based on his intake and output. He will continue all of his other current medications. He continues to follow a low sodium diet on which his mother is very helpful as she prepares his meals and had not been using any sodium whatsoever. The patient is to follow-up on Tuesday, August 18, 2009 for repeat assessment and further blood work.

ADDENDUM: The patient's blood work was reviewed with Dr. Zile. BUN and creatinine remains stable. Potassium is stable as well. Therefore he is to continue his 80 mg of po Lasix bid. It is also mentioned that the patient could potentially go to Hester's in West Ashley which is a medical supply store for a scrotal support for him to wear during this time period.

Jackie Sebastian, RN, MSN, ANP-C

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 08/24/2009 12:53PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Progress Notes

08/21/09 : 11:55am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2H2

CHARLES MIKELL
48 year old male
MRN# 1400764

August 21, 2009

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764
DOB: 1/25/1961

Dear Dr. Akhtar:

As you know I have been following Mr. Mikell's scrotal edema since his hospital discharge earlier this month. The patient does endorse feeling better and has noticed a change in the scrotal edema with it lessening. His weights have remained stable on the 80 mg of Lasix po bid and his output is ranging anywhere from 2800 to 3000 cc per day. He is keeping his intake to less 1500 cc. He denies any chest pain, shortness of breath, PND, orthopnea, pre-syncope, dizziness, or lightheadedness. He continues to endorse tenderness at the actual scrotal sight stating that at times it gets very hard and very tender to the touch. He is able to walk much better than he had been when he was first diagnosed from the hospital and he states that he able to actually stand on the scale whereas two weeks ago he was unable to do this secondary to the scrotal edema. Again his weights have remained stable and his intake and output has been recorded efficiently.

Physical exam: weight was 134.8 kg this is about the same as 8/18/2009. Temperature 99.1; pulse 72; blood pressure134/78. Head normal cephalic. Sclera anicteric. Neck no JVD or carotid bruits. Lungs sounds are clear bilaterally without wheezes, rales or rhonchi. Heart sounds are regular with S1 and S2 no murmur, rubs or gallops. His abdomen is soft non-tender active tone 4. His scrotum is still remaining the size of a grapefruit it has slightly improved. His extremities have peripheral pulses +2 throughout and 1+ pedal edema.

Assessment:

1. Scrotal edema secondary to heart failure.
2. Chronic renal insufficiency on high doses of diuretics.

Plan: Again today we will repeat a BMP to measure BUN and creatinine and potassium levels. Otherwise he will continue all current medications. Dr. Zile did come in and assess the patient's edema. Again if labs are within normal limits the plan is to just continue the 80 mg of po Lasix bid with potassium supplementation and all current medications.

ADDENDUM: The patient's BUN and creatinine remain stable at 39.0 for the BUN and creatinine was 1.9. This is really no change from 8/18/2009. The patient will be e-mailed with these results.

Jackie Sebastian, RN, MSN
Adult nurse practitioner dictating on behalf of Dr. Michael Zile

CARD CC: none

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 08/31/2009 03:22PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Nursing-Messages-PtEd

08/21/09 : 12:57pm
NURSE INTAKE - CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA

CHARLES MIKELL
48 year old male

CHIEF COMPLAINT/REASON FOR VISIT: weight and fluid control

T99.1 : Height : Weight 134.8 Kg
WEIGHT IN LBS: 297.4 lbs

Syst. BP 134 : Diast. BP 78 : P. 72
BP Method: Machine
BP Side: left
BP Location Taken: arm
BP Cuff Size: Large Adult
BP Position: sitting
BP Activity: Calm

CURRENT MEDICATIONS:
Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: NOVOLOG
Rx: WARFARIN SODIUM 10mg 1 daily
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 2 daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: CRESTOR 20mg 1 at bedtime
Rx: INSULIN 70/30 50U/50U bid
Rx: METOPROLOL SUCCINATE 50mg 1 daily
Rx: OMEPRAZOLE 20mg 1 daily
Rx: TIKOSYN 0.25mg 2 twice a day
Rx: ALDACTONE (6/26 STOPPED) 25mg 1 qd
Rx: LASIX 40mg 1 6:00pm
Rx: LASIX 40mg 2 daily in AM

Patient reports this is correct.

Medication Reconciliation: reconciled per patient report.

KNOWN ALLERGIES:
NKA

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Any **NEW** allergies to medicines, foods, herbals or latex? no

ABUSE/NEGLECT: No suspicion of abuse or neglect
SMOKING/TOBACCO SCREEN: Patient does not use tobacco products
USES TOBACCO NOW: NO
SMOKING SCREEN: 08/21/09

IS PATIENT HAVING PAIN? no

SIGNED BY JUDITH VELLA, R.N. (D2N) 08/21/2009 01:02PM

REVISED BY JUDITH VELLA, R.N. (D2N) 08/21/2009 01:03PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Orders/Requests/Referrals

08/21/09 : 01:22pm
LAB REQUEST
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2h2

Location: CARDIOLOGY

PATIENT: CHARLES MIKELL 48 year old male, DOB 01/25/61	(place sticker here if same day draw)

Collection date (to be completed by nursing/clerical/lab staff): _____

Collection time (to be completed by nursing/clerical/lab staff): _____

ORDERING PHYSICIAN: Jackie Sebastian, ANP-C 12374

ATTENDING PHYSICIAN'S NAME: M. Zile, MD

LABS ORDERED FOR today

*** PLEASE RUN STAT ***

LAB TEST ORDERED:
Basic Metabolic Panel - BMP: (Na, K, Cl, C02, Blu, UN, Creat, Ca)
MAGNESIUM - Limited Coverage Test

DIAGNOSES CODE: Congestive Heart Failure diastolic

South Carolina law Section 26-6-70 states "Regarding legality of electronic contracts, records, and signatures.
(A) A record or signature must not be denied legal effect or enforceability solely because it is in electronic form.
(B) A contract must not be denied legal effect or enforceability solely because an electronic record is used in its formation.
(C) An electronic record satisfies a law requiring a record to be in writing.
(D) An electronic signature satisfies a law requiring a signature."

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 08/21/2009 01:23PM

Medical University of South Carolina

Charleston, SC

843-792-2123

Laboratory Results Report

MRN: 001400764

Patient: MIKELL, CHARLES L

Date	Test Name	Status	Result	Normal	Flag	Site	Comment
8/21/09 1:38 PM	METABOLIC PANEL, BASIC - BMP	Finished					
	SODIUM (NA)		139.0 MMOL/L	135.0 -		GEN LAB	
	POTASSIUM (K)		4.80 MMOL/L	3.50 - 5.00		GEN LAB	
	CHLORIDE		105.0 MMOL/L	98.0 - 107.0		GEN LAB	
	CO2 CONTENT (BICARBONATE)		29 MMOL/L	22 - 32		GEN LAB	
	ANION GAP		5 MMOL/L	2 - 11		GEN LAB	
	GLUCOSE, SERUM		66.0 MG/DL	70.0 - 100.0	L	GEN LAB	
	UREA NITROGEN, BLOOD (BUN)		39.0 MG/DL	8.0 - 20.0	H	GEN LAB	
	CREATININE		1.9 MG/DL	0.6 - 1.3	H	GEN LAB	
	ESTIMATED GLOMERULAR		46 mL/min			GEN LAB	*
	CALCIUM		9.3 MG/DL	8.4 - 10.2		GEN LAB	
	HEMOLYSIS INDEX		0.0	0.0 - 1.9		GEN LAB	*
	MAGNESIUM (MG)	Finished	2.4 MG/DL	1.6 - 2.3	H	GEN LAB	
	HEMOLYSIS INDEX		0.0	0.0 - 1.9		GEN LAB	*

This document should not be filed in the paper medical record and should be confidentially destroyed when it is no longer needed.

Printed by: KNIGHT, MARGARET

Date Printed: 06/11/2013

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Progress Notes

08/28/09 : 09:49am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2H2

CHARLES MIKELL
48 year old male
MRN# 1400764

August 28, 2009

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764
DOB: 1/25/1961

Dear Dr. Akhtar:

As you know I have been following Mr. Mikell for the past several weeks for his scrotal edema. He reports that each day this gets slightly better however he still notices some discomfort and swell in that area. He denies any chest pain, shortness of breath, PND, orthopnea, syncope, or pre-syncopal episodes. He states that his bilateral lower extremity edema is about back to base line. His weight has remained steady ranging anywhere from 286 to 287 pounds. He continues with Lasix 60 mg po bid with his last creatinine measuring at 2.0. His intake totals have ranged from anywhere from 1190 to 1480 with outputs ranging from 2500 to 2800 to 3000 milliliters. The patient states he feels well he actually considered going back to work driving a bus but he wants to make sure the scrotal edema is slightly better before he actually tries to do that. He will undergo an ultra sound today to evaluate his scrotum as this was recommended when he was an inpatient.

Physical exam: temperature was not taken. Heart rate was 64; respirations 16 and blood pressure 129/67. Lungs were clear bilaterally without wheezes, rales or rhonchi. Heart sounds are regular with S1 and S2 without murmur, rubs or gallops. He has no JVD. He has +1-2 lower extremity pedal edema. His abdomen is soft non-tender active times 4. His scrotum is still approximately the size of a large grapefruit. Non-tender on exam today.

Assessment:

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

1. Scrotal edema secondary to congestive heart failure - resolving.
2. Chronic renal insufficiency on high doses of diuretics.

Plan: Again today we will obtain another BMP to monitor potassium, BUN and creatinine. Again we will repeat the scrotal ultrasound. Based upon the laboratory findings we will determine if any changes need to be made in diuretics.

