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1 S45435
 2 STATE OF OHIO }
 3 COUNTY OF CUYAHOGA } SS.
 4 IN THE COURT OF COMMON PLEAS
 5 CUYAHOGA COUNTY, OHIO
 6 CHRISTOPHER S. LONG,)
 7 Executor of the Estate)
 8 of James Long,)
 9 Plaintiff,)
 10 v.) No. 419978
 11 CLEVELAND CLINIC) Judge: Burt W. Griffin
 12 FOUNDATION,)
 13 Defendant.)

13 Deposition of JEFFERY S. VENDER,
 14 M.D., called as a witness by the Plaintiff,
 15 pursuant to the provisions of the Ohio Rules
 16 of Civil Procedure pertaining to the taking of
 17 depositions, before Melanie L. Humphrey-Sonntag,
 18 CSR, RDR, CRR, and a Notary Public in and for
 19 the County of DuPage, State of Illinois, taken
 20 at Evanston Hospital, 2650 Ridge Avenue,
 21 Evanston, Illinois, on the 25th day of
 22 February, A.D. 2002, at the hour of 2:05 p.m.
 23
 24

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INDEX

EXAMINATION

By Ms. Tosti

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EXHIBITS

- 1 -- Vender Curriculum Vitae, 22 pages 19
 2 -- Letter, Vender to Kinkopf-Zajac, 8/14/01, 2 pages 4, 67

(Attached to original and copy transcripts.)

3/24/03
 SCANNED

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1 PRESENT:
 2 BECKER & MISHKIND CO., L.P.A., by
 3 MS. JEANNE M. TOSTI,
 4 Skylight Office Tower, Suite 660
 5 1660 West Second Street
 6 Cleveland, Ohio 44113
 7 (216) 241-2600
 8 appeared on behalf of Plaintiff; and
 9 ROETZEL & ANDRESS, a Legal Professional
 10 Association, by
 11 MR. JOHN V. JACKSON,
 12 One Cleveland Center, Tenth Floor
 13 1375 East Ninth Street
 14 Cleveland, Ohio 44114
 15 (216) 623-0150
 16 appeared on behalf of Defendant.
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1 (The document was thereupon
 2 marked Plaintiff's Exhibit
 3 No. 2 for identification as
 4 of February 25, 2002.)
 5 (The witness was thereupon
 6 duly sworn.)
 7 MS. TOSTI: Doctor, did you bring
 8 your file with you today?
 9 THE WITNESS: No.
 10 MS. TOSTI: John, can you produce
 11 his file for me?
 12 MR. JACKSON: I -- I do not have
 13 his file, Jeanne. I don't --
 14 THE WITNESS: I can get it to him.
 15 I'd have to mail it back.
 16 MS. TOSTI: Okay.
 17 MR. JACKSON: I don't have it.
 18 MS. TOSTI: Because I think I would
 19 like to see what's in your file.
 20 Do you recall what documents that you've
 21 reviewed in this case?
 22 THE WITNESS: Sure. Oh, yeah.
 23 MS. TOSTI: Okay. I will get to
 24 that in just a minute. We'll go through some

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1 of those.
2 Do you have a set of records for the
3 doctor to look at, John?
4 MR. JACKSON: I do not.
5 Here, I can maybe save some time on
6 this. Here's a letter.
7 MS. TOSTI: I have his report.
8 so --
9 MR. JACKSON: Okay. I will tell
10 you that what's in his report is all the
11 records that were sent to him.
12 MS. TOSTI: Okay.
13 JEFFERY S. VENDER, M.D.,
14 called as a witness by the Plaintiff, pursuant to
15 the provisions of the Ohio Rules of Civil Procedure
16 pertaining to the taking of depositions, having
17 been first duly sworn, was examined and testified
18 as follows:
19 EXAMINATION
20 BY MS. TOSTI:
21 Q Doctor, would you please state your full name
22 for me.
23 A Yeah. Jeffery S. Vender; V, as in Victor,
24 E N D E R.

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1 It's under oath. It's important that you
2 understand my questions.
3 If you don't understand my questions,
4 let me know, and I'll be happy to repeat the
5 question or to rephrase the question.
6 Otherwise, I'm going to assume you understood
7 my question and that you're able to answer it.
8 It's important that you give all of your
9 answers verbally because the Court Reporter
10 can't take down head nods or hand motions.
11 At some point defense counsel may choose
12 to enter an objection. You're still required
13 to answer my questions unless he instructs you
14 not to answer them.
15 At this point you don't have any medical
16 records to refer to, and defense counsel has
17 said he doesn't have any medical records for
18 you to refer to, so I would normally offer you
19 that option if it would be helpful to you in
20 answering the questions.
21 Do you understand those instructions as
22 I've given them to you?
23 A Yes.
24 Q Okay. Doctor, I have a -- a copy of your

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1 Q And what is your business address?
2 A Evanston Northwestern Healthcare. It's
3 Evanston Hospital, 2650 Ridge -- R I D G E --
4 Evanston 60201.
5 MR. JACKSON: Let me correct
6 something.
7 He -- he was sent Dr. Minore's
8 deposition, also. That's not listed in his
9 report.
10 MS. TOSTI: Okay. Well, we'll go
11 through what he doesn't have.
12 MR. JACKSON: I just wanted
13 you to -- I made that statement before, but I
14 need to correct it.
15 BY MS. TOSTI:
16 Q Have you ever had your deposition taken
17 before, Doctor?
18 A Yes, I have.
19 Q Okay. How many times?
20 A Oh, over 50.
21 Q Okay. Well, I'm sure counsel's had a chance
22 to talk with you, but I'm just going to go
23 over a few of the ground rules.
24 This is a question-and-answer session.

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1 report, and in that report it indicates some
2 materials that you've reviewed in addition to
3 the depositions of Dr. Cosgrove,
4 Dr. Muehlebach, Dr. Hernandez, Dr. Hearn,
5 Dr. Koch, a Nurse Hrobat, Nurse Young, Nurse
6 Zilka, Dr. Yared, and the depositions of
7 Dr. Smith and Dr. Minore, as well as
8 Plaintiff's nursing expert, Miss Smith.
9 And I believe defense counsel has also
10 mentioned, additionally --
11 MS. TOSTI: What was the
12 additional?
13 MR. JACKSON: The deposition of
14 Dr. Minore.
15 MS. TOSTI: I believe that's
16 in his --
17 THE WITNESS: No, those are
18 Plaintiff's reports of Smith and Minore --
19 MS. TOSTI: Okay.
20 THE WITNESS: -- versus the actual
21 deposition of --
22 MS. TOSTI: Have you --
23 THE WITNESS: I did not review
24 the -- you alluded to a Nurse Smith's

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- 1 deposition.
- 2 It is actually CV Smith that I reviewed
- 3 and Minore's deposition that I reviewed.
- 4 BY MS. TOSTI:
- 5 Q Okay. In addition to the Cleveland Clinic --
- 6 did you review all of the Cleveland Clinic
- 7 records of Mr. Long?
- 8 A I believe so. I mean, I . . .
- 9 THE WITNESS: Were those the
- 10 complete records?
- 11 MR. JACKSON: Between August 20th
- 12 and September 13th.
- 13 THE WITNESS: Yeah.
- 14 BY MS. TOSTI:
- 15 Q Okay. He was at a extended care facility
- 16 after discharge from Cleveland Clinic. Did
- 17 you review any medical records from that
- 18 extended care facility?
- 19 A No, I -- just the autopsy report.
- 20 Q You have not reviewed any depositions from the
- 21 Plaintiff in this case, have you, Christopher
- 22 Long, his deposition?
- 23 A No.
- 24 Q Okay. Or any of the other lay witnesses that

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- 1 Q Can you tell me approximately how many you do
- 2 in a year's time?
- 3 A That's variable. I mean, it can be one a
- 4 month. It can be two in a month. It could be
- 5 12 in a year. I don't really track it. I
- 6 don't know.
- 7 Q How many files do you have in your possession
- 8 right now that you're currently consulting on?
- 9 A Well, I probably have in my possession 50 or
- 10 60, but I don't know if -- some of those cases
- 11 could be closed and I'm unaware of it. In
- 12 fact, I'm sure some are closed but I'm unaware
- 13 of it, so I don't know how many are truly
- 14 active.
- 15 Q And what proportion of the medicolegal matters
- 16 on which you've consulted have been for
- 17 plaintiff and what proportion for defendant?
- 18 A It's about 10 to 15 percent plaintiff and 85,
- 19 90 percent defense.
- 20 Q And in the cases that you've consulted for
- 21 plaintiff, how many times did you find
- 22 substandard care, what percentage of them?
- 23 A Oh -- what percentage of them?
- 24 I'd be strictly guessing if I said

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- 1 have been taken in this case --
- 2 A Not --
- 3 Q -- Anthony DeFlavis, Jean DePrisco?
- 4 A No.
- 5 Q In addition to the written medical records,
- 6 have you reviewed any films of echocardiograms
- 7 or cath films?
- 8 A No.
- 9 Q Have you been provided any deposition
- 10 summaries in this case?
- 11 A No.
- 12 Q Any time-line summaries?
- 13 A No.
- 14 Q Doctor, I'd like you to tell me about your
- 15 experience in medicolegal matters. When's the
- 16 first time that you offered your service as an
- 17 expert medicolegal consultant?
- 18 A Well, I wouldn't say "offered." The first
- 19 time I did was probably around 1984.
- 20 That's pretty representative.
- 21 Q Okay. And how many medicolegal matters have
- 22 you consulted on since then?
- 23 A I'm guessing probably, at this point, a couple
- 24 hundred.

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- 1 20 percent, maybe 30 percent.
- 2 Q Now, Doctor, you've mentioned you've had your
- 3 deposition taken about 50 times. Was that as
- 4 an expert in medicolegal matters?
- 5 A Correct.
- 6 Q When's the last time that you had your
- 7 deposition taken as an expert in a medicolegal
- 8 matter?
- 9 A I would say -- but I can't be sure -- within
- 10 the last six weeks.
- 11 Q And what was --
- 12 A I could look it up. I mean, I don't know off
- 13 the top of my head.
- 14 Q Okay. What was the name of that case?
- 15 A Don't recall.
- 16 Actually, I do. I think it was the
- 17 O'Keefe case, but who -- O'Keefe versus
- 18 somebody.
- 19 Q Where is that case filed?
- 20 A I want to say Cook County.
- 21 Q And were you acting as an expert for plaintiff
- 22 or defense in that case?
- 23 A Defense.
- 24 Q Have you ever testified at trial?

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- 1 A Yes, I have.
2 Q How many times?
3 A Probably 35, 40.
4 Q And in your trial testimony, how many times --
5 how many times out of that was for defendant?
6 A 100 percent for defense. But I think it's
7 important to get on the record that wasn't
8 because of refusal to do trials or depositions
9 on the plaintiffs' side as much as it was
10 either the trials -- the cases settled prior
11 to the scheduling of one or the other.
12 Q I had --
13 MR. JACKSON: Apparently, when
14 plaintiffs use Dr. Vender, the defendants
15 settle.
16 MS. TOSTI: I'll have to keep that
17 in mind.
18 BY MS. TOSTI:
19 Q Have you ever acted as an expert in a case
20 involving issues of postoperative bleeding in
21 a cardiothoracic patient?
22 A I can't say, by recollection, yes or no. I --
23 I don't recall.
24 Q What about in a case involving issues of

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- 1 A Excuse me. I'm sorry for interrupting.
2 I think I did for the materials that had
3 been reviewed to date, excluding Dr. Minore's,
4 which came in later.
5 MS. TOSTI: Okay. I'm going to
6 make a request for the doctor's billing
7 statements in this case.
8 MR. JACKSON: Okay.
9 THE WITNESS: I'm listening. Keep
10 going. I'm walking.
11 BY MS. TOSTI:
12 Q Doctor, do you provide your name to any
13 professional services or medicolegal
14 consulting firms, indicating that you're
15 available to do medicolegal reviews?
16 A No.
17 Q And other than in this case --
18 MR. JACKSON: I really wish you
19 hadn't done that, but I'm glad you did.
20 THE WITNESS: "Other than this
21 case," yes?
22 BY MS. TOSTI:
23 Q Other than this case, have you ever been
24 consulted on a medicolegal matter by

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- 1 postoperative cardiac tamponade?
2 A Possibly. Don't know.
3 Q Don't have a specific recollection?
4 A No.
5 Q Doctor, what is your charge for consultation
6 on legal matters?
7 A \$250 an hour to review charts, \$350 for
8 depositions and trials; typically, half-day
9 minimum unless they're out of town, and then I
10 have to work something out because of travel
11 and other issues.
12 Q Approximately how many hours of expert
13 services have you spent to date on this case?
14 A Don't know. I could get a number. I mean,
15 it's easy enough to track down just by looking
16 at any bills that I've sent Mr. Jackson. That
17 would pretty much stipulate the hours in
18 review, and then there was a preparation for
19 this, which I probably have, you know, four
20 hours in -- invested in.
21 Q Have you sent Mr. Jackson or his law firm any
22 bills --
23 A I think --
24 Q -- on this case to date?

