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IN THE CIRCUIT COURT FOR COOK COUNTY, ILLINOIS
COUNTY DEPARTMENT - LAW DIVISION

JERRY A. McGHEE, individually, and as independent administrator of the Estate of BRENDA McGHEE, deceased,

Plaintiff,

vs.

GOTTLIEB MEMORIAL HOSPITAL, S. BURTON ROTH, M.D.; ALAN J. ZUCKER, M.D.; ROTH & ZUCKER, M.D., S.C., and CARLITO TABORA, M.D.,

Defendants.

FILE NO.: 90-L8085

VOLUME 1

DEPOSITION OF: JOHN B. DOWNS, M.D.

TAKEN BY: Counsel for Defendants

BEFORE: Lynne J. Ide, CP, RPR, CM
Notary Public,
State of Florida at large.

DATE: March 22, 1995
commencing at 11:00 a.m. and
concluding at 5:30 p.m.

PLACE: Hyatt Westshore
Sandhill Crane Conference Room
Courtney Campbell Causeway
Tampa, Florida.

APPEARANCES:

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WHEREUPON,
JOHN B. DOWNS, M D.,
the deponent herein, being first duly sworn,
was examined and testified as follows:
DIRECT EXAMINATION
BY MR. CASTRO:
Q. Could you state your name for the record, please?
A. John Burton Downs.
MR. CASTRO. Let the record reflect this is the discovery deposition of Dr. John Downs taken pursuant to notice and continued to today's date by agreement of the parties, and also taken pursuant to the applicable rules.
BY MR. CASTRO:
Q. Dr. Downs, have you given a deposition before?
A. Yes.
Q. I'm just going to repeat three rules I'm sure you have heard many times before.
The most important one, though, is I will be asking you some questions regarding your opinions in this case and some medical terms, including adult respiratory distress syndrome, et cetera.
If I confuse any question, if you are not

clear in anyway, if I confuse medical terminology, please indicate that, because I don't want you to answer any question you don't feel that you fully understand. Okay?
A. Yes.
Q. And as you know, the court reporter is taking this down. She cannot take down two things at the same time, so, please, even though you will anticipate my question, let me get the question out before you answer: All right?
A. *Yes.*
Q. Finally, as you know, she can't take down nods of the heads or uh-huh's, so please make your responses verbal. All right?
A. *Yes.*
(WHEREUPON, Deposition Exhibit 1 is marked for identification purposes).
BY MR. CASTRO:
Q. Dr. Downs, let me show you what I have had marked as Deposition Exhibit Number 1.
Is that your curriculum vitae?
A. It certainly appears to be.
Q. Okay, is that current up to today's date?
A. Probably not.
Q. Okay.

A. I brought a recent copy with me that is probably more up-to-date.
Q. All right. Could we have that copy?
A. Yes.
Q. Why don't we just mark that Exhibit Number 2 then.
A. Yes, this one is more up-to-date than this one.
(WHEREUPON, Deposition Exhibit 2 is marked for identification purposes).
BY MR. CASTRO:
Q. Is there anything on Exhibit Number 2 that you would modify, delete, add, that would bring this curriculum vitae up to today's date?
A. No. Not that I know of.
Q. Your current position is what, doctor?
A. I am Professor and Chairman of the Department of Anesthesiology at the University of South Florida College of Medicine in Tampa, Florida.
Q. And how long have you been in that position?
A. A little over seven years.
Q. Before that,' where were you?
A. I was in Columbus, Ohio.
Q. And what was your position there?
A. Professor and Vice Chairman of the Department

of Anesthesiology at Ohio State University College of Medicine, Columbus, Ohio.
Q. Before that, where were you?
A. My residence was in Champaign, Illinois.
Q. Were you affiliated with a hospital or medical center at that time?
A. Both.
Q. What hospital and medical center?
A. I was primarily practicing at Mercy Hospital in Urbana, Illinois and I held positions at Northwestern University College of Medicine, also the University of Illinois College of Medicine, Urbana/Champaign Campus, and the University of Illinois School of Veterinary Medicine.
Q. Did you have any actual practice at Northwestern?
A. No.
Q. It was through your work at Mercy Hospital you had teaching responsibilities through the various universities you mentioned?
A. Well, it wasn't through Mercy Hospital necessarily. I had teaching responsibilities at the institutions mentioned but not necessarily through Mercy Hospital.
Q. All right. Did you actually have formal