Jackie Sebastian, RN, MSN
Adult nurse practitioner dictating on behalf of Dr. Michael Zile

CARD CC: none

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 09/16/2009 10:08AM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Nursing-Messages-PtEd

08/28/09 : 01:05pm
NURSE INTAKE - CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA

CHARLES MIKELL
48 year old male

CHIEF COMPLAINT/REASON FOR VISIT: follow edema
T : Height : Weight 132 Kg
WEIGHT IN LBS: 292 lbs

Syst. BP 129 : Diast. BP 67 : P. 64
BP Method: Machine
BP Side: left
BP Location Taken: arm
BP Cuff Size: Large Adult
BP Position: sitting
BP Activity: Calm

O2 SAT Room Air: 96

CURRENT MEDICATIONS:
Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 1 twice daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: CRESTOR 20mg 1 at bedtime
Rx: INSULIN 70/30 50U/50U bid
Rx: METOPROLOL SUCCINATE 50mg 1 daily
Rx: OMEPRAZOLE 20mg 1 daily
Rx: TIKOSYN 0.25mg 2 twice a day
Rx: LASIX 60mg 1 twice daily
Rx: WARFARIN SODIUM 5mg 1 daily

Patient reports this is correct.

Medication Reconciliation: reconciled per patient report.

KNOWN ALLERGIES:
NKA

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Any **NEW** allergies to medicines, foods, herbals or latex? no

ABUSE/NEGLECT: No suspicion of abuse or neglect
SMOKING/TOBACCO SCREEN: Patient does not use tobacco products
USES TOBACCO NOW: NO
SMOKING SCREEN: 08/28/09

Patient reported PAIN NOT MANAGEABLE on 08/25/2009 and was instructed to discuss with provider.

SIGNED BY Ashley Sisson, RN (AS2) 08/28/2009 01:06PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Orders/Requests/Referrals

08/28/09 : 01:20pm
LAB REQUEST
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2h2

Location: CARDIOLOGY

PATIENT: CHARLES MIKELL 48 year old male, DOB 01/25/61	(place sticker here if same day draw)

Collection date (to be completed by nursing/clerical/lab staff): _____

Collection time (to be completed by nursing/clerical/lab staff): _____

ORDERING PHYSICIAN: Jackie Sebastian, ANP-C
ATTENDING PHYSICIAN'S NAME: Dr. Zile

LABS ORDERED FOR today

*** PLEASE RUN STAT ***

LAB TEST ORDERED:
Basic Metabolic Panel - BMP: (Na, K, Cl, C02, Blu, UN, Creat, Ca)
MAGNESIUM - Limited Coverage Test

DIAGNOSES CODE: Congestive Heart Failure systolic

South Carolina law Section 26-6-70 states "Regarding legality of electronic contracts, records, and signatures.
(A) A record or signature must not be denied legal effect or enforceability solely because it is in electronic form.
(B) A contract must not be denied legal effect or enforceability solely because an electronic record is used in its formation.
(C) An electronic record satisfies a law requiring a record to be in writing.
(D) An electronic signature satisfies a law requiring a signature."

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 08/28/2009 01:21PM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Radiology Results

08/28/09 : 2:30pm
US SCROTUM
OUT
Accession number: 5707901

EXAMINATION: TESTICULAR ULTRASOUND 08/28/09 14:30:00

ACCESSION NUMBER: 5707901

INDICATION: 48 year old male with CHF, hospitalized in late July/early August with Anasarca, worse in scrotum

COMPARISON: 8/6/09

FINDINGS: Sonographic evaluation of scrotum was performed utilizing a linear multihertz transducer.

The right testicle is unremarkable in size and echogenicity measuring 3.9 x 2.8 x 2.7 cm. The right epididymis is unremarkable in size and echogenicity measuring 1.1 x 3 x 1.4 cm, previously 5 x 4 x 2.4 cm.

Left testicle is unremarkable in size and echogenicity measuring 2.9 x 2.3 x 2.9 cm. Hypoechoic region within the posterior aspect of the left testicle is no longer apparent. The left epididymis is unremarkable in size and echogenicity measuring 2.1 x 1.4 x 1.3 cm, previously 1.7 x 5.2 x 2.3 cm.

There is continued marked scrotal edema bilaterally. Color images demonstrate bloodflow to the testicles and epididymis bilaterally. There is no hydrocele.

IMPRESSION:

No significant interval change of severe bilateral scrotal edema. Slight decreased size of bilaterally enlarged epididymi. Hypoechoic region within the posterior aspect of the left testicle is no longer apparent.

VOICE DICTATED BY: Dr. Vanessa Hardin
I have reviewed the images and agree with the findings in this report.

AUTHENTICATING RADIOLOGIST: ANDREW HARDIE

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Practice Partner signature acknowledges receipt of results only.

ultrasound of the scrotum JACKIE 64804
48 year old male with CHF, hospitalized in late July/early August with Anasarca, worse in scrotum

BWPH 000909

Medical University of South Carolina

Charleston, SC

843-792-2123

Laboratory Results Report

MRN: 001400764

Patient: MIKELL, CHARLES L

Date	Description	Status	Result	Normal	Flg	Site	Comment
8/28/09 1:44 PM	METABOLIC PANEL, BASIC - BMP	Finished					
	SODIUM (NA)		140.0 MMOL/L	135.0 -		GEN LAB	
	POTASSIUM (K)		4.60 MMOL/L	3.50 - 5.00		GEN LAB	
	CHLORIDE		105.0 MMOL/L	98.0 - 107.0		GEN LAB	
	CO2 CONTENT (BICARBONATE)		29 MMOL/L	22 - 32		GEN LAB	
	ANION GAP		6 MMOL/L	2 - 11		GEN LAB	
	GLUCOSE, SERUM		83.0 MG/DL	70.0 - 100.0		GEN LAB	
	UREA NITROGEN, BLOOD (BUN)		37.0 MG/DL	8.0 - 20.0	H	GEN LAB	
	CREATININE		2.0 MG/DL	0.6 - 1.3	H	GEN LAB	
	ESTIMATED GLOMERULAR		43 mL/min			GEN LAB	*
	CALCIUM		9.2 MG/DL	8.4 - 10.2		GEN LAB	
	HEMOLYSIS INDEX		0.0	0.0 - 1.9		GEN LAB	*
	MAGNESIUM (MG)	Finished	2.4 MG/DL	1.6 - 2.3	H	GEN LAB	
	HEMOLYSIS INDEX		0.0	0.0 - 1.9		GEN LAB	*

This document should not be filed in the paper medical record and should be confidentially destroyed when it is no longer needed.

Printed by: KNIGHT, MARGARET

Date Printed: 06/11/2013

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Progress Notes

09/08/09 : 09:53am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2H2

CHARLES MIKELL
48 year old male
MRN# 1400764

September 8, 2009

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764
DOB: 1/25/1961

Dear Dr. Akhtar:

As you know I have been following Mr. Mikell and his scrotal edema for approximately the past month. Today he states that he feels like the scrotum has actually gotten worse over the weekend. Of note he actually has been a jock strap to kind of elevate the scrotum while he was at work and walking but he has not worn it since Sunday and definitely notices a difference. He continues his Lasix 40 mg bid and is tolerating that fine. His intake continues to be less than 1500 per day and his output is anywhere from 2400 to 3000 cc. He states that he is getting very discouraged and just wants his scrotum to go down. But he also states that he has a lot of family members that ended up on dialysis and he does not want to push the diuretics to much. He is again back to work and he is going to start cardiac rehab. Other than that he feels well. He denies and chest pain, shortness of breath, PND, orthopnea, pre-syncope, or syncope continues to tell me that he feels that the scrotum is becoming smaller.

Physical exam: lung are clear bilaterally without wheezes, rales or rhonchi. He has no JVD. He has +2 bilateral lower extremity edema. His heart sounds are regular S1 and S2 without murmurs, rubs or gallops. His abdomen is obese: soft non-tender on exam active times 4. His scrotum is still the size of a very large grapefruit it is non-tender on exam.

Assessment:

1. Scrotal edema secondary to congestive heart failure - resolving.

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

2. Chronic renal insufficiency on high doses of diuretics.

Plan: The patient's feeling of discouragement or discuss Dr. Zile and the patient's visits will be cut down to once weekly for follow-up period. His BMP will be rechecked today and barring no changes in his creatinine he will likely continue the Lasix 40 mg po bid. Other than that all of his medications will remain the same. I believe he is to see you Thursday.

ADDENDUM: The patient's BUN and creatinine are 35 and 1.9 respectively therefore Dr. Zile decided that he may increase his Lasix back up to 60 mg po bid. I have e-mailed the patient to let him know that. Also let him know that his visits can be spaced out to once weekly from now on. Again the patient is to start cardiac rehab and will continue swimming on Fridays as previously. He is instructed to call our office for any other questions or concerns.

Jackie Sebastian, RN, MSN
Adult nurse practitioner dictating on behalf of Dr. Michael Zile

CARD CC: none

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 09/16/2009 10:09AM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Nursing-Messages-PtEd

09/08/09 : 01:37pm
NURSE INTAKE - CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA

CHARLES MIKELL
48 year old male

CHIEF COMPLAINT/REASON FOR VISIT: FOLLOW-UP-VISIT

T 98.5 : Height : Weight 136.2 Kg
WEIGHT IN LBS: 300.0 lbs

Syst. BP 131 : Diast. BP 62 : P. 76
BP Method: Machine
BP Side: left
BP Location Taken: arm
BP Cuff Size: Adult
BP Position: sitting
BP Activity: Calm

KNOWN ALLERGIES:
NKA

Any **NEW** allergies to medicines, foods, herbals or latex? no

ABUSE/NEGLECT: No suspicion of abuse or neglect
SMOKING/TOBACCO SCREEN: Patient does not use tobacco products
USES TOBACCO NOW: NO
SMOKING SCREEN: 09/08/09

IS PATIENT HAVING PAIN? No
PAIN MANAGEABLE : No pain

SIGNED BY GERALDINE CANTRELL, PCT (L13) 09/08/2009 01:38PM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Orders/Requests/Referrals

09/08/09 : 02:07pm
LAB REQUEST
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2h2

Location: CARDIOLOGY

PATIENT: CHARLES MIKELL 48 year old male, DOB 01/25/61	(place sticker here if same day draw)

Collection date (to be completed by nursing/clerical/lab staff): _____

Collection time (to be completed by nursing/clerical/lab staff): _____

ORDERING PHYSICIAN: Jackie Sebastian, ANP-C

ATTENDING PHYSICIAN'S NAME: M.Zile, MD

LABS ORDERED FOR today

*** PLEASE RUN STAT ***

LAB TEST ORDERED:
Basic Metabolic Panel - BMP: (Na, K, Cl, C02, Blu, UN, Creat, Ca)
MAGNESIUM - Limited Coverage Test

DIAGNOSES CODE: Congestive Heart Failure systolic

South Caroline law Section 26-6-70 states "Regarding legality of electronic contracts, records, and signatures.
(A) A record or signature must not be denied legal effect or enforceability solely because it is in electronic form.
(B) A contract must not be denied legal effect or enforceability solely because an electronic record is used in its formation.
(C) An electronic record satisfies a law requiring a record to be in writing.
(D) An electronic signature satisfies a law requiring a signature."