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- 1 Mr. Jackson or anyone at Mr. Jackson's law
2 firm?
3 A I can't answer that. I'm not sure. He --
4 he'd probably know better than me.
5 Q You don't have any recollection --
6 A No.
7 Q -- of working with Mr. Jackson before?
8 A No.
9 Q Do you know how it is that he came to contact
10 you or his office came to contact you
11 regarding this case?
12 A No.
13 Q When were you first contacted?
14 A Don't know.
15 Q Okay. And would -- do you know if you were
16 contacted by letter or by phone?
17 A Initially by phone, follow-up with letter,
18 including the chart.
19 Q Okay. And in your file on this case, would
20 there be correspondence that would document
21 approximately the time you were contacted on
22 this case?
23 A Probably not. I can't be sure. I can check.
24 I typically do not retain the correspondences

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- 1 because the lawyers do, not -- for just paper
2 reasons. It doesn't benefit me and I only
3 retain the chart or things pertinent to the
4 actual case itself.
- 5 Q Have you ever been named as a defendant in a
6 medical negligence case?
- 7 A Twice. Once in 1979, dismissed prior to any
8 deposition or anything else. The second time
9 I would say was approximately -- I don't
10 know -- 1995, gave a deposition and it was
11 dismissed, no settlements on my behalf in
12 either case.
- 13 Q What was the allegation of negligence in those
14 two cases?
- 15 A The first case I have no idea. I was a
16 treating physician in a case that there was a
17 suit, and I don't know what the allegations
18 were against me, but like I say, I never even
19 got deposed.
- 20 In the second case it had to do with
21 medical supervision of a resident.
- 22 Q And what were they alleging that you did
23 improperly?
- 24 A Well, that I didn't watch him adequately.

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- 1 in June.
- 2 A Okay.
- 3 Q Doctor, I have a copy of your curriculum vitae
4 that was provided to me by Mr. Jackson.
- 5 MR. JACKSON: Jeanne, what he
6 brought down -- if you're going to ask him
7 about current, it's laying right there.
- 8 THE WITNESS: Let me see that one.
9 It could be just the same one, same set.
10 That one's more current.
- 11 (There followed a discussion
12 outside the record.)
13 (The document was thereupon
14 marked Plaintiff's Exhibit
15 No. 1 for identification as of
16 February 25, 2002.)
- 17 BY MS. TOSTI:
- 18 Q I'm going to ask, Doctor, if you would just
19 identify this and then if you would give it
20 back to me as to what that document is for the
21 record.
- 22 A This is -- what's been handed to me as
23 Exhibit 1 is a copy of my curriculum vitae,
24 representative of my practice and credentials

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- 1 Q Did some harm result or was there an alleged
2 harm that resulted because of that?
- 3 A An alleged one.
- 4 Q Okay. What was that?
- 5 A The puncture of a carotid artery in the
6 placement of a central line.
- 7 Q What happened to the patient?
- 8 A He's fine. The surgery had to be canceled for
9 a day or a week, whatever.
- 10 Q Has your license ever been suspended -- your
11 medical license ever been suspended, revoked,
12 or called into question?
- 13 A No.
- 14 Q Have you ever had your hospital privileges
15 suspended, revoked, or called into question?
- 16 A No.
- 17 Q Doctor, do you know when this case is set for
18 trial?
- 19 A No. When is it?
- 20 Q I take it, then, you haven't been asked to
21 attend trial as yet.
- 22 A No. I always presume I will unless told
23 differently.
- 24 Q Okay. I believe the case is set for trial

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- 1 through August 31st, 2001, barring any
2 additional publications that might have
3 occurred since then that are not noted on
4 here.
- 5 Q Okay. Are there any additions or corrections
6 that you'd like to make to your curriculum
7 vitae that's been marked as Plaintiff's
8 Exhibit 1?
- 9 A Not that are substantive to this case.
- 10 Q And you believe that -- are there some
11 additional publications that are not contained
12 on your curriculum vitae?
- 13 A I'm not sure.
- 14 Q Okay. I . . . would any of them that may be
15 pending have any applications for this case?
- 16 A No.
- 17 Q Doctor, the articles that are contained on
18 your curriculum vitae, do any of these deal
19 with postoperative complications of bleeding
20 or cardiac tamponade?
- 21 A Not that I'm aware of.
- 22 Q Pardon me?
- 23 A Not that I'm aware of.
- 24 Q Okay. Are there any articles contained on

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1 your CV that you believe have particular
2 relevance to the issues in this case as you
3 understand them?
4 A No.
5 Q And as you sit here today, are -- are there
6 any publications that you believe have
7 particular significance or relevance to the
8 issues in this case?
9 A No.
10 Q And I'm asking if there's a specific article
11 that you are aware of at this time.
12 A No.
13 Q Doctor, you are board certified in several
14 areas of medicine; is that correct?
15 A No, just two.
16 Q Just -- go ahead.
17 A Anesthesiology and then I have a special
18 certification in critical care, available
19 since 1987.
20 Q Okay. When did you receive your certification
21 in anesthesiology?
22 A 1979.
23 Q And did you pass that on your first try?
24 A Correct.

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1 A In the Evanston Northwestern Healthcare
2 system.
3 Q And there is a group of hospitals that belong
4 to that system?
5 A Correct.
6 Q Okay. Is there a particular hospital that you
7 practice from the majority of the time?
8 A The majority of the time I -- I am at Evanston
9 Hospital, but I, at any one point in time,
10 have been to all of them.
11 Q How many beds are in the Evanston Hospital?
12 Approximately.
13 A System or this hospital?
14 Q In this hospital.
15 A Four hundred.
16 Q Do they have a specific cardiothoracic
17 intensive care for the -- postoperative
18 cardiothoracic care?
19 A It's part of the medical/surgical intensive
20 care unit.
21 Q So when a patient undergoes cardiothoracic
22 surgery, they go into the general medical/
23 surgical intensive care unit?
24 A Correct.

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1 Q Okay. And the critical care, you mentioned
2 the date that you received that special --
3 A I did mine -- I think the initial exam was
4 '87. I think mine was 1988. It says '87 on
5 here. I'm not sure -- it was '87, '88.
6 Q Okay. And in regard to that particular
7 certification, did you need any additional
8 credentials besides your residency in
9 anesthesia? What were the requirements or the
10 criteria for that special certification in
11 critical care?
12 A I can't remember any at this point. I know I
13 had a fellowship in critical care so I had
14 that. It was an exam process at the time, so
15 the certification came through examination
16 process, and there might have been other
17 options to doing it, like 50 percent practice
18 or something.
19 I don't remember what the requirements
20 were. I know I met them.
21 Q But there were some additional requirements
22 besides just sitting for the examination?
23 A I think so.
24 Q Okay. Where do you have hospital privileges?

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1 Q How many beds is that unit?
2 A It's 18.
3 Q And is it only surgical patients in there?
4 A No, it's probably, on average, 70 percent
5 surgical.
6 Q And would the others be various medical
7 conditions?
8 A Correct.
9 Q Okay.
10 A And then we also have intensive care unit beds
11 that we cover in another unit, but it's really
12 not the medical/surgical; it's overflow.
13 Q Doctor, do you currently hold an academic
14 appointment?
15 A I'm a professor of anesthesiology at
16 Northwestern University.
17 Q And what currently are your administrative
18 positions?
19 A I'm the chairman of the department of
20 anesthesia at Evanston Northwestern Healthcare
21 and director of critical care services.
22 Q Is there a particular textbook of
23 anesthesiology that you refer to from time to
24 time that you consider to be the best or one

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- 1 that you find to contain reliable information?
- 2 A I think there's a number of textbooks
- 3 available in our field that are very well
- 4 written, offer reasonable information.
- 5 The word "reliable" is something that
- 6 needs definition if it's going to be used
- 7 globally, but those textbooks would be the
- 8 Miller textbook, the Barash textbook, Kirby,
- 9 then there are others.
- 10 Q What textbook does Northwestern University
- 11 Medical School utilize with the students?
- 12 A Good question. I think they're using
- 13 Barash's. I'm not sure.
- 14 Q Is there a particular echocardiography text
- 15 that you find to be a reliable source of
- 16 information?
- 17 A Did you say "echo"?
- 18 Q Yes.
- 19 A There are several -- there's a lot of
- 20 echocardiography texts but no. The
- 21 answer's no.
- 22 Q Who is your present employer?
- 23 A Evanston Northwestern Healthcare.
- 24 Q And aside from Evanston Northwestern

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- 1 In the operating room, depending on what
- 2 is going on, I work 25 to 50 percent of the
- 3 time, and that's ongoing, and that's an
- 4 average number reflective of the last couple
- 5 years. Prior to that, it was more.
- 6 And then the remainder of my time, in
- 7 particular -- which has increased to probably
- 8 25 to 50 percent, depending on what point in
- 9 time that is -- would be administrative, and
- 10 that's primarily increased because of us
- 11 becoming an independent department versus a
- 12 division of surgery necessitating a little bit
- 13 more time commitment. And clearly this is
- 14 predicated, though, on a seven-day workweek
- 15 and hours that are clearly more than eight
- 16 per day.
- 17 Q Where in all this does your academic
- 18 appointment fall?
- 19 You had mentioned that you were a
- 20 professor of anesthesiology with the medical
- 21 school. Is that part of your clinical time,
- 22 or do you have additional time that you devote
- 23 to classroom instruction?
- 24 A Being a professor is something that typically

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- 1 Healthcare, do you provide professional
- 2 services for any other entity?
- 3 A You mean medically?
- 4 Q Yes.
- 5 A No.
- 6 Q Is Evanston Northwestern Healthcare a
- 7 professional medical group?
- 8 A We have -- Evanston Northwestern Healthcare is
- 9 a not-for-profit healthcare organization
- 10 within which there is the Evanston
- 11 Northwestern Healthcare medical group, of
- 12 which I am a member.
- 13 Q Okay. Are you a part owner or shareholder in
- 14 that group?
- 15 A No, I'm an employee.
- 16 Q I'd like you to describe for me your
- 17 professional responsibilities and how you
- 18 divide your professional time.
- 19 A Well, within the context of my medical time, I
- 20 would say it's divided between, really, three
- 21 areas, critical care, and depending on the
- 22 week of the month, that could take 25 to
- 23 50 percent of my time that week, that
- 24 particular week. And that's clinical.

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- 1 comes from either your publications and/or
- 2 professional commitments, like professional
- 3 speaking and things of that nature.
- 4 Q So you don't have any responsibilities for
- 5 formal classroom -- classroom instruction at
- 6 the medical school?
- 7 A Working at Evanston Northwestern, clearly, I
- 8 do lecture residents and medical students.
- 9 That could be on our grounds here because they
- 10 rotate to our institution from the medical
- 11 school.
- 12 I have given lectures downtown at the
- 13 medical school, but those are all scheduled
- 14 and not necessarily firmly committed to on any
- 15 regular basis.
- 16 Q How often are you involved in doing that?
- 17 A Variable. Downtown, probably once a year, and
- 18 up here it could be 10 times a year.
- 19 Or more.
- 20 Q Now, Doctor, you had -- you said that you had
- 21 an opportunity to review the medical records
- 22 of James Long.
- 23 In reviewing the medical records, was
- 24 there anything that you disagreed with in

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- 1 regard to the assessments of James Long, any
2 of the interpretations of diagnostic tests
3 that you recall from your review of the
4 records?
- 5 MR. JACKSON: I'll object but go
6 ahead.
- 7 A Yeah. I mean, the form of the question is
8 such that it's difficult for me to understand
9 when you say do I disagree with, but if you're
10 saying did I -- is there anything that I saw
11 that I said shouldn't have been done or
12 deviated from a standard of care that was
13 reasonable versus different methods for
14 handling things by different practitioners,
15 the answer's no.
- 16 BY MS. TOSTI:
- 17 Q And in regard to any diagnostic studies they
18 had, did you disagree with any of the
19 diagnostic impressions?
- 20 A Can you be specific?
- 21 Q I'm asking if you recall anything that you
22 reviewed, and since you didn't bring your file
23 with you today, it's a little difficult, since
24 I can't look through your file, either, at

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- 1 at some point afterwards, presented to one of
2 our heart surgeons the initial scenarios of
3 the case.
- 4 Q When you say "some point afterwards," what are
5 you referring to?
- 6 A After receiving the case, reviewing it,
7 scenario playing with the surgeon to see how
8 they would respond without knowing the
9 outcomes.
- 10 Q Okay. And who was the surgeon that you ran
11 these facts by?
- 12 A I don't know. It would be one of our heart
13 surgeons.
- 14 Q And do you recall what he told you?
- 15 A Didn't hear anything too unusual.
- 16 Q Well, what do you recall his response was to
17 the facts as you presented them?
- 18 A I think it's not what I recall as a response
19 as much as -- in the scenario playing, what
20 one often tries to do is present the situation
21 as they see it and blinding the respondent to
22 the outcome because it often is the case, when
23 one retrospectively looks at something, it
24 really prejudices the response positively or

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- 1 this point.
- 2 But at -- as you sit here today, is
3 there any recollection that you have in your
4 review of anything that you disagreed with in
5 regard to his diagnostic tests?
- 6 A No.
- 7 Q At any time when you were reviewing this case,
8 did you ever request that defense counsel
9 provide you with any additional materials or
10 additional records?
- 11 A No.
- 12 Q And all of the depositions that you were
13 provided, have you read them?
- 14 A Yes.
- 15 Q In formulating your opinions in this case, did
16 you refer to any medical literature, journal
17 articles, or textbooks?
- 18 A No.
- 19 Q And in preparing for this deposition, did you
20 refer to any type of medical literature?
- 21 A No.
- 22 Q Have you consulted with any physicians at any
23 time regarding this case?
- 24 A I can't say I specifically did. I probably,

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- 1 negatively, being influenced by the outcome
2 versus the situational material.
- 3 And so I just remember he didn't find
4 anything out of line with it.
- 5 Now, obviously, there could be some
6 prejudices there that would be on the negative
7 side because I think his presumption would be
8 why am I presenting this unless something did
9 go wrong, but without knowing the outcome, he
10 did not find anything particular wrong.
- 11 Q Okay. And what information did you present
12 to him?
- 13 A Basically, it was a very generic presentation
14 of Mr. Long's situation in the postoperative
15 state, as reflected through the operative
16 procedure, the postoperative bleeding, a
17 little bit of the volatility of the vital
18 signs, and then the interventions.
- 19 Q And at what point did you stop providing the
20 facts and -- you recall that there is a --
21 more or less -- time line on the ICU flow
22 sheets?
- 23 Did you present it all the way through
24 the full ICU experience that was gone on?