teaching at Northwestern Medical School?
A. Only on rare occasions.
Q. Okay. Your teaching would be where then for the majority of the time back at that period of time?
A. School of Veterinary Medicine, Mercy Hospital, and occasionally in lecture rooms at the University of Illinois.
Q. Since you have been down here in South Florida, has your practice been pretty much the same over the past seven years?
A. You mean has it varied week to week? Or year to year?
Q. Let's say year to year.
A. Yes, I would say that it has varied year to year.
Q. Can you tell me currently what your practice consists of?
A. Practice of medicine?
Q. Your professional time?
A. My professional time is split most recently between administrative duties at the University of South Florida College of Medicine and teaching and research duties which are primarily but not completely limited to Tampa General Hospital.
And my administrative duties vary

significantly anywhere from ten to perhaps as much as fifty to sixty percent of my time on a day-to-day basis.
The remainder of my time is spent in either teaching or research-related activities.
Q. Over the past seven years, roughly how much of your time has been administrative?
A. Probably has remained pretty consistently around forty to sixty percent, but in terms of total hours, it has declined slightly because I spent more time six or seven years ago when I was developing the department than I do now in maintaining it.
Q. Okay. With regard to research, what areas are you doing research in?
A. My primary interests have to do with pulmonary physiology, sometimes with the cardiologic interaction with the pulmonary system, and pathophysiology of the respiratory system and the treatment of the -- the pathology of the respiratory system.
Q. What percentage of your time over the past seven years has been devoted to research?
A. It is very difficult to put an accurate number on it, but probably somewhere in the range of ten to twenty percent.

Q. And that would be approximately another – how much would be teaching then?
A. Teaching, probably -- and that is combined with clinical because most of my teaching is clinical teaching, but that is not consistent, either, somewhere around forty percent.
Also, research has to be combined in that because sometimes the research is combined with teaching, and it is -- a lot of research is clinical research.
Q. Your clinical practice, where is that generally? What areas does that generally involve?
A. The operating room environment and surgical intensive care unit of the Tampa General Hospital is where the vast majority of my clinical work occurs.
Q. How often do you do rounds in the SICU?
A. I try to do it twice a week but oftentimes it is once a week.
Q. And do you take general call – strike that.
Do you take a general rotation as an anesthesiologist in the operating room?
A. No, I don't, no longer.
Q. When is the last time you did that?
A. Probably four years ago, maybe three years ago.

Q. When you say your practice is partially centered in the OR, what does that involve?
A. That involves making rounds from room to room, spending variable period of time with our residents in the operating room environment. Rarely would that exceed an hour, rarely would it be less than fifteen or twenty minutes per room.
Q. Are you the director of SICU?
A. No, I'm not.
Q. Who is the director?
A. The director of the ICU's, not just SIC, both is actually split between doctors Jim Hearst, Roy Cane (phonetic) and a designee from pulmonary medicine who right now I believe is Alan Goldman.
Q. Prior – strike that.
About four years ago, during the first three years, if I understand, when you have been down here in Tampa, you actually took rotation as an anesthesiologist in surgery, is that correct?
A. Well, I don't -- I wouldn't phrase it that way.
Q. Okay.
A. I took night call, usually a couple -- anywhere between two and four times a month, and I would be, on a rare occasion, assigned to thk operating

room. But because of administrative responsibilities that would often interfere with continuity of care, I was rarely assigned as one of the anesthesiologists to the operating room for the last seven years.

Q. Now, you indicated before Tampa you were at Ohio State Medical Center?

A. No, Ohio State University College of Medicine.

Q. When were you there again, doctor?

A. From 1985 until 1988. I stopped in December of 1987, actually.

Q. Okay. Did you have any hospital affiliation?

A. I was on the staff at Ohio State University Hospital.

Q. During those three years, can you describe your professional practice at that time?

A. My time was split approximately fifty-fifty between the intensive care unit and operating room environment.

Q. Did you have any administrative responsibilities?

A. Yes.

Q. What percentage of your time was administrative?

A. The administrative responsibilities occurred

more or less in conjunction with my clinical activities, and if I had to put a percentage time on it, it probably would have been somewhere in the range of ten to fifteen percent.

Q. As fa7 as research, did you do any research at that time?

A. Yes, most of it was clinical, and that was -- that occupied perhaps fifteen to twenty percent of my time. And, again, that occurred while I was still performing clinical work.

Q. The areas that you told me about that you were doing research in here, were those similar areas that you were doing, similar areas in Ohio State?

A. They were similar.

Q. What was your rotation as far as your call in ICU?

A. I split the call with another anesthesiologist and surgeon more or less equal basis. I believe I took call a quarter of the time in the ICU, and I took call probably ten percent of the time in the main OR. It may have been a little less than that.