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 09/08/2009 02:10PM

Printed using Practice Partner®

Medical University of South Carolina

Charleston, SC

843-792-2123

Laboratory Results Report

Patient: MIKELL, CHARLES L

MRN: 001400764

Date	Description	Status	Result	Normal	Ab	Site	Comment
9/8/09 2:16 PM	METABOLIC PANEL, BASIC - BMP	Finished					
	SODIUM (NA)		141.0 MMOL/L	135.0 -		GEN LAB	
	POTASSIUM (K)		4.60 MMOL/L	3.50 - 5.00		GEN LAB	
	CHLORIDE		109.0 MMOL/L	98.0 - 107.0	H	GEN LAB	
	CO2 CONTENT (BICARBONATE)		25 MMOL/L	22 - 32		GEN LAB	
	ANION GAP		7 MMOL/L	2 - 11		GEN LAB	
	GLUCOSE, SERUM		72.0 MG/DL	70.0 - 100.0		GEN LAB	
	UREA NITROGEN, BLOOD (BUN)		35.0 MG/DL	8.0 - 20.0	H	GEN LAB	
	CREATININE		1.9 MG/DL	0.6 - 1.3	H	GEN LAB	
	ESTIMATED GLOMERULAR		46 mL/min			GEN LAB	*
	CALCIUM		9.1 MG/DL	8.4 - 10.2		GEN LAB	
	HEMOLYSIS INDEX		1.0	0.0 - 1.9		GEN LAB	*
	MAGNESIUM (MG)	Finished	2.3 MG/DL	1.6 - 2.3		GEN LAB	
	HEMOLYSIS INDEX		1.0	0.0 - 1.9		GEN LAB	*

This document should not be filed in the paper medical record and should be confidentially destroyed when it is no longer needed.

Printed by: KNIGHT, MARGARET

Date Printed: 06/11/2013

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Progress Notes

09/16/09 : 11:55am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2H2

CHARLES MIKELL
48 year old male
MRN# 1400764

September 16, 2009

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764
DOB: 1/25/1961

History of present illness

Dear Dr. Akhtar:

As you know I have been following Mr. Mikell's ongoing scrotal edema and monitoring his blood work for the past several weeks. He tells me today that on the evening of 9/15/2009 he was actually able to sleep on his stomach for the first time in several months. He reports that he is doing well and genuinely feels that the size of his scrotum has decreased. He has been working without a problem. I know he saw you on September 11 and you did decrease his insulin levels. Otherwise he reports feeling well.

Physical exam: weight 294.9, temperature 99.4, heart rate 80, respiration 16, blood pressure 135/75. Lung sounds clear bilaterally no wheezes, rales or rhonchi. His heart sounds are regular S1 and S2 without murmurs, rubs or gallops. No JVD, +1 bilateral lower extremity pedal edema is noted. Abdomen soft non-tender, active times 4. His scrotum is actually the size of a grapefruit now.

Assessment:
1. Scrotal edema secondary to heart failure – resolving.
2. Chronic renal insufficiency on high doses of diuretics.

Plan: Continue Lasix 60 mg po bid pending his blood work today. Again visits are going to be changed to just weekly. The patient will continue to monitor his intake, output and his daily weights. Otherwise

we will continue with his other medications.

ADDENDUM: The patient's potassium, BUN and creatinine are stable therefore he is to continue his Lasix 60 mg po bid and I will see him again on September 24, 2009.

Jackie Sebastian, RN, MSN
Adult nurse practitioner dictating on behalf of Dr. Michael Zile

CARD CC: none

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 10/05/2009 01:32PM

Nursing-Messages-PtEd

09/16/09 : 04:12pm
NURSE INTAKE - CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA

CHARLES MIKELL
48 year old male

CHIEF COMPLAINT/REASON FOR VISIT: SCROTUM EDEMA FOLLOW-UP

T 99.4 : Height : Weight 133.5 Kg

WEIGHT IN LBS: 294.9 lbs

Syst. BP 135 : Diast. BP 75 : P. 80
BP Method: Machine
BP Position: sitting
BP Activity: Calm

CURRENT MEDICATIONS:
Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 1 twice daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: CRESTOR 20mg 1 at bedtime
Rx: INSULIN 70/30 50U/50U bid
Rx: METOPROLOL SUCCINATE 50mg 1 daily
Rx: OMEPRAZOLE 20mg 1 daily
Rx: TIKOSYN 0.25mg 2 twice a day
Rx: LASIX 60mg 1 twice daily
Rx: WARFARIN SODIUM 5mg 1 daily

Patient reports this is correct.

Medication Reconciliation: reconciled per patient report.

KNOWN ALLERGIES:
NKA

Any **NEW** allergies to medicines, foods, herbals or latex? no

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

ABUSE/NEGLECT: No suspicion of abuse or neglect
SMOKING/TOBACCO SCREEN: Patient does not use tobacco products
USES TOBACCO NOW: NO
SMOKING SCREEN: 09/16/09

IS PATIENT HAVING PAIN? No
PAIN MANAGEABLE : No pain

SIGNED BY MARY W WASHINGTON, LPN (J87) 09/16/2009 04:17PM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA
Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Orders/Requests/Referrals

09/16/09 : 02:18pm
LAB REQUEST
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2h2

Location: CARDIOLOGY

PATIENT: CHARLES MIKELL 48 year old male, DOB 01/25/61	(place sticker here if same day draw)

Collection date (to be completed by nursing/clerical/lab staff): _____

Collection time (to be completed by nursing/clerical/lab staff): _____

ORDERING PHYSICIAN: jackie sebastian, anp

ATTENDING PHYSICIAN'S NAME: m. zile. md

LABS ORDERED FOR today

*** PLEASE RUN STAT ***

LAB TEST ORDERED:
Basic Metabolic Panel - BMP: (Na, K, Cl, C02, Blu, UN, Creat, Ca)
MAGNESIUM - Limited Coverage Test

DIAGNOSES CODE: Congestive Heart Failure systolic

South Carolina law Section 26-6-70 states "Regarding legality of electronic contracts, records, and signatures.
(A) A record or signature must not be denied legal effect or enforceability solely because it is in electronic form.
(B) A contract must not be denied legal effect or enforceability solely because an electronic record is used in its formation.
(C) An electronic record satisfies a law requiring a record to be in writing.
(D) An electronic signature satisfies a law requiring a signature."

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 09/16/2009 02:20PM

Printed using Practice Partner®

Medical University of South Carolina

Charleston, SC

843-792-2123

Laboratory Results Report

Patient: MIKELL, CHARLES L

MRN: 001400764

Date	Description	Status	Result	Normal	Flt	Site	Comment
9/16/09 3:57 PM	METABOLIC PANEL, BASIC - BMP	Finished					
	SODIUM (NA)		141.0 MMOL/L	135.0 -		GEN LAB	
	POTASSIUM (K)		4.30 MMOL/L	3.50 - 5.00		GEN LAB	
	CHLORIDE		108.0 MMOL/L	98.0 - 107.0	H	GEN LAB	
	CO2 CONTENT (BICARBONATE)		28 MMOL/L	22 - 32		GEN LAB	
	ANION GAP		5 MMOL/L	2 - 11		GEN LAB	
	GLUCOSE, SERUM		63.0 MG/DL	70.0 - 100.0	L	GEN LAB	
	UREA NITROGEN, BLOOD (BUN)		25.0 MG/DL	8.0 - 20.0	H	GEN LAB	
	CREATININE		1.8 MG/DL	0.6 - 1.3	H	GEN LAB	
	ESTIMATED GLOMERULAR		49 mL/min			GEN LAB	*
	CALCIUM		8.9 MG/DL	8.4 - 10.2		GEN LAB	
	HEMOLYSIS INDEX		0.0	0.0 - 1.9		GEN LAB	*
	MAGNESIUM (MG)	Finished	2.0 MG/DL	1.6 - 2.3		GEN LAB	
	HEMOLYSIS INDEX		0.0	0.0 - 1.9		GEN LAB	*

This document should not be filed in the paper medical record and should be confidentially destroyed when it is no longer needed.

Printed by: KNIGHT, MARGARET

Date Printed: 06/11/2013

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA
Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Progress Notes

09/24/09 : 11:57am
CARDIOLOGY NOTE FOLLOW-UP
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2H2

CHARLES MIKELL
48 year old male
MRN# 1400764

September 24, 2009

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764
DOB: 1/25/1961

History of present illness

Dear Dr. Akhtar:

As you know I have been following Mr. Mikell for his scrotal edema since his hospital discharge in the beginning of September. Today is the first day he as actually stated that he feels like his scrotum is about "back to normal". He has been feeling well with the exception of some fatigue. That is truly his only complaint today. He has not yet begun Cardiac Rehab but said he is planning on calling them soon. Marc Clari has been in contact with the patient, but the patient has not yet gotten in touch with him. The patient's blood sugars have been in good control. His INOs have been good control and again he does state that his scrotum is about "back to normal". His review of symptoms is only positive for fatigue.

Physical exam: lung sounds are clear bilaterally without wheezes, rales or rhonchi. His heart sounds are regular S1 and S2 without murmurs, rubs or gallops. No JVD. He has +1 pedal lower extremity edema. Abdomen is obese, soft non-tender active times 4. His scrotum is actually about the size of a large orange now. Non-tender on exam.

Assessment:
1. Scrotal edema secondary to congestive heart failure – resolving.
2. Chronic renal insufficiency on high doses of diuretics.

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Plan: The patient's will again have a BMP check today. Also checked CBC to see if patient was anemic secondary to his chronic kidney disease. Discussed at length with the patient the fact that he has not been using his C-pap machine and this could likely be contributing to his fatigue if his blood work shows today that he is not anemic. The patient states that he has not been wearing his C-pap because he feels like there is too much air coming through there. Therefore I advised him to get in touch with you, Dr. Akhtar to discuss further titrating his C-pap machine.