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- 1 A Pretty much. By -- by the way, this was all
2 by recollection because this was a while ago,
3 but by recollection, it was sometime up --
4 prior to the final few hundred-cc bleed that's
5 referred to in the 2210, 2230 time period.
6 It's up and to that point.
7 Q Have you ever met or had any contact with
8 Dr. Delos Cosgrove?
9 A No. No one in the case I don't know -- don't
10 know any of them.
11 Q Okay. I'm going to mention some of them.
12 Dr. Muehlebach you've never met or had contact
13 with?
14 A No.
15 Q Okay. Or Dr. Charles Hearn or Dr. Colleen
16 Koch -- and I'm not sure I'm pronouncing her
17 name correctly.
18 A No.
19 None of the nurses, no.
20 Q Or Dr. Yared or Dr. Hernandez?
21 A No.
22 Q Have you ever met or had any contact with any
23 of the experts that have been identified in
24 this case, either for Plaintiff or for

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- 1 Defendant?
2 A I know Dr. Minore.
3 Q Okay. How do you know Dr. Minore?
4 A He's an anesthesiologist here in Illinois, in
5 Rockford, and I've spoken in his town. I
6 think I've spoken to his hospital.
7 Q Okay. You have never met or had contact with
8 Dr. Mehmet Oz or Dr. Timothy Lyons?
9 A Don't -- no. I've spoken at Columbia where Oz
10 is, but I don't know him.
11 Q Have you read the report of Nurse Mary Anne
12 Belanger?
13 A Is that the Plaintiff's expert nurse?
14 Q Have you -- have you read Plaintiff's expert
15 nurse's report?
16 A There was a report and I can't remember the
17 name on it, so I can't -- I can't answer that
18 right now.
19 MR. JACKSON: From one of the
20 nurses?
21 THE WITNESS: Not a deposition. I
22 didn't read any deposition. There were two
23 reports, and I can't remember. One was a
24 Minore report.

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- 1 MR. JACKSON: The other one was
2 Dr. Smith.
3 THE WITNESS: Okay.
4 A (Continuing.) So no. The answer's no on the
5 nurse.
6 BY MS. TOSTI:
7 Q In reviewing this case, did you generate any
8 personal notes?
9 A No, other -- no, other than what you've got
10 here.
11 Q And you're referring to your report?
12 A Correct.
13 Q And you have seen Dr. Vernon Smith and
14 Dr. Minore's reports; correct?
15 A Reports, yes.
16 Q Yes.
17 Have you ever been involved in any
18 research involved with postoperative cardiac
19 tamponade?
20 A Research, no.
21 Q What about postoperative bleeding in
22 cardiothoracic patients?
23 A Research, no.
24 Q Do you personally provide anesthesia services

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- 1 for cardiothoracic surgery service at
2 Evanston?
3 A Correct. Yes.
4 Q How many cases a week do you personally
5 provide the anesthesia for?
6 A Oh, I would say, over the years, it's been
7 between one a week and -- in a given week --
8 six. Variable.
9 Q Okay. And currently, this year --
10 A Well, this year just started, and I haven't
11 been around a lot, but historically, at least
12 50 a year, 50 to a hundred a year or more.
13 Q And in the last year, how many cases would you
14 say you've personally provided anesthesia
15 services for heart valve replacements?
16 A Don't know.
17 Q Well, generally speaking, in the 50 to a
18 hundred a year that you may do, can you give
19 me just a -- a ballpark as to approximately
20 how many --
21 A Well, generally speaking --
22 Q -- would be heart valves?
23 A Generally speaking, based on historic, about
24 25 percent of our procedures are valves. I

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- 1 can't say what mine are.
- 2 Q Tell me what your experience is in providing
- 3 anesthesia for minimally invasive valve
- 4 replacements.
- 5 A Zero.
- 6 Q Are there any cardiothoracic surgeons that are
- 7 doing minimally invasive procedures --
- 8 A Not that --
- 9 Q -- at Evanston Hospital?
- 10 A Sorry.
- 11 Not that I'm aware of.
- 12 Q Is there a reason that you know of why they're
- 13 not being done here?
- 14 A No, other than, you know, not -- not everybody
- 15 does them.
- 16 Q Doctor, in the Evanston Hospital postoperative
- 17 unit, where the cardiothoracic patients go,
- 18 what type of physician coverage does that unit
- 19 have? How are they staffed?
- 20 A We have the primary service, which is the
- 21 cardiac service, who has their patients in the
- 22 unit. They're involved, obviously, with
- 23 direct patient care of their own patients.
- 24 And then we have coverage by an

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- 1 contacted and it's after, say, 7:00 p.m. at
- 2 night, what's the procedure? Who do they
- 3 contact?
- 4 A Depending on what they perceive as the
- 5 problem, they'll either call one of the
- 6 intensive care people on call and/or the
- 7 cardiac surgeon involved, primary cardiac
- 8 surgeon.
- 9 Q So the cardiac surgeons stay on call at night?
- 10 A Sure.
- 11 Q Okay. Now, Doctor, you mentioned previously
- 12 that you spend a good deal of your time in the
- 13 intensive care unit.
- 14 Is it the unit that we were previously
- 15 talking about, that postoperative unit that
- 16 has mostly surgical patients in it?
- 17 A Yes.
- 18 Q Okay. Tell me a little bit about what your
- 19 responsibilities are in that unit, what
- 20 you do.
- 21 A Well, I'm the -- I'm the head of --
- 22 historically -- I've been the head
- 23 administrator for critical care services in
- 24 our institution as of recently but, prior to

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- 1 intensive care group, which I oversee, with
- 2 full-time day coverage there and then coverage
- 3 by beeper at night.
- 4 We have moonlighting people at night, we
- 5 have house staff at night, and we have nurse
- 6 practitioners who also are involved with the
- 7 residents.
- 8 Q The moonlighting and house staff physicians,
- 9 what area of expertise are they?
- 10 A They're variable. The majority are cardiology
- 11 and pulmonary and/or medical house staff.
- 12 Q Now, you also mentioned that you have some --
- 13 did you say -- nurse clinicians that are
- 14 available in the area?
- 15 A Nurse-practitioners.
- 16 Q Nurse-practitioners. Okay.
- 17 Are they there on a 24-hour basis?
- 18 A No.
- 19 Q Okay. When are they there?
- 20 A Mostly during the day. And the CV
- 21 nurse-practitioner, I don't know what her
- 22 hours are.
- 23 Q In your unit, if a patient has difficulty and
- 24 the nurses feel that a physician needs to be

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- 1 that, in the medical/surgical intensive care
- 2 unit since 1987. That's administrative
- 3 involvement with, you know, nursing and
- 4 triaging, policies and procedures and things
- 5 of that nature.
- 6 And then, in addition to that, I've been
- 7 one of five practitioners who rotate on a
- 8 weekly basis for weekend call responsibility
- 9 in the intensive care unit as a consultant to
- 10 critical care patients and the managers of the
- 11 ventilators.
- 12 Q So currently, on a weekly basis, how much time
- 13 are you in the ICU?
- 14 A Well, since we do it by the week, every few
- 15 weeks I'm in there, but the other weeks I'm
- 16 just there administratively. I'm not taking
- 17 care of patients.
- 18 Q And how often do you rotate in and actually
- 19 are carrying out clinical responsibilities in
- 20 the unit? How many --
- 21 A Every fifth week.
- 22 And there's other times I'll substitute
- 23 in and stuff like that, but generically, we
- 24 rotate on a five-week basis.

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- 1 Q And then are you in there for seven days?
2 A Uh-huh.
3 MR. JACKSON: You should say yes so
4 that she has it.
5 A (Continuing.) Yes.
6 THE WITNESS: I'm sorry.
7 MR. JACKSON: Thank you.
8 BY MS. TOSTI:
9 Q Okay. And when you are in -- when it's your
10 week and you're in the ICU, tell me what it
11 is you do in the ICU, what your
12 responsibilities are.
13 A We consult on new admissions. We see all of
14 the patients, either from a clinical care
15 standpoint or -- and consultation -- or
16 educational standpoint with house staff, and
17 we manage all of the ventilators that are in
18 the unit and ventilators that are in any acute
19 care setting.
20 Q Now, Doctor, do you have responsibilities for
21 managing vasopressors or for watching chest
22 tube drainage or any of those types of things
23 for the patients?
24 A We participate with all the primary care

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- 1 services. This is not a closed ICU. It's
2 semiopen, semiclosed, meaning we have a
3 critical care service that sees everybody. We
4 have a primary service and responsibility,
5 which is the surgical service or primary
6 medical admitting physician.
7 We have various degrees of liberty that
8 we work out with the individual practitioners
9 or service on how many we will or won't do,
10 which could include the management of
11 vasoactive agents and/or sedation and/or
12 mechanical ventilation.
13 Q Okay. So you don't have a set policy or
14 procedure that goes over all the patients, the
15 postoperative patients in the unit?
16 A No.
17 Q Okay. Generally speaking, is the management
18 of vasopressors and management of chest tube
19 drainage and fluid replacement something that
20 falls to the surgical staff or that which
21 falls to the person that's the intensive
22 coverage of the unit for that week?
23 A Both.
24 Q And do you --

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- 1 A Can be either/or, I should have said.
2 Q Do you have training in echocardiography?
3 A No. Not formal training, no.
4 We have seven certified
5 anesthesiologists in our group, not to
6 mention the cardiologists. That all came
7 about after my training time period, so I'm
8 involved with them, but no, I don't have
9 formal training.
10 Q Okay. And just in follow-up, do you -- do you
11 do any intraoperative transesophageal echoes?
12 A It's often done on my cases but not by me.
13 Q And you would not consider yourself an expert
14 on echocardiography?
15 A Do not, no.
16 Q Okay. Are you sometimes in a position,
17 though, to order an echocard -- echocardiogram
18 on patients --
19 A Sure.
20 Q -- in the intensive care unit?
21 A Sure.
22 Q And do you sometimes evaluate the results of
23 the echocardiograms in conjunction with the
24 echocardiographer?

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- 1 A Sure.
2 Q And can you tell me, from the perspective of a
3 postoperative cardiothoracic patient, what
4 type of information an echocardiogram provides
5 you in regard to cardiac function.
6 A It can show you, you know, wall motion
7 abnormalities. It can show you ventricular
8 volume and filling. It can show you function
9 through ejection fraction and outputs. It can
10 show you the presence of pericardial fluid.
11 It can show you valvular function.
12 Those are the key things.
13 Q Now, do you have any responsibilities in your
14 unit for supervising the nursing staff?
15 A We work professionally in conjunction with
16 nursing staff.
17 Supervisory roles of nursing staff are
18 by nurses.
19 Q Okay. And do you have any responsibilities
20 for setting the policies and procedures that
21 the nurses are to follow in the ICU?
22 A Well, if we have protocols, often they're done
23 in conjunction with nursing, or if we do it,
24 one way or the other, it's eventually in

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1 conjunction, so the answer would be yes.
2 Q And do you consider yourself an expert in
3 nursing care?
4 A No.
5 I haven't met any doctors who are.
6 Q In general, what is your understanding as to
7 the duties and the responsibilities of the
8 Cleveland Clinic anesthesia department
9 personnel regarding James Long's management in
10 the ICU?
11 A I -- I'm -- didn't read any policies and
12 procedures as it relates to that. I know that
13 they are involved in the intensive care unit,
14 in the context that Dr. Vared came through
15 there and there's pain management involved. I
16 don't know their exact involvement as it
17 relates to the care of the postcardiac
18 surgical patient.
19 I do know that they have critical care
20 services they clinic, but that's just from
21 outside knowledge, but I don't know the
22 policies and procedures.
23 Q Okay. Well, my question was in regard to the
24 duties and the responsibilities of the

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1 I'll go back to the original statement:
2 I don't know anesthesia's responsibilities at
3 the clinic.
4 Q Okay. Well, Doctor, I believe you've been
5 identified as an anesthesiology expert in this
6 case --
7 A Uh-huh.
8 Q -- and that you are rendering opinions as to
9 whether or not they met the standard of care,
10 so my questions to you are in regard to what
11 their duties and responsibilities were.
12 So you understand why I'm asking you
13 these questions?
14 MR. JACKSON: Well, I'll object,
15 Jeanne, because I don't think he was
16 identified specifically as just an anesthesia
17 expert dealing with anesthesiology matters.
18 So I disagree with your characterization
19 but go ahead.
20 BY MS. TOSTI:
21 Q Doctor, in your report of August 14th --
22 A Uh-huh -- yes.
23 Q -- in paragraph 2 you indicate, "Based on my
24 review of the above, with a primary focus on

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1 anesthesia department personnel --
2 A Don't know.
3 Q -- in the ICU.
4 A Don't know.
5 Q Do you know whether the anesthesia personnel
6 had responsibility for managing the sedation
7 on James Long?
8 A Don't know.
9 Q Do you know whether they had any
10 responsibility for managing the chest tube
11 drainage on James Long?
12 A I would presume not, based on the
13 communications with the different surgeons and
14 not the anesthesia.
15 Q Okay. What communications are you speaking of?
16 A With Dr. Muehlebach and his awarenesses or
17 Dr. Hernandez and his awarenesses.
18 Q And what is your understanding as to whether
19 they had any responsibilities for the
20 management of the vasopressor drugs that were
21 given to James Long?
22 A Anesthesia, you're talking about?
23 Q Yes.
24 A Don't know.