Q. When you say a quarter of the time in ICU, that would be approximately three months a year you would rotate through there?

A. If you added up the days, but we didn't do it

that way.

Q. It was just certain weeks or months you would be --

A. Or days.

Q. Okay. And how often would you be involved as the anesthesiologist in surgical procedure?

A. Probably a hundred and twenty days out of the year, plus the days on call.

Q. And then prior to 1985 you were at Mercy Hospital in Urbana?

A. That is correct.

Q. Did you have any administrative functions there?

A. Yes.

Q. What were your administrative responsibilities?

A. I don't remember exactly. I think most of them are outlined in my CV. But I was head of profusion services, director of the intensive care unit, I was in charge of pulmonary medicine, which is the same as respiratory care, I was in charge of the operating room, I was in charge of the recovery room and I was director of anesthesiology.

There may have been some other titles that I had, as well.

Q. How much actual clinical time did you spend where you were the anesthesiologist in charge of this operation?

A. Essentially every day.

Q. You would actually work as the anesthesiologist each day?

A. Yes, there were only two of us most of the time, and we covered, between the two of us, six operating rooms.

Q. Okay.

A. With nurse anesthetists, of course.

Q. And what was your actual hands-on involvement in the ICU?

A. I was director, I was in charge of managing almost every patient that was on a mechanical ventilator. Occasionally they would consult a pulmonologist but usually I was consulted.

Q. What were the years, doctor, — strike that.

You are not -- do they have a subspecialty of obstetric anesthesiologist?

A. Yes.

Q. Do you have any double board certification in the area?

A. No one does. There isn't double board certification.

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Q. It is just an area of specialization you can take training in?
A. That is correct.
Q. Okay. You are board certified in anesthesiology as well as critical care medicine?
A. No, there aren't boards in critical care medicine, either. There is certificate of special qualifications obtained by passing an examination.
I have passed that examination. I do hold that certificate, but it is not considered a subspecialty board.
Q. Besides board certification in anesthesiology, are you board certified in anything else?
A. No.
Q. Besides the certification of specialization in critical care medicine, do you have any other certifications in any other specialties?
A. Not other specialties. But I do hold the certificate of demonstration of qualifications, or whatever it is called, of continued qualifications in anesthesiology which was just recently offered.
Q. Is that like recertification?
A. Yes. Exactly.
Q. All right. Over the years of your practice,

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have you had experience with patients who have suffered from DIC?
A. Yes.
Q. Can you tell me approximately how many occasions or how many patients you have seen with that disorder?
A. No, I can't. But it is many.
Q. Can you give me in any way an approximation?
A. Less than a thousand. Probably more than a hundred.
Q. Okay. Have any of those patients that you have either been involved with or seen in your hospitals ever gone and developed DIC?
A. Yes, I thought you asked me if they had DIC, did they develop DIC?
Q. I'm sorry, did any of the patients that had DIC go on and develop adult respiratory distress syndrome?
A. Yes.
Q. Can you tell me approximately how many?
A. No.
Q. Can you give me any kind of an approximation whatsoever?
A. Many. That is not an uncommon evolution.
Q. What is the mechanism for DIC leading to the

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development of adult respiratory distress syndrome?
A. Nobody knows for sure.
Q. Can you give me any kind of educated guess or belief?
A. I don't believe you want me to guess.
Q. Okay.
A. And I cannot give you a more likely mechanism than any other mechanism. It has been speculated widely in the literature. I'm moderately familiar with that literature. But I certainly cannot tell you the precise mechanism by which DIC could lead to respiratory failure.
Q. Do you know what the reported incidence in the literature is for patients who have DIC that go on to develop ARDS?
A. It is extremely variable.
Q. What does it range from?
A. Well, it *can* range from, with extremely mild DIC, to little or no incidence, or it *can* range to in some reports by Doctors Blaisdale and Hardaway, for example, in the older literature, it is their opinion that patients with severe DIC almost always go on to develop respiratory failure.
I have not reviewed that literature for well over twenty years so it may not be a terribly accurate

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representation of their work, but I think so.
Q. Do you know what the more current literature indicates the range would be?
A. It still is extremely variable, it is my impression.
Q. You have obviously had a great deal of experience – strike that.
For purposes of the deposition, doctor, is it ARDS, or A R D S peogle generally refer to as adult respiratory distress syndrome?
A. I heard both terms.
Q. What would you prefer us, so I don't have to keep going through the long litany?
A. ARDS.
Q. Okay. You have had a great deal of experience with A R D S patients, is that correct?
A. Yes, I think that is true.
Q. Can you tell me approximately how many patients in your career you have treated with A R D S?
A. Hundreds, maybe thousands.
Q. Of the patients you have cared for with A R D S, can you tell me generally what the mortality rate has been that you have seen in your patients?
MR. SIRACUSA: Object -- excuse me, object to the form of the question, it is vague.