ADDENDUM: Mr. Mikell's BUN came back at 25 and his creatinine is 2.0. Discussed this with Dr. Zile. He is to remain on the Lasix 60 mg po bid. I am going on vacation next week and therefore he will follow-up in two weeks with me just to check and see how he is doing. I also scheduled an appointment for him to see Amy Mendez the registered dietician as he stated that he would like to see her and get better control of his eating habits.

Jackie Sebastian, RN, MSN
Adult nurse practitioner dictating on behalf of Dr. Michael Zile

CARD CC: none

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 10/05/2009 01:32PM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Nursing-Messages-PtEd

09/24/09 : 01:19pm
NURSE INTAKE - CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA

CHARLES MIKELL
48 year old male

Does patient want to receive Seasonal Influenza immunization today? YES
FLUSHOTRESPONSE09/10: YES
FLUSCREENSEASON: 2009/10

CHIEF COMPLAINT/REASON FOR VISIT: pt is here to f/u for CRI complications

T : Height : Weight 133.4 Kg

WEIGHT IN LBS: 294 lbs

Syst. BP 128 : Diast. BP 74 : P. 78

O2 SAT Room Air: 98%

CURRENT MEDICATIONS:
Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 1 twice daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: CRESTOR 20mg 1 at bedtime
Rx: METOPROLOL SUCCINATE 50mg 1 daily
Rx: OMEPRAZOLE 20mg 1 daily
Rx: TIKOSYN 0.25mg 2 twice a day
Rx: LASIX 60mg 1 twice daily
Rx: WARFARIN SODIUM 5mg 1 daily
Rx: INSULIN ADMIN SUPPLIES 50U/50U bid

Patient reports this is correct.

Medication Reconciliation: reconciled per patient report.

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

KNOWN ALLERGIES:
NKA

Any **NEW** allergies to medicines, foods, herbals or latex? no

ABUSE/NEGLECT: No suspicion of abuse or neglect
SMOKING/TOBACCO SCREEN: Patient does not use tobacco products
USES TOBACCO NOW: NO
SMOKING SCREEN: 09/24/09

SIGNED BY CHRISTINE M HAMILTON, RN, BSN (V81) 09/24/2009 01:21PM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Orders/Requests/Referrals

09/24/09 : 01:26pm
LAB REQUEST
MEDICAL UNIVERSITY OF SOUTH CAROLINA
2h2

Location: CARDIOLOGY

PATIENT: CHARLES MIKELL 48 year old male, DOB 01/25/61	(place sticker here if same day draw)

Collection date (to be completed by nursing/clerical/lab staff): _____

Collection time (to be completed by nursing/clerical/lab staff): _____

ORDERING PHYSICIAN: jackie sebastian, anp-c

ATTENDING PHYSICIAN'S NAME: M. zile, md

LABS ORDERED FOR today

*** PLEASE RUN STAT ***

LAB TEST ORDERED: Basic Metabolic Panel - BMP: (Na, K, Cl, C02, Blu, UN, Creat, Ca) CBC - Limited Coverage Test

DIAGNOSES CODE: Congestive Heart Failure systolic

South Carolina law Section 26-6-70 states "Regarding legality of electronic contracts, records, and signatures.
(A) A record or signature must not be denied legal effect or enforceability solely because it is in electronic form.
(B) A contract must not be denied legal effect or enforceability solely because an electronic record is used in its formation.
(C) An electronic record satisfies a law requiring a record to be in writing.
(D) An electronic signature satisfies a law requiring a signature."

SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 09/24/2009 01:30PM

Medical University of South Carolina

Charleston, SC

843-792-2123

Laboratory Results Report

Patient: MIKELL, CHARLES L

MRN: 001400764

Date	Description	Status	Result	Normal	Alt	Site	Comment
9/24/09 2:02 PM	METABOLIC PANEL, BASIC - BMP	Finished					
	SODIUM (NA)		141.0 MMOL/L	135.0 -		GEN LAB	
	POTASSIUM (K)		4.20 MMOL/L	3.50 - 5.00		GEN LAB	
	CHLORIDE		109.0 MMOL/L	98.0 - 107.0	H	GEN LAB	
	CO2 CONTENT (BICARBONATE)		27 MMOL/L	22 - 32		GEN LAB	
	ANION GAP		5 MMOL/L	2 - 11		GEN LAB	
	GLUCOSE, SERUM		56.0 MG/DL	70.0 - 100.0	L	GEN LAB	
	UREA NITROGEN, BLOOD (BUN)		25.0 MG/DL	8.0 - 20.0	H	GEN LAB	
	CREATININE		2.0 MG/DL	0.6 - 1.3	H	GEN LAB	
	ESTIMATED GLOMERULAR		43 mL/min			GEN LAB	*
	CALCIUM		8.9 MG/DL	8.4 - 10.2		GEN LAB	
	HEMOLYSIS INDEX		0.0	0.0 - 1.9		GEN LAB	*
	HEM PANEL	Finished					
	WHITE BLOOD CELL COUNT		8.590 K/CUMM	4.800 -		GEN LAB	
	RED BLOOD CELL COUNT		4.17 M/CUMM	4.70 - 6.10	L	GEN LAB	
	HEMOGLOBIN		10.3 GM/DL	14.0 - 18.0	L	GEN LAB	
	HEMATOCRIT		34.20 %	42.00 -	L	GEN LAB	
	MCV		82.0 FL	80.0 - 94.0		GEN LAB	
	MCH		24.7 pg	27.0 - 31.0	L	GEN LAB	
	MCHC		30.1 GM/DL	30.7 - 34.4	L	GEN LAB	
	RDW		15.0 %	11.5 - 14.5	H	GEN LAB	
	PLATELET COUNT	Finished					
	PLATELET COUNT		214 K/CUMM	140 - 440		GEN LAB	
	MPV		10.60 FL	9.15 - 12.31		GEN LAB	

This document should not be filed in the paper medical record and should be confidentially destroyed when it is no longer needed.

Printed by: KNIGHT, MARGARET

Date Printed: 06/11/2013

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Progress Notes

10/27/09 : 10:46am
MEDICAL NUTRITION THERAPY - CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA
SV5
2H2

CHARLES MIKELL
48 year male

Lab: REFERRING PROVIDER: Jackie Sebastian, FNP

Start Time: 2:05 pm
Stop Time: 3:05 pm
Length of Time of Session: 60 minutes
INITIAL VISIT
Present at Session: unaccompanied

REASON FOR VISIT: Nutrition counseling for weight loss, low sodium diet, diabetes

ACTIVE PROBLEMS/DIAGNOSIS:
ADVANCE DIRECTIVES
T2DM
Dyslipidemia
Obesity with BMI 44.3
HTN
OSA
Non ischemic dilated Cardiomyopathy

SOCIAL HISTORY:
Marital status: Divorced
Employment: DISABLED, DRIVES PART TIME FOR THE CANTERBURY HOUSE. Previously worked as technical director for Channel 2.
Smoking: Patient does not smoke cigarettes
ETOH: Patient does not use alcohol.
Social Drug Use: none
Abuse: none

MEDICAL HISTORY:
Medical history: AFLUTTER, avnrt S/P ABLATION, DM TYPE 2, HTN, NON-ISCHEMIC DILATED CARDIOMYOPATHY, G-6-PD DEFICIENCY, CHOLECYSTITIS, HYPERLIPIDEMIA, ARF
Surgical history: none

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

CURRENT MEDICATIONS AND SUPPLEMENTS:
Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 1 twice daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: CRESTOR 20mg 1 at bedtime
Rx: METOPROLOL SUCCINATE 50mg 1 daily
Rx: OMEPRAZOLE 20mg 1 daily
Rx: TIKOSYN 0.25mg 2 twice a day
Rx: LASIX 60mg 1 twice daily
Rx: WARFARIN SODIUM 5mg 1 daily
Rx: INSULIN ADMIN SUPPLIES 50U/50U bid
Rx: CPAP +16cm H2O
Rx: ATROVENT 0.03% 2 SPRAYS at bedtime
Rx: FLONASE 50 MCG 2 SPRAYS daily

LABS:
HGBA1C: 4.9 on 10/08/2009
GLUCOSE-SERUM: 56.0 on 09/24/2009
ALBUMIN, SERUM: 3.7 on 07/30/2009
CHOLESTEROL: 87.0 on 08/04/2009
LDL-CHOLESTEROL: 30 on 08/04/2009
HDL-CHOLESTEROL: 41 on 08/04/2009
TRIGLYCERIDES: 78.0 on 08/04/2009
CALCIUM: 8.9 on 09/24/2009
MAGNESIUM: 2.0 on 09/16/2009
SODIUM: 141.0 on 09/24/2009
POTASSIUM: 4.20 on 09/24/2009
ALKALINE PHOS: 62 on 07/30/2009
BUN: 25.0 on 09/24/2009
CREATININE: 2.0 on 09/24/2009
KETONES URINE: Negative on 08/09/2009
PROTEIN URINE: 21 on 10/05/2005
GLUCOSE-URINE: Negative on 08/09/2009
C-REACTIVE PROTEIN: .060 on 03/09/2009
Reports some previous hypoglycemia that has improved since he cut back his insulin dose. Now running 99-114 in the morning, considers 130 to be a "high" reading. Prior to hospitalization, reports that typical sugars were 200-300 when he did check.

ANTHROPOMETRICS:
Vitals 2: T : Ht.69 in : Wt. 135.9 Kg
Lab: 10/27/09:10:46 AM: WEIGHT IN LBS: 299.7 lbs
BMI: 44.3
Weight history: Reports that his weight had been around 270-280 for the past few years, but had crept up to 326 pounds when he was admitted to the hospital recently. Now running about 300 pounds. Would prefer to weigh about 240-250, what he weighed when he graduated from college.