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1 the anesthetic care."
2 Was that, in fact, what you were
3 focusing on primarily in your review of this
4 case?
5 A Well, obviously, since I'm an
6 anesthesiologist, I look for any aberrations
7 in the anesthetic care, which means
8 intraoperatively. That's anesthetic care.
9 I was not provided with any policies and
10 procedures as it relates to stipulating
11 anesthesia's specific roles in the
12 perioperative care of Mr. Long.
13 The secondary focus was on the post-op
14 care of the nurses as it was my perspective,
15 as somebody who practices with nurses in an
16 intensive care environment on similar kinds of
17 patients under similar circumstances with a
18 background in anesthesia and critical care,
19 and focusing more from the perspective of a
20 deviation that I would find relative to what
21 the reasonable practitioner would do under
22 similar circumstances.
23 Q Okay. And Doctor, you did read the
24 depositions of the various anesthesia

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- 1 personnel in this case; correct?
- 2 A I read the depositions of Hearn, Yared, and
- 3 Koch -- Koch.
- 4 Q And you -- in those depositions, do you recall
- 5 them defining what they felt their
- 6 responsibilities were in regard to James
- 7 Long's care and in regard to some of the
- 8 issues that I just mentioned?
- 9 A Well, they gave variable answers because
- 10 they're all involved at variable points in
- 11 time, so none of them were identical, as
- 12 representing anesthesia, versus what their own
- 13 roles were.
- 14 And I don't specifically -- because it
- 15 did not stand out as an abnormality to me --
- 16 remember any of the specific language that
- 17 defines specifically what you are alluding to.
- 18 Q Well, we're talking about the duties and the
- 19 responsibilities of the anesthesia personnel
- 20 to James Long in the ICU.
- 21 A Clearly, from my review of their particulars,
- 22 without seeing specifically what you are
- 23 referring to, I found nothing that they did
- 24 not adhere to their own perspectives of what

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- 1 A Yes.
- 2 Q Now, Doctor, for the remaining part of this
- 3 deposition, I'm going to be speaking
- 4 specifically in reference to aortic valve
- 5 replacement surgery. I may just say "surgical
- 6 post-op patient," but that's what I'm
- 7 referring to, and if I mean something else,
- 8 I'll let you know.
- 9 A Fine.
- 10 Q And when I'm speaking of the postoperative
- 11 period, I'm speaking of the immediate
- 12 postoperative period, that first 12 hours or
- 13 so right after surgery.
- 14 A Fine.
- 15 Q Okay. Is there a point in time after aortic
- 16 valve replacement surgery at which you
- 17 anticipate that the patient's cardiac index is
- 18 going to approximate what it was at the close
- 19 of surgery?
- 20 A Variable.
- 21 Q So there isn't a point when you, as an
- 22 intensivist, would say, "Well, this patient
- 23 should now have gotten over that initial
- 24 postoperative period and should be about what

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- 1 their duties are so I don't recall.
- 2 Q Doctor, at your institution, do you know what
- 3 the rate for cardi thoracic reexploration is
- 4 because of bleeding complications?
- 5 A I would -- I used to know it exactly, and
- 6 prior to a couple years ago, it was clearly
- 7 down under 2 1/2 percent, I think. I don't
- 8 know recently what it is.
- 9 Q Do you know what the national average is for
- 10 reexploration for bleeding complications?
- 11 A It's higher than that. It's higher than that.
- 12 I don't know what it is. We were always well
- 13 below it here.
- 14 Q When a cardiothoracic surgery patient has
- 15 bleeding at a suture site that requires
- 16 reinforcement before the close of surgery,
- 17 should escalating postoperative hourly chest
- 18 tube drainage that goes from 50 to a hundred
- 19 to 250 in the first few hours after surgery
- 20 cause a heightened concern for excessive
- 21 postoperative bleeding?
- 22 A I would answer it that it would cause a
- 23 heightened concern.
- 24 Q So the answer is yes to that?

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- 1 he was when he was in surgery?"
- 2 A This -- this is a very dynamic process that
- 3 numerous independent factors play into that is
- 4 variable from patient to patient, depending on
- 5 other issues -- like underlying diseases;
- 6 volume; blood management; baseline and post
- 7 hemoglobins, which vary from patient to
- 8 patient; coronary disease, which was not the
- 9 issue in this particular patient; myocardial
- 10 dysfunction and/or variances among patients in
- 11 cardiac contractility; systolic and diastolic
- 12 dynamics of the ventricle -- and to try to
- 13 pigeon-hole aortic valve patients as a
- 14 singular entity that then reflects how they
- 15 behave intra and postoperatively is incorrect.
- 16 Q So you would disagree with the statement that
- 17 about four to six hours after surgery an
- 18 aortic valve replacement patient's cardiac
- 19 index should strongly correlate with the
- 20 cardiac index at the close of surgery?
- 21 A I think that is directly determined by a lot
- 22 of things that go into the care of that
- 23 patient, temperature changes that might have
- 24 occurred.

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1 Typically, many of the patients -- their
2 cardiac outputs will be variable from the end
3 of surgery because, all of a sudden, they're
4 waking up.

5 Intraoperatively, at the end of the
6 surgery, you have an anesthetized patient. In
7 the postoperative period, similar to Mr. Long,
8 when he comes back to the intensive care unit,
9 he is responsive. He's then sedated.

10 Depending on the degree of sedation and
11 when -- if it's an early extubation, the
12 hemodynamics can be very different if a
13 patient is anesthetized.

14 So anybody that says there's a singular
15 answer to that, I disagree with them.

16 Q In a patient who's undergoing aortic valve
17 replacement, does preoperative left
18 ventricular hypertrophy increase the risk for
19 hypertension in the immediate postoperative
20 period?

21 A The preoperative presence of left ventricular
22 hypertrophy is classically present in patients
23 with aortic stenosis.

24 When you repair the stenosis, the

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1 ventricular hypertrophy prior to surgery?
2 A Based on the echocardiogram and strictly by
3 recollection -- because I'm not reading it
4 here -- I recall him having left ventricular
5 hypertrophy, and I think he had some
6 dysfunction of the left ventricle, I think
7 a .54 opening on the volume.

8 THE WITNESS: Can I just grab
9 something real quick out here. I'll be right
10 back.

11 (Whereupon, a recess was had
12 at 3:05 p.m., after which
13 the deposition was resumed
14 at 3:07 p.m. as follows:)

15 BY MS. TOSTI:

16 Q In a patient who has undergone aortic valve
17 replacement, does a falling cardiac index
18 suggest that there may be problems with
19 cardiac function?

20 A Well, that's -- that's a very large statement.
21 Could it be due to falling cardiac
22 function? Yes. It can also be due to
23 hypovolemia. It could be due to changes in
24 metabolics, temperature, lots of things. Very

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1 increased ejection and cardiac function that
2 can occur can alter the hemodynamics and blood
3 pressure, but once again, blood pressure is a
4 variable thing, depending on medications and a
5 lot of other things, and the left ventricular
6 hypertrophy itself, I don't recognize it as,
7 you know, significantly influencing
8 hypertension.

9 Q Have you seen patients with preoperative left
10 ventricular hypertrophy who have required
11 medications to reduce their blood pressure
12 during the first few hours after aortic valve
13 replacement?

14 A Well, you know, classically, with aortic
15 stenosis, prerepair you never want to lower
16 the blood pressures, and -- because of
17 diastolic filling of the coronary arteries.

18 Postoperatively -- and if we're going to
19 try to stick to this case -- and maybe that
20 wasn't your intent -- there are plenty of
21 patients who have their blood pressures
22 controlled because of suture line concerns and
23 bleeding.

24 Q In James Long's case, did he have left

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1 multifactorial.

2 Q And would you agree that, when a postoperative
3 cardiac surgery patient exhibits hemodynamic
4 instability, that it's important to look for
5 the cause of the instability?

6 A Correct.

7 Q And isn't it also true that, when a patient's
8 cardiac index goes down, the coronary
9 perfusion also goes down?

10 A That -- well, there's a couple of statements.
11 Coronary perfusion is primarily related
12 to diastolic pressure and diastolic filling
13 time, which they can be impacted by low states
14 of perfusion in general, but you can have a
15 great cardiac output and an exceptionally high
16 heart rate and have no diastolic filling time.

17 You could have a great cardiac output
18 and no diastolic pressure because of severe
19 vasodilatation, and it can impact it.

20 So once again, not a singular answer.

21 Q Okay. But with the cardiac index, when that
22 goes down, does the coronary perfusion go
23 down?

24 A I think, if it goes down significantly -- when

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- 1 we're talking about a cardiac index of 2.50 in
2 somebody without significant coronary disease,
3 it's insignificant.
4 Q In a postoperative aortic valve patient, if
5 the cardiac index falls from 8.0 on admission
6 to the unit down to 2 over the course of an
7 hour and 20 minutes, should that raise a level
8 of concern for cardiac function?
9 A Well, I think you misrepresented the
10 information. I think you just said a cardiac
11 index of 8.0 falling to 2.
12 I think you're referring to a cardiac
13 output of 8.2 falling to a cardiac index of
14 2.0, which are two different ways of
15 representing the same data.
16 One is clearly a higher number than the
17 other, and depending on what else is going on
18 is how one would interpret what that all
19 means.
20 Q As it relates to postoperative cardiac surgery
21 patients, what is a cardiac tamponade?
22 A A cardiac tamponade is a collection of fluid
23 around the heart, in the juxtacardiac area
24 within the pericardial mediastinal contents,

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- 1 narrowed pulse pressure.
2 Those are the key things. Increasing
3 heart rate, tachycardia.
4 Q Do you have to have all of those present in
5 order to have a cardiac tamponade?
6 A No.
7 Q Would you agree that another sign of cardiac
8 tamponade might be the gradual increasing
9 requirements for entropic or pressor support?
10 A Well, as a response to a number of the things
11 I mentioned, if you had the problems I alluded
12 to, you would need, as a consequence,
13 increasing pressor support.
14 Increasing pressor support, in the
15 absence of the things I mentioned, wouldn't
16 make me think of cardiac tamponade.
17 Q But if you had some of the things you
18 mentioned and had pressors running without a
19 good response to the pressors, would that
20 increase the index of suspicion for cardiac
21 tamponade?
22 A It depends on what things aren't responding.
23 It depends if I had other explanations.
24 Q Is tamponade considered an emergency situation

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- 1 that creates a pressure around the heart from
2 the collection of the fluid that creates
3 hemodynamic instability as a result of this
4 pressure.
5 Q Can you also have localized tamponade with a
6 collection of blood that coagulates or forms a
7 clot and impairs a regional portion of the
8 heart function?
9 A Well, I'm sure that can happen, but typically,
10 the thing is more global.
11 Q And when cardiac tamponade occurs, what
12 happens to cardiac function?
13 A Oh, when the tamponade actually occurs, versus
14 just an effusion, cardiac function in the
15 context of cardiac output and stroke volume
16 and things of that nature typically diminish.
17 Q What would be the profile of someone that
18 would be suspected of having a cardiac
19 tamponade in a postoperative-type patient?
20 What would you be looking at?
21 A Well, classically, you look for falling
22 ventricular function, increasing cardiac
23 pressures, equalization of cardiac pressure,
24 falling signs of perfusion, like urine output,

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- 1 in a postoperative patient?
2 A Yes.
3 Q And cardiac tamponade in some instances can
4 lead to total cardiovascular collapse and
5 death; correct?
6 A Correct.
7 Q And would you agree that, following cardiac
8 surgery, it's important to watch for those
9 factors that may suggest cardiac tamponade?
10 A Yes.
11 Q And in a postoperative patient, how is
12 tamponade treated?
13 A Well, you know, it can be done two ways. On
14 an emergent basis, they can do a
15 pericardiocentesis with a needle, subxiphoid
16 into the pericardium, and try and aspirate
17 fluid. They can do it with interventional
18 radiology and put drains in or emergently
19 reexplore the patient and decompress it.
20 Q Isn't it true that echocardiography is the
21 definitive diagnostic technique for
22 documenting the presence and the magnitude of
23 pericardial effusions?
24 A Well, you -- you jumped from tamponade to

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- 1 effusion, and I would say that the -- the best
2 diagnostic technique that I'm aware of -- but
3 I would stand corrected by a cardiologist --
4 is transthoracic echocardiography.
5 Q Do you know what the echocardiographic
6 correlates are that suggests that there is
7 cardiac tamponade?
8 A Well, you know, I -- I think -- like I said,
9 I'm not an expert on echocardiography, so I'm
10 not going to presume anything. I will say
11 that it would probably be, you know, the
12 presence of fluid, contracted ventricular
13 volumes, and things of that nature.
14 Q Would you agree that the information provided
15 by an echocardiogram is helpful to the
16 physician in arriving at the diagnosis of
17 cardiac tamponade?
18 A Well, it is help -- the tamponade, no. The
19 presence of an effusion, yes. Tamponade is
20 the clinical scenario that surrounds the
21 presence of the effusion.
22 Q Okay. My question was, is an echocardiogram
23 helpful to the physician in arriving at the
24 diagnosis of cardiac tamponade?