A. I can't answer that question as precisely phrased because there are sometimes when I have been completely in charge of the *care* of patients and mortality would be one figure, and there have been other circumstances where I was merely a consultant and had no authority over direction of the patient *care,* and then also there were times when I was acting primarily as a consultant, in a referral situation, where patients were coming in very late, and mortality would vary extremely over those different scenarios.

BY MR. CASTRO.

Q. Taking into consideration the timing as to when you would become involved in the aspects and degree you would become involved in the aspects of the patient care, what has the range been generally of mortality in the patients you had some degree of involvement with?

A. Twenty percent to eighty percent.

Q. The patients that you have been involved with that have had DIC that have then gone on to develop A R D S, can you tell me what the percentage of mortality rate of those patients have been?

A. No.

Q. Can you give me any kind of an approximation or range?

A. No.

Q. Doctor, the articles that you have published in – over the years, do you consider those authoritative?

A. No.

Q. Why not?

A. Well, as you pointed out, they have been published over the years and so, therefore, medical knowledge and opinion changes considerably from time to time. As more information is gathered, it sometimes puts in doubt information that was previously published.

Therefore, much of what I published as little as, say, two years ago might have changed in subtle ways the opinions that I have held prior to that.

Q. Okay.

A. Authoritative, to my way of thinking, means absolutely accurate. And, so, therefore, I couldn't say that anything is ever completely authoritative.

Q. Would you agree that the articles you published are articles that physicians could reasonably rely on in learning about and studying the disease process that you might be publishing on?

A. At the time of the publication that would certainly be true, and in some cases it might even be

true for a period of time following its publication.

Q. Are there articles in your bibliography that today you would not find to be authoritative?

A. I just told you that I would not find anything I have ever written to be authoritative by my definition of authoritative.

Q. Are you familiar with Dr. Michael Matthay?

A. I know him.

Q. Have you read his articles?

A. I have read some of his articles, I'm sure.

Q. Do you consider the articles you have read by Dr. Matthay to be authoritative?

A. No, I don't.

Q. Do you know Dr. Bone?

A. Yes.

Q. Have you read some of the articles published by Dr. Bone?

A. *Yes.*

Q. Do you consider the articles published by Dr. Bone to be authoritative?

A. No.

Q. Are there any authors in the United States that you feel are authoritative in the area – whose published articles are considered authoritative in the field of A R D S?

MR. SIRACUSA: Let me just object again *to* the form.

A. Well, they may be considered by some people to be authoritative, but not me.

BY MR. CASTRO:

Q. I'm talking about you.

A. No.

Q. Are you familiar with Dr. Bone's work and experience in the field of ARDS?

A. Somewhat.

Q. Would you consider him *to* be a – an – a national authority in that field?

A. Yes

Q. I take it since you don't believe any of the articles you have published or seen are authoritative, that you don't consider any textbooks to be authoritative on the disease of ARDS?

A. That's correct.

Q. And that would be true of DIC, as well?

A. Your question?

Q. That there would be no authoritative articles or texts with regard to the disease DIC?

A. Well, I'm not familiar with all texts on either DIC or ARDS so I can't say that there are none that are authoritative. But none that I'm familiar

with are authoritative.
Q. What journals do you subscribe to?
Well, what journals do you generally read? I'll shorten it a little.
A. That doesn't shorten it verymuch.
Anesthesiology; Abridged Journal of Anesthesiology; Canadian Anesthetists Society Journal; Intensive Care Medicine; Society of Critical Care Medicine; Journal of Critical Care Medicine; American Review of Respiratory Disease has changed its title and I never *can* remember precisely but it is something like American -- it is Journal of Critical Care Medicine something, I never can get the new title; Chest; The Journal of the American Medical Association; occasionally the New England Journal of Medicine; Hillsborough County Medical Association Journal; Florida Medical Association Journal; Resident Physician; and then several other -- oh, Medical Economics; and several other nonmedical journals, and probably a few others that have slipped my mind.
Q. Okay. Do you know Dr. Ostheimer? I'll spell it but I'm sure I will flip a letter, probably, OSTHEIMER.
A. Yes.
Q. Do you consider him expert in the field of

anesthesiology?
A. Yes, I do.
Q. Have you ever reviewed a case for the firm of Joe Power – or Joe Power, Rogers and Smith before?
A. Possibly, I don't remember.
Q. Do you know how they got your name in this case?
A. Mrs. Sosenko I have worked with, and I don't know if it was with this firm or when she was with another firm. I'm not sure. It seemed to me she may have been with Winter, Gray (phonetic) at one time, that is a possibility, but I'm guessing so I can't say for sure.
Q. How many occasions have you worked with her in the past?
A. I don't know.
Q. How long have you been doing reviews in medical legal cases such as this?
A. The first case that I reviewed was in about 1981, and that was for John Hayes.
Q. How many reviews have you done with Jack Hayes or John Hayes?
A. That was the only one.
Q. Since 1981, approximately how many reviews have you done?