DIET HISTORY: 3 meals and snacks

Reports a significant improvement in dietary choices since hospitalization. Previously rated dietary choices a "D-" and now a "B+". Has not eaten out at a restaurant, is avoiding fried foods, limiting his added salt intake and has cut back on his skim milk intake (had been nearly a gallon a day)

A typical day:
Breakfast 8:30-9:00 am:
-3 frozen Eggo waffles with sugar free syrup
-once in awhile an omelet made from Egg Beaters with added mushrooms and onions, some cheese, grits

Lunch:
-if working, will take a turkey sandwich with mayonnaise and pickle relish on honey wheat bread. Also takes a diet soda.
-if at home, will usually eat leftovers from the previous night: lean meat, vegetable, grain

Dinner 6:30pm:
-Shares cooking responsibilities with his mother, but "she cooks healthy too- she has diabetes also"
Describes lean meat, fish or poultry with vegetables, some baked potatoes

Bedtime snack:
-turkey sandwich (same as before)
-no added salt peanuts, cashews, pecans
-sugar free popsicle
-"occasionally"-- will buy some bakery chocolate chip cookies from Publix

Night eating:
-occasionally pecans or peanuts

BEVERAGES: only water and Diet Canada Dry ginger ale
DINING OUT: none since hospitalization

EXERCISE HISTORY: Previously walked 1-2 miles per day. Now nothing. Wants to get back to walking Playground road daily.

NUTRITION DIAGNOSIS 1: Problem - Behavioral
Knowledge and Beliefs - Food and nutrition-related knowledge deficit NB 1.1
as related to lack of prior exposure to information as evidenced by request for information on what to eat and how much. Rates his motivation for making dietary changes a "10" on scale of 1-10.

NUTRITION PRESCRIPTION: Moderate carbohydrate, cardioprotective, low calorie diet for desired weight loss.

NUTRITION INTERVENTION 1: Nutrition Education - Comprehensive Nutrition Education - E-2 calorie wt. loss diet, serving sizes, low sodium diet/ 2,000 mg sodium per day
GOALS: Weight loss of at least 10% of current weight, euglycemia, improved HgbA1c, Increase knowledge of low

sodium diet choices
PLAN:

1. Get back into walking plan –starting slowly with 10 minute increments
2. Check blood sugar before exercise-- consuming small snack if <100
3. Try using "plate method" to help with portion control of starch and protein
4. Coumadin precautions discussed
5. Read nutrition labels for sodium-- not just limiting added salt
6. Limit nuts to 1/4 cup per day

PATIENT EDUCATION:
Barriers to Learning: None identified
Readiness to Learn: excellent
Comprehension: good
Anticipated Compliance: good

NEXT APPOINTMENT: f/u in 1 month. He has my contact information for questions/concerns in the meantime.

SIGNED BY AMY H MENDEZ MPH, RD, LD (SV5) 10/30/2009 11:35AM

CO-SIGNED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 11/02/2009 07:59AM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Progress Notes

12/01/09 : 10:28am
MEDICAL NUTRITION THERAPY - CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA
SV5
2H2

CHARLES MIKELL
48 year old male

Start Time: 3:30 pm
Stop Time: 4:00 pm
Length of Time of Session: 30 minutes
FOLLOW UP VISIT
Medicare B Units Billed for Calendar Year 2009 : 6

REASON FOR VISIT: follow-up of weight management efforts
Referral Diagnosis: DM, NICM, Obesity
Present at Session: unaccompanied

ASSESSMENT:

SOCIAL HISTORY/LIFESTYLE FACTORS: Changes noted, Had some unexpected bills, no having to be careful financially– not purchasing the "specialty" items at Publix, but rather using Sav-A-Lot grocery and eating fewer fresh fruits and vegetables

ACTIVE PROBLEMS/DIAGNOSIS:
ADVANCE DIRECTIVES
T2DM
NICM
Obesity with BMI 45.0

MEDICAL HISTORY: Changes noted, notes fewer episodes of hypoglycemia since his insulin dose was reduced – now taking 40 units of Novolin 70/30 twice daily

CURRENT MEDICATIONS: Changes noted, nasal spray added. Coumadin dose changed due to change in leafy green intake.

Rx: ASPIRIN 81mg 1 qd
Rx: NAFTIN 1% GEL APP AA BID
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 1 twice daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: CRESTOR 20mg 1 at bedtime
Rx: METOPROLOL SUCCINATE 50mg 1 daily

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Rx: OMEPRAZOLE 20mg 1 daily
Rx: TIKOSYN 0.25mg 2 twice a day
Rx: LASIX 60mg 1 twice daily
Rx: WARFARIN SODIUM 5mg 1 daily
Rx: INSULIN ADMIN SUPPLIES 50U/50U bid
Rx: CPAP +16cm H2O
Rx: ATROVENT 0.03% 2 SPRAYS at bedtime
Rx: FLONASE 50 MCG 2 SPRAYS daily

LABS:
HGBA1C: 4.9 on 10/08/2009
ALBUMIN, SERUM: 3.7 on 07/30/2009
CHOLESTEROL: 87.0 on 08/04/2009
LDL-CHOLESTEROL: 30 on 08/04/2009
HDL-CHOLESTEROL: 41 on 08/04/2009
TRIGLYCERIDES: 78.0 on 08/04/2009
CALCIUM: 8.9 on 09/24/2009
MAGNESIUM: 2.0 on 09/16/2009
SODIUM: 141.0 on 09/24/2009
POTASSIUM: 4.20 on 09/24/2009
ALKALINE PHOS: 62 on 07/30/2009
BUN: 25.0 on 09/24/2009
CREATININE: 2.0 on 09/24/2009
KETONES URINE: Negative on 08/09/2009
PROTEIN URINE: 21 on 10/05/2005
GLUCOSE-URINE: Negative on 08/09/2009
Notes fasting BG around 109 with highest 139 lately.

DIET HISTORY: 3 meals and snacks

Diet recall is largely unchanged from previous visit. States that he started to make some preparations for healthier choices, but got off track with the Thanksgiving holiday. Of interest, he continues to report pretty good food quality choices, but admits that his portions are excessive at times. Sometimes "feels like his sugar is dropping" (doesn't always check) and finds that he overeats at that following meal. This may be related to inconsistent carbohydrate intake as he doesn't always consume a source of carbs at lunch meal. Reinforced the importance of a consistent carb diet when on his type of insulin regimen.

COMPLIANCE WITH PREVIOUS DIET INSTRUCTION: fair

EXERCISE HISTORY/ACTIVITY LEVEL (FH-6.3.1): Usual routine: has been walking a few times, but admits that it's only once a week. Encouraged more regular fitness program if weight loss is his goal

COMPARATIVE STANDARDS
WEIGHT (AD-1.1.2): 138.6 kg Weight in lbs: 304.9 %
HEIGHT (AD-1.1.1): 175 cm %
BMI(AD-1.1.5): 45.0

Weight history: weight is up about 5 pounds since previous visit

NUTRITION DIAGNOSIS: Problem - Behavioral
Knowledge and Beliefs - Food and nutrition-related knowledge deficit NB 1.1 as related to lack of prior exposure to information as evidenced by questions about following diet
Status: No improvement/unresolved

Status:

NUTRITION INTERVENTION:
Nutrition Prescription:
Nutrition Education - Comprehensive Nutrition Education - Recommended modifications E-2.2 calorie wt. loss diet, low sodium diet/ 2,000 mg sodium per day, healthy diet for heart disease
GOAL: Weight loss toward at least 10% of initial weight lost, euglycemia, improved HgbA1c
PLAN:
1. Keep carb intake consistent-- be sure to include a source of carb at each meal
2. Consider food logging-- software programs recommended
3. Include protein at breakfast meal-- ideas sheet provided
4. Resume exercise program-- walking in morning.

MONITOR AND EVALUATION: Knowledge/Beliefs/Attitudes - Food and nutrition knowledge
Areas and level of knowledge FH-3.1.1

PATIENT EDUCATION:
Preferred Learning Method: Verbal Written
Barriers to Learning: None Identified
Readiness to Learn: good
Comprehension: good
Anticipated Compliance: good

NEXT APPOINTMENT: follow up appointment scheduled for January. He has my contact information for questions and concerns in the meantime.

SIGNED BY AMY H MENDEZ MPH, RD, LD (SV5) 12/02/2009 10:45AM
REVIEWED BY JACQUELINE S SEBASTIAN, RN, MSN, ANP-C (2H2) 12/02/2009 01:20PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

Progress Notes

12/11/09 : 00:00am
MUSC CARDIOLOGY FOLLOW-UP VISIT
MZ
MUSC Division of Cardiology
25 Courtenay Drive
MSC592
Charleston SC 29425
Phone: (843) 792-3355
Fax: (843) 876-4809

December 11, 2009

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764

Dear Jeff:

Mr. Mikell returns to cardiology for follow-up of his cardiomyopathy and acute decompensated heart failure. As you recall, his medical problems include:

1.Non ischemic dilated cardiomyopathy
a.normal cardiac catheterization in 2001
b.echocardiogram in 2003, ejection fraction 50%, enlarged LV diastolic diameter and enlarge left atrial diameter
c.repeat cardiac catheterization on 10/7/05. Normal coronary arteries, LVEDP 30.
d.repeat echocardiogram, dilated left ventricle 6.4cm, hypokinesis the posterior wall, ejection fraction 20 - 30%
e.repeat echocardiogram 2/20/08, LV end diastolic diameter 6.7 eccentric hypertrophy ejection fraction 50%
2.Atrial ventricular nodal reentrant tachycardia
a.status post ablation
b.recurrent tachycardia 10/05 treated with cardioversion
c.repeat atrial tachycardia 9/06 treated with cardioversion
3. Acute renal failure secondary to hypertension (resolved)
4. Hypertension
5. Diabetes
6. G6 PD deficiency
7. Gallbladder disease. (a calculus cholecystitis ultrasound demonstrating thickened gallbladder and sludge).
8. Diffuse bladder thickening with peri-vascular inflammation and possible mass.
9. Hypoglycemia induced ventricular tachycardia (resolved).
10. Acute hepatic failure (resolved).
11. Hyperlipidemia.
12. Sleep apnea (treated with CPAP)

MEDICATIONS

1.Flonase 50 mcg 2 sprays daily for 30 days
2.Atrovent 0.03% 2 sprays at bedtime for 30 days
3.Tikosyn 0.25 mg twice a day
4.CPAT +16cm H20
5.Insulin 50U/50U twice each day
6.Warfarin 5 mg a day
7.Lasix 60 mg twice a day (40 mg tab 1-1/2 tablet per dose)
8.Omeprazole 20 mg a day
9.Metoprolol 50 mg a day
10.Crestor 20 mg at bedtime
11.Potassium 20 meq twice a day
12.Magnesium 400 mg twice a day
13.Fosinopril 20 mg twice a day
14.Naftin
15.Aspirin 81 mg a day

I last saw Mr. Mikell as an outpatient on 6/26/09. However since that time he has had an episode of acute decompensated heart failure requiring hospitalization from 8/3/09 to 8/11/09 he was admitted to the hospital under my service. He had severe acute decompensated heart failure with dyspnea on exertion, lower extremity edema and scrotal edema. He was successfully diuresed in an incomplete fashion during hospitalization. Following the hospitalization we saw him in the outpatient clinic (we means myself and the mid-level provider service) every two to three days for almost a month. Following which we saw him once a week for almost a month. During each of these outpatient visits he underwent history, physical exam, adjustment of his Lasix dose, assessment of his BUN, creatinine and potassium. With all of this extensive work mostly provided by the patient and the superb work of Jackie Sebastian we have been able to reduce his symptoms from New York Heart Association Class IV to New York Heart Association Class III. In addition he has had complete resolution of his scrotal edema but not his lower extremity edema.