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- 1 an echocardiogram is another piece of
2 information.
3 Q Okay. And an echocardiogram also provides you
4 with a lot of information about cardiac
5 function, not just --
6 A Sure.
7 Q -- in regard to tamponade correlates but as to
8 the actual function of the heart, too?
9 A Sure. Absolutely.
10 Q So if there is a patient that is
11 hemodynamically unstable, the echocardiogram
12 may provide additional information regarding
13 ejection fractions and wall movement and those
14 types of things, also; correct?
15 A If you've perceived significant
16 instability, yes.
17 Q Are there any -- aside from echocardiogram,
18 are there any other tests or studies that may
19 provide findings that would suggest tamponade?
20 A Nothing significant, no.
21 Q Isn't it true that, in some instances,
22 cardiac -- with cardiac tamponade you can see
23 mediastinal widening on chest films?
24 A Mediastinal widening is more commonly

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- 1 And I'm not sure whether your answer is
2 a yes or a no to that.
3 A Well, the diagnosis of tamponade is a clinical
4 diagnosis as a consequence of a pericardial
5 effusion under pressure, and the presence of
6 the effusion itself is made with the
7 echocardiogram.
8 So in conjunction with those two, I
9 would say yes.
10 Q Have you ever ordered an echocardiogram in
11 order to assist in the diagnosis of cardiac
12 tamponade in a postoperative patient?
13 A Sure.
14 Q Doctor, would you agree that, when a
15 postoperative cardiothoracic patient is
16 hemodynamically unstable, that an
17 echocardiogram should be done to help
18 determine if the cause is due to tamponade?
19 A I -- I think that's a clinical decision that
20 is made in the context of a lot of information
21 available to the practitioners at the time.
22 If one cannot explain, in their mind,
23 why the dysfunction exists or finds the
24 magnitude of the dysfunction dramatic, clearly

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- 1 associated with aortic aneurysm development,
2 especially after trauma. That's a classic
3 thing for mediastinal widening.
4 Can you have mediastinal widening? The
5 answer is yes, but X-ray interpretation as a
6 means of diagnosing tamponade, slash, effusion
7 is very difficult because of the variability
8 in patient position, lung expansion, and a
9 number other things that impact -- A/P versus
10 supine filming -- that impact the
11 interpretation of mediastinal width.
12 Q But if a patient is hemodynamically unstable
13 after surgery and a chest X-ray is done and
14 there is a new finding of mediastinal
15 widening, would that raise a concern for
16 tamponade?
17 A Once again, I'll say not necessarily, and I
18 would leave that to the expertise of a cardiac
19 surgeon and/or radiologist.
20 Q In your institution, how long does it take in
21 the cardiothoracic intensive care unit to have
22 a transesophageal echo done?
23 A Boy, it depends what time of night. If there
24 is no one in-house who does it, you know, you

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- 1 could probably get one within 45 minutes to an
2 hour. And if somebody was available, it could
3 be done in 10 minutes.
4 Q And what about a -- a surface echo, a
5 transthoracic?
6 A Pretty much the same.
7 Q Doctor, if blood clots occlude a chest tube
8 and the drainage backs up in the chest, can
9 that result in cardiac tamponade?
10 A I'm not sure how to interpret that, but I
11 think the answer is yes.
12 Q If there's clots in the chest tubes that
13 doesn't allow the drainage into the chest tube
14 and then the blood clots are dislodged through
15 milking or squeezing the chest tubes, can that
16 sometimes relieve a tamponade that's begun?
17 A I'm not sure -- I'll defer to a cardiac
18 surgeon.
19 Q You'll defer to a surgeon?
20 A I'll defer to a cardiac surgeon.
21 Q In your unit are the nurses required to milk
22 or squeeze the chest tubes at regular
23 intervals to assist in keeping the chest tubes
24 clear of clots?

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- 1 of a perfusion pressure minimum of about 50 or
2 60, but in healthy people or patients without
3 significant cerebral vascular disease, for
4 periods of time they can definitely go below
5 that.
6 Q If the mean arterial pressure falls below 50,
7 would there be an increased risk for brain
8 damage?
9 A I think, the lower the pressure goes, the
10 increase of the risk.
11 Q You have a copy of your report in front of
12 you, don't you, Doctor?
13 A Correct.
14 Q Okay. I'm going to hand you what's been
15 marked as Plaintiff's Exhibit 2, if you would
16 just identify that, and then we'll use that as
17 the exhibit number.
18 A Correct.
19 Q Okay. Is that a copy of your report?
20 A Yes, it is.
21 Q And that's dated -- it's a letter dated
22 August 14th of 2001; correct?
23 A Yes.
24 Q Now, did you provide Mr. Jackson or his office

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- 1 A I think they are.
2 That's under the auspices of the heart
3 surgeons and their protocols.
4 Q Okay. And do you know how often the nurses do
5 that?
6 A No.
7 Q In regard to the chest tubes, Doctor, if clots
8 are lodged in the chest tube, sometimes they
9 could be lodged in the portion of the tube
10 that's inside the chest that can't be seen if
11 you're standing at the bedside; is that
12 correct?
13 A Correct.
14 Q If there's a significant loss of circulating
15 fluid volume, will that tend to mask some of
16 the hemodynamic changes that are usually seen
17 with cardiac tamponade?
18 A No. It would make them worse.
19 Q Doctor, is there a minimal level of mean
20 arterial pressure that's needed to maintain
21 cerebral blood flow in a patient?
22 A That's independently variable in the context
23 of age, presence of vascular disease in the
24 carotids and/or brain. Classically, we think

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- 1 with any type of written memorandum of your
2 opinions before rendering your August 14th
3 report?
4 A No.
5 Q And --
6 A You said "written"; right?
7 Q Yes.
8 A No.
9 Q Okay. Did you perform -- did you provide him
10 with any type of memorandum of your report
11 before you rendered this August 14th report?
12 A No.
13 Q Were you asked to include anything in
14 particular or to exclude anything in
15 particular?
16 A No.
17 Q And did you provide any drafts of your
18 August 14th report?
19 A No.
20 Q And this is the only report that you've
21 provided to Mr. Jackson?
22 A Written, yes.
23 Q And does your August 14th, 2001, report
24 summarize all the opinions that you currently

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1 hold concerning this case?

2 A Yes.

3 Q Is there any additional opinions, as you sit

4 here today, that you intend to offer at trial

5 that are not summarized in this report?

6 A No.

7 Q And do you still maintain all the opinions

8 that are contained in your August 14th report?

9 A Yes.

10 Q Do you intend to do any additional work or

11 review any additional materials in this case

12 prior to trial?

13 A Only if specific information is sent to me by

14 Mr. Jackson; example, Plaintiff's nursing

15 expert, something of that nature.

16 Q Now, we talked a little bit about what your

17 assignment in this case was, and you were --

18 if you would just relate to me again what you

19 were asked to do in regard to this case.

20 A I think I was basically asked to review the

21 case from my perspective as to the care and

22 its relationship to outcome and its

23 relationship to any deviations from standard

24 of care that I would notice in the care of

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1 which I am, who renders care to cardiovascular

2 patients who can present with similar

3 circumstances.

4 Q What is your understanding as to the cause of

5 bleeding at the end of James Long's first

6 surgery?

7 And I'm speaking of the -- the close

8 surgery, that episode that he had.

9 A Excuse me?

10 MR. JACKSON: Can you define that

11 better than what you're saying, Jeanne. I'm

12 not sure what you're talking about.

13 BY MS. TOSTII:

14 Q There was -- I believe there was an episode of

15 bleeding that occurred at the close of James

16 Long's first surgery before --

17 A During the first surgery.

18 Q -- before he went into the ICU.

19 And I'm asking as to what your

20 understanding is of the cause of that

21 bleeding.

22 MR. JACKSON: When you're saying

23 "close," you're not saying when they closed

24 him on the first surgery? You're talking

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1 Mr. Long with no specific direction as to who

2 or what as much as did I note something

3 inconsistent with what I might typically see

4 in our practice.

5 Q Okay. And were -- were you asked to render

6 any opinions as to whether certain individuals

7 met the standard of care in this case?

8 A No. I think it was more of the participants

9 from Cleveland Clinic where I was capable of

10 responding appropriately.

11 Q Okay. And who are the individuals that you

12 will be rendering the opinion met the standard

13 of care in this case?

14 A I think, to the best of my abilities, I did

15 not identify any deviations from the standard

16 of care on the part of any practitioners, but

17 I'm not holding myself out as an expert on the

18 nursing end or the cardiovascular end.

19 The actual anesthetic managements --

20 where I can hold myself out as an expert --

21 they were both superbly done, whether it was

22 notation charting, et cetera.

23 The critical care part is the general

24 gestalt of a critical care practitioner, of

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1 about --

2 MS. TOSTII: I'm talking about

3 before he left the surgical suite.

4 THE WITNESS: I thought it was

5 during the surgical procedure.

6 MR. JACKSON: I think it was and

7 that's the confusion.

8 MS. TOSTII: I --

9 THE WITNESS: He had an episode of

10 bleeding that delayed the bypass period of

11 time prior to closure of the first operative

12 procedure.

13 I can't remember the exact site or

14 situation, but it was satisfactorily managed

15 to Dr. Cosgrove's satisfaction.

16 MR. JACKSON: Is that what you were

17 referring to, Jeanne?

18 MS. TOSTII: Yes.

19 MR. JACKSON: Okay.

20 BY MS. TOSTII:

21 Q Okay. Did that bleeding episode have any

22 implications for his postoperative care in the

23 ICU, as far as your understanding?

24 A My understanding is that the surgical service,

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- 1 because of the -- a couple of things --
2 because of the bleed and because of using the
3 aortic route homograft, not just a valve, that
4 there was concerns for suture line bleeding,
5 and therefore, they had requested the systolic
6 blood pressure be maintained below 100.
7 Q And would keeping his blood pressure below
8 100 systolic have any relationship to his left
9 ventricular hypertrophy that he had before
10 surgery?
11 Was that also one of the reasons why
12 they wanted to keep his blood pressure below
13 100 systolic?
14 A Not to my knowledge, but I'd stand corrected
15 by some specific comment that you're
16 alluding to.
17 Q The episode prior to coming into the ICU, when
18 he was still in the surgical suite, should
19 that episode of bleeding have raised a
20 heightened index of concern for bleeding in
21 the ICU?
22 A I think there is a heightened index of concern
23 for any bleeding in the ICU, irrespective of
24 any intraoperative occurrence, and they are

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- 1 A He had acceptable parameters, yes.
2 Q Okay. Was there any of those parameters that
3 were cause for concern?
4 A No.
5 Q And at the time of his admission to the ICU,
6 were there any indications that James Long
7 would not remain stable?
8 A Not that --
9 MR. JACKSON: I'm sorry, I didn't
10 under -- what did you say again, please?
11 BY MS. TOSTI:
12 Q I said, at the time that he came into the ICU,
13 were there any indications that James Long's
14 condition would not remain stable.
15 A Not that I'm aware of.
16 Q Okay. At the time that he was admitted to the
17 ICU, were there any indications that his
18 cardiac function was compromised?
19 A No.
20 Q Doctor, would you agree that James Long had no
21 evidence of right heart dysfunction prior to
22 surgery?
23 A None that I'm aware of.
24 Interestingly, though, having stated

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- 1 true, true and unrelated in the context that
2 whether the patient bled or not
3 intraoperatively is unrelated to our levels of
4 concern for postoperative bleeding and that
5 the fact that somebody bleeds intraoperatively
6 does not change how we interpret postoperative
7 bleeding except in states of coagulopathy and
8 things of that nature, if we felt we can
9 correct it intraoperatively.
10 Q So in James Long's case, there was no higher
11 level of concern for bleeding for him than
12 there would be for any other cardiothoracic
13 patient?
14 A I'm speaking from my own opinion, that I think
15 any bleeding postoperatively has a heightened
16 concern, irrespective of anything prior. It's
17 unrelated.
18 Q When James Long came out of surgery, would you
19 agree that he was hemodynamically stable?
20 A Well, I -- you know, when you say "out of
21 surgery" --
22 Q When he arrived in the ICU, would you agree
23 that he was hemodynamically stable? If that's
24 helpful to you.

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- 1 that, throughout his initial operative
2 procedure, the whole time his -- what has been
3 referred to as his central venous pressures
4 were always high.
5 Q And what would a high central venous pressure
6 throughout his operative procedure indicate?
7 A You know, anything from preexistent high
8 pulmonary artery pressures, pulmonary
9 hypertension, right ventricular dysfunction.
10 It could be a lot of different things.
11 But it -- it was present. I don't know
12 why. They were not low numbers.
13 Q Now, when James Long came into the ICU, who,
14 in your opinion, was responsible for his
15 medical management while he was in the ICU?
16 A Dr. Cosgrove and -- and the cardiovascular
17 surgical service.
18 Q And that would be Dr. Muehlebach --
19 A Well --
20 Q -- and Dr. Hernandez?
21 A Well, Muehlebach was there earlier, and
22 Hernandez was there later. I don't know how
23 you want to separate that as separate.
24 Q Who is Nurse Hrobat?

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- 1 A She was the intensive care unit nurse who was
2 on duty till 7:00 p.m.
3 Q And what responsibilities did she have
4 regarding James Long's care?
5 A Provision of nursing care till the time she
6 left. Staff nurse.
7 Q And who is Nurse Zilka?
8 A She was the nurse on -- after the
9 seven o'clock, who was the preceptor to Nurse
10 Young.
11 Q And what were her responsibilities?
12 A Well, she was the preceptor for Nurse Young
13 in the management of Mr. Long.
14 Q And who was Dr. Yared?
15 A Dr. Yared was a staff anesthesiologist who --
16 I don't know -- he was on the pain service or
17 something that night, and I don't know what
18 other roles that he had as it related to the
19 intensive care unit. I can't remember.
20 Q And what, in your opinion, were Dr. Yared's
21 responsibilities regarding James Long's
22 postoperative care in the ICU?
23 A I specifically don't recall any direct
24 responsibilities by him.

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- 1 Q So Dr. Yared didn't have any responsibilities
2 in managing, monitoring chest tube drainage,
3 hemodynamics?
4 A Not that I'm aware of.
5 Q Do you believe those items, hemodynamic
6 monitoring, chest tube drainage, fell to the
7 surgical staff, Dr. Cosgrove, Dr. Muehlebach,
8 Dr. Hernandez?
9 A Primarily, in communication with nursing.
10 Q Doctor, is a diminishing pulse pressure one of
11 the red flag indicators of cardiac tamponade?
12 A I think I already answered your question
13 regarding the signs and symptomatology of
14 cardiac tamponade, of which I mentioned pulse
15 pressure at that time as one of them, yes.
16 Q Okay. And in James Long's case, do you have
17 an opinion as to whether he had a diminishing
18 pulse pressure over the course of time that he
19 was in the ICU?
20 A Without looking at the actual vital sign flow
21 sheet, I -- there might have been a vital sign
22 here or there that pulse pressure narrowed,
23 but whenever you see a falling blood pressure,
24 quite often is the case that the pulse

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- 1 pressure will narrow.
2 Q Okay. Doctor, I -- I have a copy of the
3 initial flow sheet from August 20th of 1996
4 that I'm going to provide you with just so
5 that you have something to look at --
6 A Sure.
7 Q -- If that's helpful to you.
8 A Thank you.
9 MR. JACKSON: Is there a question
10 you're asking him to look at now, Jeanne,
11 or --
12 MS. TOSTI: No. We were discussing
13 whether there was a diminishment of his pulse
14 pressure over the course of time that he was
15 in the ICU, and he stated that he didn't
16 recall specifically all of the values.
17 THE WITNESS: Yeah. Interestingly,
18 between H -- and I'm using that as meaning
19 1950 -- you can even go back to 1910, going
20 all the way back here -- let's see.
21 If I can read this right, I would say
22 sometime about, you know, 1900, going down to
23 about 2150, there was a overall modest drop in
24 his pressures and a narrowing of his pulse

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- 1 pressure but, interestingly, an increase in
2 his diastolic pressures as part of the reason.
3 Earlier in his admission, his diastolic
4 pressures were very, very low, although his
5 systolic pressures weren't that much higher;
6 therefore, he had a wider pulse pressure.
7 Later in the time course, prior to any
8 significant instabilities, his pulse pressure
9 then began to widen again, and his cardiac
10 function seemed to be consistent, the --
11 appropriate for those pressures.
12 BY MS. TOSTI:
13 Q And why do you think there was that type of
14 variability that you just described?
15 A Well, you know, to the best of my abilities to
16 ascertain, since there was no marked changes
17 in his central venous pressures throughout
18 this whole time period, no statistically
19 significant changes in his central venous
20 pressure, and then one looks at his heart
21 rate, there was no statistically significant
22 change in his heart rate to explain any of
23 those things, and then you go over and look at
24 his pulmonary artery pressures and his cardiac

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1 output pressures, one could only presume but
2 not be sure that this could be related to
3 hypovolemia, of which he did receive fluids in
4 the intensive care unit, and he did receive
5 various vasoactive agents in response to the
6 hypotension that developed, either from the
7 nitroprusside and/or the propofol
8 administration, both of which impact systemic
9 vascular resistance, which was low.

10 Q Do you have an opinion as to whether he was
11 hypovolemic at any point in time when he was
12 in the ICU that evening?

13 A Well, I would say that a -- you know, at 1810,
14 for instance, or even before that, when his
15 pulmonary artery pressures are 22 over 15,
16 that is a low number for somebody who's had
17 aortic stenosis, and -- or at least appears as
18 a low number.

19 And he has not had any major blood loss
20 to that point in time, so one could presume a
21 degree of hypovolemia.

22 Q Doctor, who had responsibility for watching
23 James Long's pulse pressure while he was in
24 the ICU?

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1 Is that one of the actions?

2 A Reduces -- reduces systemic vascular
3 resistance and, therefore, blood pressure.

4 Q Okay. In your opinion, was it appropriate to
5 continue to administer propofol during the
6 time period when his blood pressure was below
7 90 systolic with two vasopressors being
8 administered to increase his blood pressure?

9 A Well, I think, you know, that -- that's an
10 independent decision on whether one believes
11 somebody who is intubated postsurgery with
12 pain deserves to be sedated, and obviously, if
13 you cannot sustain hemodynamic stability in an
14 acceptable vein, then you have to play one
15 against the other.

16 In this particular case, because of the
17 perceived needs of the patient to not be in
18 pain and/or aware of the circumstances, they
19 elected to use a vasoactive agent to increase
20 systemic vascular resistance yet maintain
21 blood pressure below the desired 100 and at a
22 pressure that still sustained adequate
23 perfusion of the kidneys, as exemplified by
24 the urine output throughout the procedure.

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1 A Well, I think -- you know, I think the nurses
2 were the ones who record the vital signs in
3 general.

4 It isn't a matter of watching a vital
5 sign any more than watching the vital signs,
6 so nursing typically is the one monitoring the
7 patients and recording these things and then,
8 in conjunction with the various practitioners,
9 be it Dr. Cosgrove and/or his service,
10 managing these situations.

11 Q And one of the reasons why these hemodynamics
12 are recorded is in order to be able to pick up
13 trends that may occur in the various
14 hemodynamic values; correct?

15 A Sure.

16 Q And that's one of the ways that various
17 problems with cardiac function or tamponade
18 may be suggested, is by seeing a trend that
19 occurs in the various hemodynamics; correct?

20 A Sure.

21 Q What is the drug propofol used for?

22 A Sedation.

23 Q Okay. And does propofol have one -- is one
24 action of propofol to decrease blood pressure?

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1 Q All right. But Doctor, when the patient is
2 unresponsive to the vasopressors for an
3 extended period of time -- which, in this
4 case, I believe he's got vasopressors that are
5 started at 1910, 1930 hour --

6 A Correct.

7 Q -- and his blood pressure falls at 1950 hour
8 to below 90 systolic and stays down there
9 until 2150 hour, during that period of time,
10 when two vasopressors are running and the
11 patient's blood pressure, his systolic value,
12 remains below 90, is it appropriate to
13 continue administering propofol?

14 A I think, at that point in time, I -- I believe
15 there was a reduction in the propofol dosage,
16 but if -- if one was concerned about the level
17 of the blood pressure, clearly reducing and/or
18 terminating propofol would be an acceptable
19 therapy.

20 Q Why was James Long's chest tube drainage
21 increasing from 50 to a hundred to 250 ccs
22 during the first two hours he was in the ICU?

23 A Why was it?

24 Because he was bleeding.

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- 1 Q Would you agree that increased chest tube
2 drainage followed by a fall in blood pressure
3 below 90 systolic, with two vasopressors
4 running, should have raised a high level of
5 concern for excessive postoperative bleeding?
- 6 A Well, I think clearly it did raise a concern,
7 and that's why platelets and fluids were
8 administered. There is no question about
9 it, yeah.
- 10 Q Now, considering that the bleeding -- that
11 bleeding at a suture line occurred when he was
12 in surgery, this increasing amount of chest
13 tube drainage during the first two hours in
14 the ICU, followed by this persistent
15 hypotension with two vasopressors running,
16 would you agree that James Long should have
17 been assessed by a physician at the bedside to
18 determine if he was having complications of
19 excessive bleeding?
- 20 A Well, I think everything is a matter of
21 interpretation and what call is successive.
22 A lot of people would be cognizant of a
23 blood loss of 400 in the first two hours, but
24 many people might not do anything about it,

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- 1 perceive these problems.
- 2 If one was to look at these pressures on
3 a patient on propofol, unchanging CVP,
4 unchanging heart rate, mean blood pressures
5 from -- ran from a low point of 55 to 67 --
6 you know, a very modest swing in mean blood
7 pressure -- from admission all the way down,
8 one would not find this to be a very unusual
9 presentation.
- 10 Q Okay. Now, James Long had another increase in
11 his chest tube drainage, I believe at 2210
12 hour, where he put out 250 ccs into his chest
13 tube, and that had been preceded by that long
14 period of hypotension.
- 15 In your opinion, Doctor, should that
16 have raised a high level of concern for
17 excessive bleeding and tamponade?
- 18 A Well, a couple of things.
- 19 Number one, in the absence of a changing
20 heart rate, his pulse pressure actually was
21 widening at that period of time. The CVP did
22 not change at all in that period of time. His
23 pulmonary diastolic pressures had been stable
24 or relatively stable.

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- 1 other than to go ahead and do things like the
2 administration of platelets, the reinfusion,
3 the volume infusion, and then watching for any
4 other precipitous changes that could not be
5 explained, either by the vasodilators that
6 were being administered and the likes or some
7 other hemodynamic instability.
- 8 In this particular case, as the
9 management played out, cardiac function
10 continued to go up after its low point of
11 about 1950 to 2030. In that time period was
12 the low point in cardiac output, and then it
13 proceeded going up, so one would presume that
14 their management was addressing the problems
15 as they perceived it.
- 16 Q Okay. My -- my question was, though, when you
17 have escalating chest tube drainage that goes
18 from 50 to a hundred to 250, followed by this
19 extended period of hypotension with two
20 vasopressors, should this patient have been
21 seen by a physician at the bedside to do an
22 evaluation?
- 23 A That -- that's an independent decision of the
24 institution and -- and how they typically

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- 1 It should raise a high index of
2 suspicion of bleeding but not necessarily
3 tamponade.
- 4 Q Okay. You mentioned his pulmonary artery
5 pressures being stable.
- 6 A Correct.
- 7 Q Okay. Doctor, isn't it true that the last
8 pulmonary artery pressure we have is at
9 2050 hour --
- 10 A Correct.
- 11 Q -- because the nurses didn't take them after
12 that? Right?
- 13 A No.
- 14 Q So how can you say that they were stable
15 because that 250-cc dump into his chest tube
16 occurs at Line 0, which is at 2210 hour?
- 17 A Well, the best way to answer that is, number
18 one, I didn't specify to what time the
19 pulmonary pressures, in particular in
20 isolation of the CVP, the cardiac output that
21 was increasing, the heart rate that was
22 stable, or the pulse pressure that was
23 widening. I didn't specifically identify a
24 time.

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1 But having said that, through the time
2 of the bleed, the CVP pressures were very
3 stable, going all the way back to 1930. There
4 was no dramatic change, which one would expect
5 in the presence of a tamponade, and were
6 within the range that they were
7 intraoperatively at the first surgical
8 procedure.

9 The heart rate did not dramatically
10 change from 1930 all the way through the time
11 of the increased bleed. The mean blood
12 pressure had actually increased in that time
13 period, not decreased, and the pulse pressure
14 widened, not narrowed.

15 And admittedly, as alluded to by
16 Plaintiff's attorney, yes, the last one was
17 taken at 2050, prior to that episode of
18 bleeding, but prior to that was relatively
19 stable, also, and yet, the cardiac function
20 appeared to continue to increase at 2150 and
21 even at 2210.

22 THE WITNESS: Sorry if that was
23 quick.
24 BY MS. TOSTI:

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1 I think, number one, you've got ongoing
2 propofol, and that is a systemic vasodilator,
3 but it was determined to be necessary for
4 sedation and, therefore, take that in
5 conjunction with the vasoactive agents.

6 You know, this is not an unusual
7 circumstance to see, this kind of
8 presentation.

9 Q What did you find that would tell you that the
10 propofol was a necessity in this case?

11 A Well, it's -- the use of the word
12 "necessity" --

13 Q Well, that was the word that you used, Doctor.

14 A Well, it's common practice in all postcardiac
15 patients to use various medications for
16 sedation and/or analgesia.

17 In days gone by, we used to use lots of
18 morphine and some Versed and Valium and drugs
19 of that nature, but today the most commonly
20 employed drug in the perioperative period for
21 the transition of the patient from the
22 operating room to the point of extubation is
23 propofol because it's short acting, so it's
24 commonly employed, probably in -- I'd be

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1 Q Doctor, do you think an echocardiogram should
2 have been done to assess cardiac function when
3 Mr. Long experienced hypotension below
4 90 systolic that was unresponsive to two
5 vasopressor drugs for over an hour or an hour
6 and 40 minutes?

7 A On the basis that, other than a couple of
8 pressures at 2010 and 2030 that were in the
9 70s, none of the pressures on this patient --
10 there was one at, you know, 1850 that was
11 set -- most of these pressures are in the 90s
12 or 80s.

13 In somebody you're trying to keep in the
14 90s, these pressures, in and of themselves,
15 don't seem very bad, especially in somebody
16 with normal coronaries and who's making urine
17 the whole time, so there was nothing
18 demonstrably bad here. There was no acute
19 voluminous change in any of these vital signs.

20 Q And you don't find a problem with the systolic
21 blood pressures that are in the 80 range with
22 the two vasopressors running? That's
23 acceptable for this patient, in your opinion?

24 A Well, I -- I think there's a couple of things.

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1 speculating to say 90 percent of the patients
2 we do.