Today, I would view this patient to be New York Heart Association Class III meaning that he can do activities of daily living but nothing beyond that. He continues to have lower extremity edema. He continues to have dyspnea on exertion. He has mild dyspnea with one flight of stair and can not walk two flights of stairs. He can walk can on the level ground but has to do it at a modest pace. He works as a bus driver for the Canterbury House. If he puts in a full day he is exhausted and must take the next day off. He denies chest pain, PND, orthopnea, syncope, or pre-syncope.

Cardiac review of systems is as above. All other systems are negative.

Past medical history, family history, and social history are outlined above.

PHYSICAL EXAMINATION: Blood pressure 137/83, heart rate of 70, weight 306 lbs. HEENT: Is remarkable except for mild jugular venous distention. Carotid upstrokes are normal without bruits. Chest is clear to auscultation and percussion. Cardiac exam reveals a normal 1st and 2nd heart sound. There is either a S3 or an S4 or both. There is a II/VI systolic ejection murmur heard throughout the precordium. I do not hear a diastolic murmur. Abdominal exam reveals central obesity. I do not feel a liver or a spleen tip. Bowel sounds are normal. Extremities reveal 2+ pedal edema, ankles and calves. He has no scrotal edema. Cutaneous and neurologic exams are normal.

Impression/Plan: I believe this patient has successfully decreased his New York Heart Association class from

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Date Printed: 06/11/13

Class IV to Class III. However he remains significantly symptomatic and limited. I have reviewed all of his medication and believe that his medications are stable for the time being. I have drawn CMP, BNP, CBC. We discussed monitoring his weight at home. I have asked him to call my office if his weight increases by five pounds or more. If this occurs I would like to increase his Lasix from 60 mg twice a day to 80 mg twice a day for two to three days. If his weight successfully returns to baseline we will then reduce his Lasix back to the baseline of 60 twice a day. If the increasing in Lasix does not reduce his weight he will have to be seen as an outpatient. I would like to see this patient in approximately three months.

I discussed at length with this patient the potential of becoming a participant in the CVRx Rios study called HOPE4HF. He was interviewed by the study coordinators. He has made a return appointment to the study coordinators for further information.

Thank you for allowing me to help take care of this patient. If you have further questions please hesitate to contact me.

Sincerely,

Michael R. Zile, M.D.
Charles Ezra Daniel Professor of Medicine
MZ:js
MZ/am1858
dd: 12/14/2009
dt: 12/21/2009
JobID: 2006567

cc:

SIGNED BY MICHAEL ZILE, MD (ATTENDING) (MZ) 12/22/2009 09:12AM

MIKELL, CHARLES

Date Printed: 06/11/13
1400764 Sex: M Age: 52 DOB: 01/25/1961

Nursing-Messages-PtEd

12/11/09 : 03:18pm
CARDIOLOGY NOTE
MEDICAL UNIVERSITY OF SOUTH CAROLINA
MZ

CHARLES MIKELL
48 year male
MRN# 1400764

Patient seen in CLinic today by Dr. Zile. Plan of care to include Lasix 60mg 1 BID unless weight increases more than 5 lbs. He is to notify me or Jackie Sebastian NP of this occurence and take Lasix 80mg 1 BID for 2-3 days. Dr. Zile will follow progress.

Patient given the CV Clinic phone number of 876 5622. He states he can also email Jackie Sebastian, NP, as he has in the past. Patient verbalizes understanding and appears competent to follow these directions.

Confirmed dose of lasix with Brandt, Pharmacist of Rite Aid, phone 766 5593 and another script for Lasix 80mg BID or as directed authorized to allow for needed flexing doses.

CARD CC: none

SIGNED BY MARTHA HOLMES, RN (N90) 12/11/2009 03:34PM

SIGNED BY MICHAEL ZILE, MD (ATTENDING) (MZ) 12/15/2009 01:50PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Progress Notes

01/22/10 : 00:00am
MUSC CARDIOLOGY FOLLOW-UP VISIT
MZ
MUSC Division of Cardiology
25 Courtenay Drive
MSC592
Charleston SC 29425
Phone: (843) 792-3355
Fax: (843) 876-4809

January 22, 2010

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764

Dear Jeff:

Mr. Mikell returns to cardiology for follow-up of his cardiomyopathy and heart failure. As you recall, his medical problems include:

1.Non ischemic dilated cardiomyopathy
a.normal cardiac catheterization in 2001
b.echocardiogram in 2003, ejection fraction 50%, enlarged LV diastolic diameter and enlarge left atrial diameter
c.repeat cardiac catheterization on 10/7/05. Normal coronary arteries, LVEDP 30.
d.repeat echocardiogram, dilated left ventricle 6.4cm, hypokinesis the posterior wall, ejection fraction 20 - 30%
e.repeat echocardiogram 2/20/08, LV end diastolic diameter 6.7 eccentric hypertrophy ejection fraction 50%
2.Atrial ventricular nodal reentrant tachycardia
a.status post ablation
b.recurrent tachycardia 10/05 treated with cardioversion
c.repeat atrial tachycardia 9/06 treated with cardioversion
3. Acute renal failure secondary to hypertension (resolved)
4. Hypertension
5. Diabetes
6. G6 PD deficiency
7. Gallbladder disease. (a calculus cholecystitis ultrasound demonstrating thickened gallbladder and sludge).
8. Diffuse bladder thickening with peri-vascular inflammation and possible mass.

9. Hypoglycemia induced ventricular tachycardia (resolved).
10. Acute hepatic failure (resolved).
11. Hyperlipidemia.
12. Sleep apnea (treated with CPAP)

MEDICATIONS

1.Aspirin 31 mg a day
2.Tikosyn 500 mg twice a day
3.Lasix 80 mg bid (the patient has increased this from 60 bid on his own)
4.CPAP +16cm H20
5.Insulin 50U/50U twice each day
6.Warfarin 5 mg a day
7.Omeprazole 20 mg a day
8.Metoprolol 50 mg a day
9.Crestor 20 mg at bedtime
10.Potassium 20 meq twice a day
11.Magnesium Oxide 400 mg twice a day
12.Fosinopril Sodium 20 mg twice a day
13.Naftin

I last saw this patient on 12/11/09. At that time he was compensated with New York Heart Association Class III heart failure, however over the last four weeks or so the patient has again developed acutely decompensated heart failure. This has been expressed by increasing dyspnea on exertion and increasing lower extremity edema and abdominal girth. It should be noted that this patient has somewhat liberalized his fluid intake but had remained sodium restricted. Over the last few days the patient has increased his Lasix from 60 mg po bid to 80 mg po bid. Despite this, this patient has gained five to six pounds over the last two weeks. He is now New York Heart Association Class IIIB heart failure. He denies PND, he has some orthopnea, and he denies chest pain or syncope.

Past medical history, family history, and social history are unchanged since my last evaluation.

Cardiac review of systems is as above. All other systems are negative.

PHYSICAL EXAMINATION: Blood pressure 150/79 mmHg, heart rate of 75, weight 321 lbs. HEENT shows some mild jugular venous distention. Carotid upstrokes are normal without bruits. Chest is clear to auscultation and percussion. Cardiac exam reveals a normal 1st and 2nd heart sound. I do not hear S3 or S4. There is a II/VI systolic ejection murmur heard throughout the precordium. I do not hear a diastolic murmur. Abdominal exam reveals central obesity, ascites, and abdominal wall edema. I do not feel a liver or a spleen tip. Bowel sounds are normal. His extremities reveal 3+ pitting edema from toes to mid thighs. He has a bullous lesion on his right lower extremity. He has no scrotal edema. Neurologic exam is normal.

Impression/Plan: Unfortunately this patient has now again developed decompensated heart failure. His brain naturetic peptide is almost 400. His creatinine has increased to 1.8 (these are laboratories which were drawn today). Because of his acute decompensated heart failure I will do the following:

1.Vascular surgery consult to address the bolus lesions on his right lower extremity

2.Echocardiogram
3.I have enrolled the assistance of our mid-level providers in order to increase the frequency with which we see this patient. DoraAnn Kitchin will provide this therapy.
4.We will increase his Lasix to 120 mg po bid
5.DoraAnn will see this patient in three to four days, assess his volume status, draw BUN and creatinine, and adjust his Lasix dose
6.The patient has agreed to go back to the previous methodology of recording his weight, fluid intake, and fluid output on a daily basis
7.I will see this patient in my office in approximately three weeks.
8.This patient's cell phone number is 843-631-0106, home is 843-763-3513

I have again talked to this patient about entering the HOPE4HF study with CVRx device of baroreceptor stimulator. There is no question that this patient would benefit from this. Both from the control of his blood pressure and for potentially control of his heart failure. I have given this patient two weeks to make up his mind about whether he wants to enter this or not. If he does enter this I think we might be able to take care of this patient using the mid-level providers, study coordinators and myself. However if this patient does not want to enter this study I think this patient will have to go to the heart failure clinic. I plan to call this patient in approximately two weeks to discuss his care and see whether he is willing to enter this clinical trial.