3 Q Okay. And are there any alternative drugs
4 that can be used that don't have the
5 additional effect of lowering blood pressure
6 but will also provide the sedation that a
7 patient such as James Long would need?

8 A All of the primary sedative agents that we
9 employ, which were typically the
10 benzodiazepines, offer some vascular
11 resistance.

12 Q Doctor, if James Long had had an
13 echocardiogram prior to 2110, which I think is
14 Line L, and it showed echocardiographic
15 correlates of tamponade physiology, would you
16 agree that it would have required immediate
17 return to surgery for a reexploration for him?

18 A Sure. Yes.

19 Q How often were the nurses supposed to be
20 observing and recording the hemodynamic
21 parameters on Mr. Long?

22 A They -- they stated it in the depositions
23 somewhere, and I don't know if it was

24 Q 20 minutes with cardiac outputs every couple

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- 1 of hours. I forget -- they exceeded it in
2 most situations. I mean, the cardiac outputs
3 are much more frequent than we often see, but
4 I can't remember their exact timing.
- 5 Q Are pulmonary artery pressures important in
6 assessing the stability of a postoperative
7 aortic valve patient?
- 8 A I think all the vital signs taken together are
9 important, yes.
- 10 Q And in your cardiac surgery ICU, how often do
11 the nurses do pulmonary artery pressures on
12 postoperative aortic valve patients?
- 13 A Well, it's a continuously monitored pressure.
14 How often do they chart it? Is that the
15 question? That would be every 15 or
16 30 minutes or something. I'm not sure of the
17 exact number.
- 18 Q Okay. And the reason, again, that it's
19 charted is so that you can view a trend --
- 20 A Sure, but --
- 21 Q -- if one is occurring?
- 22 A These are continuously displayed numbers,
23 though, so they could see dramatic changes
24 right on their monitors.

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- 1 Q But the requirements of the nurses are that
2 they record it on a sheet so that a trend can
3 be seen; correct?
- 4 A Sure.
- 5 Q Isn't that what they do in your unit?
- 6 A Yes.
- 7 Q And how often in your unit do they do cardiac
8 outputs and indexes on postoperative aortic
9 valve patients?
- 10 A It's -- it's quite variable. I would say
11 anywhere -- depending on the stability of the
12 patient, it could be, you know, every
13 15 minutes, or it could be every 2 to 3 hours.
- 14 Q So if the patient's unstable, you'd expect
15 them to be doing them the Q 15 minutes?
- 16 A Sure. But you got to be very careful on the
17 definition of "instability." And the -- the
18 definition that I'm employing is a situation
19 that doesn't -- seems out of line with the
20 circumstances or significantly abrupt and
21 dramatic changes.
- 22 Q Okay. And in James Long's case, the nurses
23 were the individuals responsible for observing
24 and recording the hemodynamic values?

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- 1 A Correct.
- 2 Q Are you critical of the nursing staff for
3 failing to record cardiac outputs and cardiac
4 indexes for the last hour and 20 minutes that
5 James Long's in the unit?
- 6 A Well, you know, I think the last one being
7 recorded is 2210, at the time of the bleed, at
8 which point I think it was in that time period
9 that the conversations on what to do began.
- 10 Recognizing no other dramatic changes,
11 recognizing that the blood pressure, heart
12 rate, et cetera, maintained their stability
13 and the actual last output was, I think there
14 were other things going on at that point in
15 time that I wouldn't be critical of it.
- 16 Q Doctor, in a patient that's just bled 250 ccs
17 into his chest tube and had, just prior to
18 that, an extended period of hypotension,
19 wouldn't that be precisely the type of
20 situation where you would want to know the
21 cardiac index on a more frequent basis?
- 22 A I think the cardiac index at the time of the
23 bleeding was quite good. It was 2.9. There
24 was no change in the pulse pressure, blood

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- 1 pressure, mean pressure, or CVP.
- 2 Q Okay. And for the next hour and 20 minutes,
3 you have no idea as to what his cardiac index
4 was; correct?
- 5 A No, I do not.
- 6 Q Now, you indicate, I believe, in your report,
7 in the middle of the third paragraph, that --
8 you say, "Throughout the postoperative period,
9 the patient was appropriately monitored."
- 10 And we've already talked about the
11 pulmonary artery pressures that are not
12 recorded during the last 2 hours and
13 40 minutes that James Long is in the ICU, I
14 believe from after 2050 hour, at Line K,
15 through the final notation at 2330 hour at
16 Line S.
- 17 A Yes.
- 18 Q What is your understanding as to why the PA
19 pressures were recorded every 20 minutes at
20 the beginning of the time that he was in the
21 unit and then stopped?
- 22 A Don't know. I -- I forget what Nurse Young
23 answered, other than to allude to the fact
24 that they should have been recorded.

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- 1 Q And you'd agree that a prudent nurse, caring
2 for a postoperative patient that had had blood
3 pressures below 90 systolic with two
4 vasopressors running should have continued to
5 observe and record the pulmonary artery
6 pressures every 20 minutes?
7 MR. JACKSON: Objection.
8 Go ahead.
9 A Well, I think she answered that for herself,
10 and I'll let nursing experts do that. I think
11 it's agreed upon they should have been
12 recorded.
13 I don't think the absence of recording
14 is the issue as far as did -- the outcome, and
15 therefore, I think they're unrelated.
16 BY MS. TOSTI:
17 Q Well, Doctor, without having them recorded,
18 there would be no way to really monitor the
19 trends --
20 MR. JACKSON: Objection.
21 BY MS. TOSTI:
22 Q -- that were occurring; correct?
23 MR. JACKSON: Objection.
24 Go ahead.

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- 1 A Well, I think it's like all bits of
2 information count, but no piece of information
3 unto itself is the whole answer. If you have
4 enough of the pieces, you can often tell the
5 picture, so -- the reason you can put all the
6 parts of a puzzle in a box is to complete the
7 whole picture, but if you're missing 1 piece
8 or 10 percent of the pieces, you can often
9 still tell the picture.
10 Pretty good analogy there.
11 MR. JACKSON: I like that.
12 THE WITNESS: That will work.
13 MR. JACKSON: Did you like that
14 analogy, Jeanne?
15 You don't have to answer.
16 BY MS. TOSTI:
17 Q Now, Doctor, you have commented on this
18 patient's urinary output --
19 A Correct.
20 Q -- and you have indicated that you felt that
21 the urinary output gave some indication that
22 there was -- and maybe I'm going to misphrase
23 this, but -- that there was good perfusion?
24 A Yeah. Urinary output is a sign, not the only

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- 1 A I think you're -- you're correct in that
2 statement. I think we have other information
3 in their absence, though, that gives us a
4 reasonable reflection on the stability and/or
5 instability of the cardiopulmonary situation.
6 BY MS. TOSTI:
7 Q Okay. And what are those other reflections
8 that you're speaking of?
9 A Well, I think we've got situations of stable
10 to increasing blood pressure, stable heart
11 rate, stable mean arterial pressure, stable
12 CVP, improving oxygenation, and improving
13 cardiac output, despite the absence of the
14 pulmonary artery pressures.
15 Q Would you agree that pulmonary artery
16 pressures would have provided additional
17 information regarding James Long's heart
18 function during the last 2 hours and
19 40 minutes he was in the ICU?
20 A No better information than is exemplified by
21 the presence of an increasing cardiac index at
22 2210 and the existing other vital signs.
23 Q Then why do pulmonary artery pressures,
24 Doctor?

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- 1 sign, of perfusion.
2 Kidneys in significantly compromised
3 states are often an early organ function to
4 shut down to preserve other organs, and there
5 was good urine output through the last one
6 at 2210.
7 Q Now, he was in the ICU for another hour and
8 20 minutes --
9 A Correct.
10 Q -- and there are no urine outputs recorded
11 during that time.
12 So Doctor, you would agree that we have
13 no reflection in regard to perfusion because
14 of this missing urinary output?
15 A No, I agree with -- I agree with that.
16 Q Okay. Should the nurses -- considering this
17 patient had just drained 250 ccs of blood into
18 his chest tube, should they have been checking
19 that on a regular basis?
20 A Oh, I think absolutely except then -- and the
21 fact that it's not there does not mean that
22 they were not checking it.
23 I think, as exemplified in the
24 depositions and the examined sequence of

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- 1 events and notes, that, after this bleed, I
2 think there became a significant concern for
3 communicating with other people and getting
4 this gentleman back to surgery.
5 So I think part of what we are looking
6 at here is an attentiveness to other issues.
7 Q Okay. But Doctor, Mr. Long had Nurse Zilka,
8 who was an experienced ICU nurse, plus Nurse
9 Young working on him.
10 Wouldn't you expect that an experienced
11 ICU nurse would be reporting the urinary
12 outputs on a patient who had just had a
13 significant bleed into their chest tubes?
14 A No, because, if -- even if it was good, it
15 wouldn't matter, so the fact that it's bad
16 could be expected.
17 If it was good, it would make no
18 difference. Their concerns were totally drawn
19 at that point in time to the bleeding and the
20 fact that this is -- probably now, since this
21 is the second significant bleed in this
22 gentleman, they had gone by a couple of hours
23 or whatever since the 250 bleed at Point G,
24 which is 1930. They had made it a couple of

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- 1 and therefore, just bleeding is -- can be
2 treated with volume resuscitation, blood, and
3 then reexploration.
4 The acuity that you go back is
5 determined by the -- the degree of the
6 bleeding and the absence of believing there's
7 a tamponade.
8 Q Do you think that James Long should have been
9 assessed at the bedside by a physician at 2210
10 when he had the 250-cc bleed into his chest
11 tubes?
12 A Oh, sure. I think a physician should
13 have been called and come to assess the
14 patient, yes.
15 Q Okay. Did you find any indication that a
16 physician came and assessed the patient
17 at 2210?
18 A Well, the only thing I know is, sometime
19 around 2300, Dr. Hernandez is at the bedside,
20 and -- because there's 350 mls of blood in the
21 chest tube -- and prior to that, that
22 Dr. Muehlebach had been called in the process,
23 and he had been called, also, at about 2150.
24 So I think there was ongoing

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- 1 hours plus in a very stable fashion, nothing
2 demonstrable, and then this acute bleed
3 occurs.
4 This changes everything in their
5 perspective, and I think everyone's attention
6 was elsewhere at that point in time. It
7 wouldn't matter what the urine output is.
8 This man's going back to surgery.
9 Q Well, he didn't go back for an hour and
10 20 minutes, though, did he?
11 A Correct. And I -- you know, I think that's a
12 number of issues as it relates to
13 communication, getting people onboard, making
14 the appropriate contacts and decisions.
15 Q Is it your opinion that he should have gone
16 back to surgery at 2210?
17 A I think, at that point in time, the decision
18 to go back is there.
19 I think they gave him packed cells, they
20 gave him albumin, and they were treating the
21 bleeding knowing that they were going to go
22 back because I don't think there was a
23 perception at any point in time -- and there
24 never was a documentation of a tamponade --

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- 1 communications, the exact timing of which I'm
2 not sure.
3 Q Okay. What's your understanding as to why
4 James Long required the drug Amicar?
5 A Well, I think, you know, that's for
6 coagulation purposes. You know, when somebody
7 has ongoing bleeding, Amicar is often used.
8 Q Okay. And is it your understanding that he
9 received the Amicar in response to the 250 ccs
10 of chest tube output that he had at Line G?
11 A Correct.
12 And then continued thereafter.
13 Q Now, your report indicates, I think, the last
14 line on page 1, that the patient's had several
15 episodes of bleeding from the chest tube.
16 Would you tell me what -- what you're
17 referring to as the episodes.
18 A I'm referring to all of them, 50 in the first
19 minutes of being there, then a hundred
20 occurring at 1830, then the 250 that occurs at
21 1930, then there's a couple of 50s, and then
22 there's the big 250.
23 The two primary ones are the two 250s.
24 Q Okay. And --

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- 1 A And a suggestion of additional bleeding in
2 somebody's comments beyond that 250.
3 Q Okay. Now, you also state, at the top of
4 page 2, that the surgical service was aware of
5 these episodes and were at the patient's
6 bedside prior to the second episode of
7 significant drainage.
8 A I think, at that point in time when I wrote
9 this, I was referring to Dr. Yared, who was
10 actually anesthesia.
11 Q Okay. So that -- that's a correction that you
12 want to make in your report?
13 A Correct, yes.
14 Q Okay. You didn't find that anyone from the
15 surgical service was at the bedside prior to
16 the second --
17 A No. Dr. Hernandez, which we already
18 described, was at the bedside sometime around
19 2300, but -- I'm not sure of the exact time,
20 but based on the lines, that's what it looks
21 like.
22 Plus I do have to make one other
23 correction in there. Where it says "2230, an
24 acute deterioration," that should really be

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- 1 perfusion?
2 A Might have, but on the medications I didn't
3 notice it.
4 Q Okay. Would Lasix have -- if he was given
5 Lasix, would that change your opinions at all
6 as to --
7 A No.
8 Q -- what the evidence of his urinary output
9 means?
10 A Oh, it would influence the impact on urinary
11 output, absolutely.
12 Q No, that was a bad question.
13 Would it change your opinion any, if he
14 had had Lasix, as to whether or not his
15 perfusion was as good as you've represented it
16 to be?
17 MR. JACKSON: He answered that,
18 Jeanne.
19 But go ahead.
20 A Yeah, I -- I think it could but it wouldn't --
21 when you take it -- like I said, when you take
22 the pieces together, you -- you just don't
23 look at the urine output in the absence of the
24 other information; you don't look at the other

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- 1 "2330."
2 Q Okay. And what is the basis for your opinion
3 that James Long suffered acute deterioration
4 at what you've corrected to be 2330 hour?
5 A What is my -- what?
6 Q The basis for your opinion that that's when
7 he --
8 A I think at that point --
9 Q But let me finish my --
10 A Yeah.
11 Q What is the basis for your opinion that James
12 Long suffered acute deterioration at 2330,
13 which is what you've corrected just now in
14 your report?
15 A Was the mean arterial blood pressure dropping
16 down to 45.
17 And just the descriptiveness of the
18 events that occurred with rushing him back to
19 the operating room and the situation at that
20 time.
21 Q Okay. Let me edit here.
22 Did James Long have any Lasix that would
23 have increased his urinary output and have
24 masked any of his -- reflection of his

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- 1 information in the absence of the urine
2 output. And the more of the pieces we have,
3 the more comfortable we are in making
4 decisions or interpretations that -- and
5 unfortunately, in these kinds of situations,
6 aren't always correct.
7 BY MS. TOSTI:
8 Q What's your understanding as to the cause
9 of James Long's bleeding that occurred in
10 the ICU?
11 A Well, strictly based on the surgical
12 dictations and comments that existed in the
13 material reviewed, it was from bleeding at the
14 distal suture line in the graft.
15 Q Doctor, isn't it likely that the bleeding that
16 occurred earlier in the evening in the ICU was
17 also the result of bleeding from that distal
18 suture line?
19 A Could be. Don't know.
20 Q Now, Doctor, you mention in your report
21 something called a vascular myocardial bridge.
22 What is that?
23 A That is, you know, a -- I'm not a pathologist.
24 That was in the autopsy report, and I think it

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- 1 refers to a fibrotic band of tissue within the
2 myocardium that was detected at autopsy.
3 Q Okay. And what significance might that have
4 to what occurred here?
5 A Don't know.
6 Q You, in your report, say the exact etiology of
7 the patient's demise is unclear and you
8 mention bleeding, I think that's tamponade --
9 A Correct.
10 Q -- okay -- and vascular myocardial bridge.
11 How could vascular myocardial bridge
12 lead to a patient's demise?
13 A Well, you know, I'm not saying it can. I said
14 it's unclear and I don't know. I mean, you
15 could also have kinking of the grafts to the
16 coronary arteries causing ischemia and
17 arrhythmias when they were reopening the
18 chest.
19 He had two -- a couple of grafts to
20 reattach the coronary vessels to the new
21 graft.
22 I am not sure why he had the demise he
23 had necessitating internal cardiac massage
24 right at the time because the bleeding was not

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- 1 relieved?
2 A Well --
3 MR. JACKSON: Objection again to
4 possibilities.
5 A (Continuing.) I think, number one, his heart
6 did recover, so that would be inconsistent
7 with the question asked.
8 He was resuscitated and his heart
9 adequately recovered. He incurred a cerebral
10 event, so his heart did recover.
11 BY MS. TOSTI:
12 Q Okay. But can it -- for a period of time can
13 you have decreased cardiac function, even if a
14 tamponade is relieved and, during that period
15 of cardiac decompensation and decreased
16 cardiac function, can you have insufficient
17 circulation to the brain?
18 A I think --
19 MR. JACKSON: Objection again.
20 Go ahead.
21 A (Continuing.) I think what would be typically
22 answered is, if one was to ask what happens to
23 cardiac function in the vast majority of
24 patients where a tamponade has been relieved,

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- 1 so extensive, there was no presence of
2 tamponade noted by anybody at any time,
3 including opening the chest, to explain the
4 whole thing.
5 Q Doctor, is it possible that he could have had
6 tamponade earlier in the evening and -- such
7 as from blood clots in the chest tube that
8 then released when he ejected 250 ccs and then
9 another hundred ccs into the chest tube?
10 MR. JACKSON: Objection.
11 But go ahead.
12 Object to the possibilities.
13 A Well, he could have but then he wouldn't if he
14 ejected it with the 150 ccs, et cetera; he
15 wouldn't have had the hemodynamic
16 deterioration. He would have actually
17 improved from the added fluid administration
18 and everything else that he had and the
19 release of the tamponade. He would have
20 gotten better. He wouldn't have gotten worse.
21 BY MS. TOSTI:
22 Q Can a tamponade cause such cardiac -- decrease
23 in cardiac function that the heart cannot
24 recover from it, even if the pressure is

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- 1 cardiac function dramatically improves.
2 That's the perception.
3 What could happen versus what does
4 happen are two different issues.
5 BY MS. TOSTI:
6 Q At 2330 hour, at the point when he was last in
7 the ICU, what's your understanding of James
8 Long's condition?
9 A I think he was critical. I think his blood
10 pressure was falling and he was rushed back to
11 the operating room, and it's very hard,
12 between that point in time and the surgical
13 procedure itself, to figure out what's going
14 on. There's a transition period in there, but
15 he was very critical.
16 Q And would you agree that a mean arterial blood
17 pressure of 45 put James Long at high risk for
18 brain injury?
19 A Sure.
20 For a prolonged period of time if it
21 persisted, yes.
22 Q Doctor, in this cardiac flow sheet at
23 1850 hour, which is at Line E, I believe --
24 A Yes.

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- 1 Q -- his blood pressure goes down to 75 over 46,
2 and he's got a mean arterial pressure of 55 --
3 A Sure.
4 Q -- cardiac output of 4.4, and a cardiac index,
5 I believe, of 2.0.
6 A Correct.
7 Q Do you have an opinion as to what caused his
8 blood pressure to drop to 75 over 46 at that
9 point?
10 A Yeah. As best as I can tell, at that point in
11 time, a combination of hypovolemia, they
12 continued to give more fluids in addition to
13 the nitroprusside, which they terminated, and
14 the nitroprusside could clearly explain that
15 fall in blood pressure, especially when one
16 looks at the CVP coming down, et cetera.
17 Q Is there an acceptable range for test -- chest
18 tube drainage per hour in a postoperative
19 aortic valve replacement patient?
20 A Well -- well, clearly, we don't like seeing --
21 and I say "we" in the global sense, but
22 cardiac surgeons typically use a number of a
23 hundred an hour. You don't want to see more
24 than a hundred an hour.

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- 1 Where you have situations more than a
2 hundred an hour, you have enhanced awareness
3 and concerns.
4 Q Can a rise in CVP pressure and diastolic
5 pressure sometimes be an indicator of bleeding
6 and cardiac tamponade?
7 A Those are two different things, bleeding and
8 cardiac tamponade.
9 A rising CVP definitely is consistent
10 with a tamponade. A falling CVP is more
11 consistent with bleeding.
12 Q Why, in your opinion, was the IP drip of
13 Levophed started?
14 A Oh, I think, as I alluded to earlier, you
15 know, there's numerous reasons someone's
16 vascular resistance could be down, but
17 clearly, the propofol itself lowers some
18 vascular resistance, and therefore, they
19 started the Levophed.
20 Q And the main action of Levophed is what?
21 A Vasoconstriction.
22 Q Okay. Now, in addition to the Levophed, a
23 second IV vasopressor, epinephrine, was added,
24 I believe at 2010 hour.

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- 1 And what is your understanding as to why
2 epinephrine was needed in addition to the
3 Levophed?
4 A Well, I -- I would presume, when -- when the
5 cardiac index had dropped down, that they also
6 wanted to add a contractility agent. He did
7 have a history of left ventricular
8 dysfunction, I think by the echo. I'm going
9 to presume that they were using them
10 additively. I don't know.
11 Q Doctor, isn't it unusual for an aortic valve
12 patient to come out of surgery not needing
13 vasopressors and to have medications to lower
14 his blood pressure and then, after two hours
15 postoperatively, have to be started on not one
16 but two vasopressors in order to maintain his
17 blood pressure?
18 A I think that answer's all over the place. I
19 think there are numerous patients that,
20 depending on their degree of health and
21 stability, after an aortic valve replacement
22 have no -- no agents, other than propofol.
23 Where you have bleeding concerns and
24 you're trying to maintain a suture line and

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- 1 you want to maintain certain blood pressures,
2 depending on the underlying situation, you
3 might be using vasodilators, like
4 nitroprusside, and if you then have to
5 diminish that because of other problems, you
6 might find yourself using vasoactive agents.
7 I think what makes these cases so
8 difficult to interpret is the dynamic nature
9 of cardiac surgery and the inability to make a
10 universally applicable statement to all
11 patients.
12 Q Now, he had the two vasopressors running from
13 about 1930 hour and through 2130 hour when his
14 blood pressure wasn't responding.
15 Why wasn't his blood pressure responding
16 during that period of time, bringing his blood
17 pressure up to at least 90 systolic?
18 A Well, I think it's a couple things. I think
19 they were also giving ongoing fluids,
20 platelets. I think they had, you know, the --
21 the propofol was being decreased, and it was a
22 matter of trying to get everything in balance.
23 THE WITNESS: Can I take a break
24 for one second?

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1 MR. JACKSON: Sure. Go ahead.
2 THE WITNESS: I'll be right back.
3 MS. TOSTI: We've only got 5 or
4 10 minutes.
5 (Whereupon, a recess was had
6 at 4:20 p.m., after which
7 the deposition was resumed
8 at 4:21 p.m. as follows:)
9 BY MS. TOSTI:
10 Q Doctor, if a patient develops a cardiac
11 tamponade in some instances, would you agree
12 that you can see decreasing chest tube
13 drainage?
14 A Sure.
15 Q Would you agree that, when serious
16 complications occur in the early postoperative
17 period, that the surgeon has a duty to keep
18 the patient's family informed regarding the
19 patient's condition?
20 A I think, if one perceives a significant
21 problem occurring versus problems that are
22 consistent with routine care and management of
23 critically ill patients, yes.
24 Q And would you agree that the surgeon should

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1 cerebral hypoxia, and exactly what transpired
2 I don't know.
3 Q Do you find fault with any of the care that
4 you reviewed in this case?
5 A Not as it relates to my areas of
6 expertise, no.
7 Q Okay. And have we covered all of your
8 opinions in this case that you currently hold?
9 A Yes.
10 Q There's none that we've -- haven't discussed
11 in any of the questions?
12 A No.
13 MS. TOSTI: Okay. I would ask
14 that, if you arrive at any new opinions
15 between now and the time of trial, that you
16 inform defense counsel, and I would request to
17 continue your deposition relative to any new
18 opinions that you should have.
19 Other than that, I think we're
20 completed, your deposition.
21 THE WITNESS: Fine.
22 MS. TOSTI: Okay. I thank you
23 for --
24 MR. JACKSON: I would suggest you

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1 respond in a reasonably prompt manner to
2 inquiries made by the immediate family of a
3 patient that's suffered complications from
4 surgery?
5 A Sure.
6 Q Do you have an opinion as to when James Long's
7 brain damage occurred?
8 A No.
9 Q Do you have an opinion as to what point in
10 time James Long's condition was irreversible?
11 And by that I mean the point when brain
12 damage was not avoidable.
13 A No.
14 Q Now, if James Long had recovered from his
15 aortic valve surgery neurologically intact, do
16 you have an opinion as to what his reasonable
17 life expectancy would have been?
18 A No.
19 Q Do you have an opinion as to whether his death
20 was preventable?
21 A No.
22 Q What is your understanding as to what caused
23 James Long's death?
24 A You know, I think he suffered consequences of

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1 read it, Doctor.
2 THE WITNESS: Oh, please.
3 MR. JACKSON: Okay.
4 MS. TOSTI: Thank you for your
5 time, Doctor.
6 THE WITNESS: Thank you.
7 AND FURTHER DEPONENT SAITH NOT AT 4:25 P.M.
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1 STATE OF ILLINOIS }
 2 COUNTY OF DU PAGE } SS.

3
 4 I, Melanie L. Humphrey-Sonntag,
 5 Certified Shorthand Reporter No. 084-004299,
 6 CSR, RDR, CRR, and a Notary Public in and for
 7 the County of DuPage, State of Illinois, do
 8 hereby certify that previous to the
 9 commencement of the examination, said witness
 10 was duly sworn by me to testify the truth;
 11 that the said deposition was taken at the time
 12 and place aforesaid; that the testimony given
 13 by said witness was reduced to writing by
 14 means of shorthand and thereafter transcribed
 15 into typewritten form; and that the foregoing
 16 is a true, correct, and complete transcript of
 17 my shorthand notes so taken as aforesaid.

18 I further certify that there were
 19 present at the taking of the said deposition
 20 the persons and parties as indicated on the
 21 appearance page made a part of this
 22 deposition.
 23
 24

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1 I have read the above and foregoing, and
 2 it is a true and correct transcript of my
 3 deposition given on the day and date
 4 aforesaid.

5
 6
 7
 8 _____
 9 JEFFERY S. VENDER, M.D.

10
 11
 12 Subscribed and sworn to before me
 13 this ____ day of _____, 2002.

14
 15 _____
 16 Notary Public

17
 18 My Commission Expires
 19 _____
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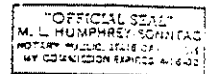
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1 I further certify that I am not counsel
 2 for nor in any way related to any of the
 3 parties to this suit, nor am I in any way
 4 interested in the outcome thereof.

5 IN TESTIMONY WHEREOF I have hereunto set
 6 my hand and affixed my Notarial Seal this
 7 1st day of March, A.D. 2002.

8
 9
 10 *Melanie L. Humphrey-Sonntag*
 11 Certified Shorthand Reporter
 12 Registered Diplomatic Reporter
 13 Certified Realtime Reporter

14 My commission expires
 15 April 16, 2002.



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