Thank you for allowing me to help take care of this patient. If you have further questions please hesitate to contact me.

Sincerely,

Michael R. Zile, M.D.
Charles Ezra Daniel Professor of Medicine
MZ:js
dd: 01/25/2010
dt: 02/02/2010
JobID: 2124698

cc:

SIGNED BY MICHAEL ZILE, MD (ATTENDING) (MZ) 02/03/2010 11:07AM

Nursing-Messages-PtEd

01/22/10 : 02:32pm
NURSE INTAKE - CARDIOLOGY
MEDICAL UNIVERSITY OF SOUTH CAROLINA

CHARLES MIKELL
48 year old male

Seasonal Influenza Immunization was Given on 09/24/2009. **Patient is up-to-date with Seasonal Influenza Immunization.**

CHIEF COMPLAINT/REASON FOR VISIT: here for cardiomyopathy, CHF follow up. States he has gained weight, feels poorly, has had a cough, was treated with Mucinex DM and coricidan. States not non productive.

T 99.1F : Height : Weight 145.4 Kg

WEIGHT IN LBS: 321 lbs

Syst. BP 150 : Diast. BP 79 : P. 75
BP Method: Machine
BP Side: left
BP Location Taken: arm
BP Cuff Size: Large Adult Long
BP Position: sitting
BP Activity: Calm slight dyspnea

CURRENT MEDICATIONS:
Rx: NAFTIN 1% GEL APP AA BID
Rx: FOSINOPRIL SODIUM 20 MG 1 TABLET twice a day
Rx: MAGNESIUM OXIDE 400mg 1 twice daily
Rx: POTASSIUM CHLORIDE 20meq 1 twice a day
Rx: CRESTOR 20mg 1 at bedtime
Rx: METOPROLOL SUCCINATE 50mg 1 daily
Rx: OMEPRAZOLE 20mg 1 daily
Rx: WARFARIN SODIUM 5mg 1 daily
Rx: INSULIN ADMIN SUPPLIES 50U/50U bid
Rx: CPAP +16cm H2O
Rx: LASIX 60mg 1 twice daily
Rx: TIKOSYN 0.500mg 1 twice a day
Rx: ASPIRIN 81mg 1 daily

Patient reports this is correct.

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Medication Reconciliation: reconciled per patient report.

KNOWN ALLERGIES: NKA

Any **NEW** allergies to medicines, foods, herbals or latex? no

ABUSE/NEGLECT: No suspicion of abuse or neglect
SMOKING/TOBACCO SCREEN: Patient does not use tobacco products
USES TOBACCO NOW: NO
SMOKING SCREEN: 01/22/10

IS PATIENT HAVING PAIN? No
PAIN MANAGEABLE : No pain

EDUCATION DOCUMENTATION -
Learning Needs/Content Taught: Diagnosis/Signs/Symptoms, Test/Procedures, Patient's Plan of Care, Medications

Person(s) Taught: Patient

Readiness to Learn: No barriers

Department: Nursing, Physician

Teaching/Learning Method: Verbal, Demonstration of keeping legs elevated higher than heart as much as possible to decrease swelling. Demonstrated correct wrapping technique, foot to BK bilaterally. Discussed importance of not sitting for long periods of time, as on his job. Agreed to call Dora Ann Kitchin, APN this PM when he gets home

Outcome/Comprehension: Able to state understanding and/or return demonstration

WOUNDS/DRAINS/TUBES/IV SITES:

Swelling

RN assessment of wound: right lower leg shiny tight with edema. 1+ palpable pulse...large fluid filled blister on anterior shin. No blisters noted left lower leg, which is less edematous.

Plan of Care: Dora Ann Kitchin, APN, to begin following patient very frequently with labs, weights, adjusting diuretic meds, etc. in assistance for Dr. Zile.

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Also, being evaluated by Dr. T.M. Shary, MD Vascular Resident on order of Dr. Zile and Dr. Brothers, MD. Ace Wraps applied bilaterally to lower legs. Vaseline gauze and allevyn over right anterior shin blister to avoid abrading blister. Encouraged patient to call if blister pops, pain occurs, drainage, fever, redness , or any signs of infection. Vascular access phone numbers provided.

To return next Thursday afternoon to meet with Dora Ann Kitchin, APN.
To return in 3 weeks to see Dr. Zile again.
Echo and labs ordered for today.

SIGNED BY MARTHA HOLMES, RN (N90) 01/22/2010 02:42PM

REVISED BY MARTHA HOLMES, RN (N90) 01/22/2010 04:21PM

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Special Studies

01/22/10 : 3:46pm
Echo Adult Complete Transthoracic Echo Doppler

20100122154616261165435
Accession number: 20100122154616261165435

Indication: CHF, ACUTE DECOMPENSATION, TDS WINDOW DUE TO LARGE BODY HABITUS

Name	Value	Range	Flag	Probability	Reference
WARD	PDC, MICHAEL ZILE, MD				
Blood Pressure	158/95 mmHg				
Height	1.753 m				
Weight	138.0 kg				

Interpretation: The technical quality of the study is adequate. The patient had normal sinus rhythm with a wide QRS throughout the study. The left ventricle is dilated. The left ventricular end diastolic diameter is 5.9cm. The left ventricular end systolic diameter is 4.4cm. There is global hypokinesis with relatively worse function in the posterior wall. There is incoordinate septal motion. The 2D global left ventricular ejection fraction is estimated to be 30 to 40%. The M Mode left atrial diameter is abnormal at 5..9cm. The right atrium is dilated. The right ventricle is dilated with reduced systolic function. There is rightward bowing of the interatrial septum indicative of elevated left atrial pressure. The Aortic, Mitral, Pulmonic , and Tricuspid valves appear structurally normal. A pericardial effusion is not identified. The apex is not well visualized, however there is an echodense area that may represent shadow or thrombus. The inferior vena cava is not visualized, therefore no comment can be made regarding right atrial pressure. Based on previous study dated 8/2009, the left ventricular function is slightly worse. Given the suboptimal visualization of the apex, consider commercial contrast study to evaluate for thrombus. Laurance D. Farmer, MD Cardiology Fellow I have reviewed the images and agree with the findings in this report. Electronically signed by: Bruce W. Usher, MD Cardiology Attending

Conventional And Doppler Color Flow Imaging: There is physiologic tricuspid regurgitation at valve closure. We are unable to estimate the peak right ventricular systolic pressure due to the inability to obtain an adequate velocity envelope of the tricuspid regurgitation. There is physiologic pulmonic regurgitation. Major valvular regurgitation of the aortic and mitral valves is not identified. By doppler color flow there are no intracardiac shunts identified. The mitral valve inflow doppler and mitral annulus tissue doppler are consistent with stage 3 or severe left ventricular diastolic dysfunction(restrictive physiology). The E/e ratio is 10-15 suggestive of an elevated left ventricular filling pressure.

Name		Value	Range	Flag	Probability	Reference
LAD	(1.0 - 4.0)					RANGE
AO	(2.0 - 3.7)					RANGE
LVDd	(3.5 - 5.6)					RANGE
LVDs	(2.3 - 3.9)					RANGE

Printed using Practice Partner®

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA

Patient Chart

Date Printed: 06/11/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

LVEF	(50 - 80%)	RANGE
LV MASS (ASE)	(FEMALE 43-95 g/m2;MALE 49-115 g/m2)	RANGE
LVEDV INDEX (ASE)	(35-75 ml/m2)	RANGE
LVESV INDEX (ASE)	(12-30 ml/m2)	RANGE

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

Progress Notes

01/26/10 : 10:58am
CARDIOLOGY VISIT - RUTLEDGE TOWER
MEDICAL UNIVERSITY OF SOUTH CAROLINA
ct7:mz

CHARLES MIKELL
MRN: 1400764
DOB: 01/25/61

The patient presents today in follow up related to heart failure. Breifly, Mr Mikell was seen on 1/22 secondary to increased sob/doe, lower extremity edema and increase in abdominal distention. At that time labs were drawn and his lasix was increased to 120mg bid. Baseline cr on 1/22 was 1.8. He is also with the complaint of a quarter size open blister that is being followed by vascular.

Today in follow up Mr Mikell reports a weight loss of almost 5 kgs, improved sob/doe as well as abdominal distention. States that he is able to ambulate about 1/4 of a mile without dyspnea. He denies lightheadedness with standing or ambulation and states that he overall feels better . He has been compliant with medication as well as a na restricted diet and a fluid restriction of 1000 mls. Denies chest pain. States that he is voiding normally and is not discolored. He is sleeping on one pillow and denies any orthopnea or pnd.

History of Present Illness: 49 year old male presents with increased lower extremity edema as well as abdominal distention and weight gain.

Past Medical History: Medical history:
AFLUTTER, avnrt S/P ABLATION, DM TYPE 2, HTN,
NON-ISCHEMNIC DILATED CARDIOMYOPATHY,
G-6-PD DEFICIENCY, CHOLECYSTITIS,
HYPERLIPIDEMIA, ARF

Surgical history: none

Review of Systems:
General: Generally doing well stable

Respiratory Complaints: There are no respiratory complaints, decreased sob/doe.
Cardiovascular Complaints: There are no cardiovascular complaints.
Gastrointestinal Complaints: There are no GI complaints, abdominal distention is improved
Musculoskeletal Complaints: no pain to lower extremities, improvement in lower extremity edema.
Sleep patterns: Denies orthopnea, pnd

Social History: There is a past history for tobacco use but none currently.
patient has been compliant with low na diet and 1000ml fluid restriction.

Physical Exam:
Blood Pressure: 123/73; hr 68; weight 140.7 kg or 310.2 lbs
Constitutional and general appearance: The patient appears well.
Jugular Venous Distention: There is trace hepatojugular reflux noted
Lungs: Lungs are clear bilaterally.
Heart: S1 and S2 are Normal with a split s2 .
Abdomen: The abdomen is protuberant but soft nontender..
The Periphery: There is peripheral edema 2+ pitting. BLE bandaged.

LAB REVIEW: I have reviewed the following lab results:
CBC
WBC: 8.830 on 01/22/2010
HEMOGLOBIN: 10.4 on 01/22/2010
HEMATOCRIT: 34.90 on 01/22/2010
PLATELET COUNT: 198 on 01/22/2010
MCV: 82.9 on 01/22/2010
ABSOLUTE NEUTROPHI: 5.930 on 01/22/2010
BMP
SODIUM: 140.0 on 01/26/2010
POTASSIUM: 4.40 on 01/26/2010
CHLORIDE-SERUM: 105.0 on 01/26/2010
CO2: 29 on 01/26/2010
GLUCOSE-SERUM: 123.0 on 01/26/2010
ALBUMIN, SERUM: 3.0 on 01/07/2010
BUN: 35.0 on 01/26/2010
CREATININE: 1.9 on 01/26/2010
CALCIUM: 8.9 on 01/26/2010
URIC ACID: 9.4 on 04/29/2008

Assessment and Plan: Discussed the case of Mr Mikell with Dr Zile after recieving the results of his lab work. Cr 1.9, K+ wnl as above. Mr Mikell will continue lasix 120mg bid as well as compliance with a no sodium diet and 1000ml fluid restriction. He is to continue daily weights and to follow up with me on Friday 1/29/10 at 1430. Patient is aware of plan and is in agreement. Is aware that he should call our office with worsening sobd/doe, dizziness/lightheadedness with standing or exertion, decreased urinary output or any other questions or concerns.

Impression and Conclusions:
Improvement in symptoms.

Medications: unchanged
Re-evaluation: Friday 1/29/10 with lab work

Rx: ZAROXOLYN 2.5mg 1 daily , 30, Ref: 3

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/11/13

SIGNED BY DORA ANN KITCHIN, ANP (CT7) 01/29/2010 11:43AM
REVISED BY DORA ANN KITCHIN, ANP (CT7) 02/01/2010 09:38AM

CO-SIGNED BY MICHAEL ZILE, MD (ATTENDING) (MZ) 02/03/2010 11:07AM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA
Patient Chart

Date Printed: 06/10/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Progress Notes

02/01/10 : 09:47am
CARDIOLOGY VISIT - RUTLEDGE TOWER
MEDICAL UNIVERSITY OF SOUTH CAROLINA
ct7:mz

CHARLES MIKELL
MRN: 1400764
DOB: 01/25/61

The patient presents today in follow up related to heart failure. Today in follow up Mr Mikell has gained approximatley 5 lbs overnight according to his scale at home. He has increased abdominal girth. He is also with the c/o a small amount of lightheadedness but states that it does not increase with exertion or standing. He has been compliant with meds and is currently on lasix 120mg po bid.
g
Past Medical History: Medical history:
AFLUTTER,
AVNRT S/P ABLATION
DM TYPE 2,
HTN,
NON-ISCHEMNIC DILATED CARDIOMYOPATHY,
G-6-PD DEFICIENCY,
CHOLECYSTITIS,
HYPERLIPIDEMIA,
ARF

Surgical history: none

Review of Systems:
General: Generally doing well but is with further decompensated heart failure.

Dizziness: There is lightheadedness but does not increase with standing or exertion
Respiratory Complaints: There are no respiratory complaints.
Cardiovascular Complaints: There is no chest pain. There is still lower extremity edema but improved.
Gastrointestinal Complaints: There are no GI complaints, bm are regular. There is increased abdominal girth
Sleep patterns: He sleeps with one pillow and denies orthopnea or pnd.

Social History: The patient does not smoke .

Physical Exam:
Blood Pressure: The blood pressure at home is reported as normal. Today: 130/72
Constitutional and general appearance: The patient appears well.
Lungs: Lungs are clear bilaterally.
Heart: S1 and S2 normal with a split s2. .

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961 Date Printed: 06/10/13

Abdomen: The abdomen is distended.
The Periphery: There is peripheral edema 1+- 2+.

BMP
SODIUM: 141.0 on 01/29/2010
POTASSIUM: 4.40 on 01/29/2010
CHLORIDE-SERUM: 106.0 on 01/29/2010
CO2: 28 on 01/29/2010
GLUCOSE-SERUM: 101.0 on 01/29/2010
ALBUMIN, SERUM: 3.0 on 01/07/2010
BUN: 38.0 on 01/29/2010
CREATININE: 1.7 on 01/29/2010
CALCIUM: 8.7 on 01/29/2010
URIC ACID: 9.4 on 04/29/2008

Assessment and Plan:

Impression and Conclusions: decompensating diastolic heart failure. Patient was discussed with Dr Van Bakel and is to follow up with him next Tuesday. In the interim, we will add zaroxolyn 2.5mg daily. Mr Mikell is aware that he should call our office for decreased urinary output, increased or new dizziness or lightheadedness or other concerns.

Medications: continue medications with the addition of zaroxolyn 2.5mg po daily
Re-evaluation: to follow up with Dr Van Bakel next Tuesday 2/2/10

SIGNED BY DORA ANN KITCHIN, ANP (CT7) 02/01/2010 12:46PM

CO-SIGNED BY MICHAEL ZILE, MD (ATTENDING) (MZ) 02/03/2010 11:08AM

MUSC
MEDICAL UNIVERSITY OF SOUTH CAROLINA
Patient Chart

Date Printed: 06/10/13

MIKELL, CHARLES 1400764 Sex: M Age: 52 DOB: 01/25/1961

Progress Notes

04/30/10 : 00:00am
MUSC CARDIOLOGY FOLLOW-UP VISIT
MZ
MUSC Division of Cardiology
25 Courtenay Drive
MSC592
Charleston SC 29425
Phone: (843) 792-3355
Fax: (843) 876-4809

April 30, 2010

Jeffrey Akhtar, M.D.
Carolina Family Care-Peninsular Charleston
30 Bee Street, Suite 2100
Charleston, SC 29403

RE: Charles Mikell
MRN: 1400764

Dear Jeff:

Mr. Mikell returns to cardiology for follow-up of his cardiomyopathy and heart failure. As you recall, his medical problems include:

1.Non ischemic dilated cardiomyopathy
a.normal cardiac catheterization in 2001
b.echocardiogram in 2003, ejection fraction 50%, enlarged LV diastolic diameter and enlarge left atrial diameter
c.repeat cardiac catheterization on 10/7/05. Normal coronary arteries, LVEDP 30.
d.repeat echocardiogram, dilated left ventricle 6.4cm, hypokinesis the posterior wall, ejection fraction 20 - 30%
e.repeat echocardiogram 2/20/08, LV end diastolic diameter 6.7 eccentric hypertrophy ejection fraction 50%
2.Atrial ventricular nodal reentrant tachycardia
a.status post ablation
b.recurrent tachycardia 10/05 treated with cardioversion
c.repeat atrial tachycardia 9/06 treated with cardioversion
3.Acute renal failure secondary to hypertension (resolved)
4.Hypertension
5.Diabetes
6.G6 PD deficiency
7.Gallbladder disease. (a calculus cholecystitis ultrasound demonstrating thickened gallbladder and sludge).
8.Diffuse bladder thickening with peri-vascular inflammation and possible mass.
9.Hypoglycemia induced ventricular tachycardia (resolved).

10.Acute hepatic failure (resolved).
11.Hyperlipidemia.
12.Sleep apnea (treated with CPAP)
13.HOPE4HF clinical Study (Medical Therapy Arm)

MEDICATIONS

1.Flonase
2.Zaroxolyn 2.5 mg a day prn
3.Aspirin 81 mg a day
4.Bidil 20/37.5 tid
5.Atrovent
6.Compression Stockings
7.Lasix 120 mg bid
8.Insulin 43U/43U bid
9.Tikosyn 500 mg bid
10.CPAP +16cm H20
11.Warfarin 5 mg a day
12.Omeprazole 20 mg a day
13.Metoprolol 50 mg a day
14.Crestor 20 mg at bedtime
15.Potassium 20 meq bid
16.Magnesium Oxide 400 mg bid
17.Fosinopril Sodium 20 mg bid
18.Naftin

I last saw this patient on 1/22/10. I am happy to tell you that since he has been enrolled in the HOPE4HF study this patient has had significant improvement in his symptoms. He is receiving care from me, the Heart Failure Clinic, and the Cardiovascular Research Clinic. He denies chest pain, PND, orthopnea, syncope or pre-syncope. He still has some dyspnea on exertion but was able to cut his own grass, both the front and back of his house without symptoms. He can walk up two flights of stairs without symptoms. He swims one day a week. He continues to work part-time. However, I believe that any activities that would be considered extraordinary still give him some limitation. I would judge him as New York Heart Association Class II. He has only trace edema when he wears his support stockings. He has had no recurrence of his scrotal edema or abdominal edema.

Cardiac review of systems is as above. All other systems are negative.

Past medical history, family history, and social history are unchanged since my last evaluation.

PHYSICAL EXAMINATION: Blood pressure 125/69 mmHg, heart rate of 71, weight 296 lbs. HEENT shows some mild jugular venous distention. Carotid upstrokes are normal without bruits. Chest is clear to auscultation and percussion. Cardiac exam reveals a normal 1st and 2nd heart sound. I do not hear S3 or S4. There is a II/VI systolic ejection murmur heard throughout the precordium. I do not hear a diastolic murmur. Abdominal exam reveals central obesity, ascites, and abdominal wall edema. I do not feel a liver or a spleen tip. Bowel sounds are normal. His extremities reveal trace edema in his lower extremities. He has no scrotal edema. Neurologic exam is normal.

Impression/Plan: I believe this patient is doing exceeding well at this point. I would like for him to continue to be followed closely and carefully in the Research Clinic and in the Heart Failure Clinic. I would like to see this patient again in my office in approximately six months.

Thank you for allowing me to help take care of this patient. If you have further questions please hesitate to contact me.

Sincerely,

Michael R. Zile, M.D.
Charles Ezra Daniel Professor of Medicine
MZ:js

Cc: Mariann Schulz, R.N.
dd: 05/03/2010
dt: 05/05/2010
JobID: 2453382

cc:

SIGNED BY MICHAEL ZILE, MD (ATTENDING) (MZ) 05/14/2010 01:30PM