A. I couldn't tell you accurately. It has been extremely variable from year to year. I probably did only one or two in '82 and '83, then built up, by '85, to perhaps seven or eight a year.
Then at Columbus, Ohio it went up considerably, probably as many as twenty to twenty-five a year.
And in Florida, when I moved here, it markedly decreased again, then last year I reviewed forty-five cases, so I can tell you with some accurately last year's experience.
Q. Of those forty-five cases, how many were on behalf of a plaintiff?
A. Twenty-three.
Q. And the other twenty-two were on behalf of the defense?
A. You got it.
Q. There were no state or governmental involvement or anything?
A. Well, I consider -- I have done a few DPR cases for physicians and I regard those as defense since the DPR is usually not for the physician when they *are* reviewing them.
Q. What areas of medicine have the majority of your depositions been in?

A. Anesthesiology and critical care.
Q. Have they been on the subjects of adult respiratory distress similar syndrome?
A. Veryoften.
Q. How about DIC?
A. I think occasionally.
Q. Have you given depositions where there have been – where there was a patient who had DIC and ARDS together?
A. I'm sure I have.
Q. Can you tell me the names of any of those cases?
A. No, I can't.
Q. Do you know the names of any of the attorneys?
A. Involved in cases like that?
Q. Involved in cases like that?
A. No.
Q. Do you keep a list at all as far as the cases you have reviewed over the years?
A. Only for billing purposes.
Q. Okay. When you say only for billing purposes, what do you mean by that?
A. If they are active files for the past year, then I -- my assistant would have those in the

computer. But, for example, I don't keep records going back two or three or four years.

Q. Who is your assistant?

A. Miss Patricia Smith.

Q. Is she your assistant solely for purposes of medical legal reviews? Or does she have other responsibilities for you?

A. That is the only one she has for my corporation. My personal corporation. Professional corporation.

Q. So Miss Patricia Smith works for your personal corporation?

A. *Yes*, she does.

Q. And what is the name of that corporation?

A. John B. Downs, M.D., Ltd.

Q. What does the corporation – what business does that corporation engage in?

A. It is a medical corporation, it is an Illinois medical corporation doing business in Florida.

Q. Okay. The income you receive from doing your work as an expert gets billed by that corporation?

A. That's correct.

Q. Any other income from your activities other than work as an expert get billed by that corporation?

A. Yes.

Q. What other activities?

A. Many activities, including consulting, speaking, any other non-university medical activity.

Q. So within the year or so of active cases, Miss Smith would have a list, for billing purposes, of those cases that are active or just recently went inactive?

A. *Yes*.

Q. Would they list the attorney that the bill is going to be submitted to?

A. Possibly.

Q. Okay.

A. I'm not exactly familiar with what her computerized list is since I don't review that, but my *guess* is that it would have the case name and the attorney's name, and the firm's name to some extent. Of course, if the deposition is involved, it would only have the one attorney's name.

MA. CASTRO: I would make a request for at least as far back as Miss Smith can go, recognizing what are active or inactive, the list of the various cases and attorneys the doctor has been involved in.

A. I don't think I can comply with that because in some cases I may not have been listed as an expert, yet, and so I don't think I could do that without

having the permission of each of the attorneys involved to describe to you their name, the name of the case and so on.

MR. CASTRO: Well, I have made the request.

MR. SIRACUSA: We'll deal with it later.

MR. CASTRO: For purposes of that, I'll put on the record we can put a protective order that this won't be disclosed outside this case or something, or sent to any other firm or matters, to give the doctor the confidentiality that he believes he needs in that regard.

But I think I'm entitled to the list, so I would put on the record the request.

BY MR. CASTRO:

Q. How many depositions have you given, doctor?

A. I don't know exactly how many I have given.

Q. Can you give me an approximation, the best approximation you can give?

A. No, I can't give you an accurate approximation. I *can* tell you exactly how many I did last year, I did seven.

Q. Okay. Do you remember the names of any of the firms that you gave depositions for last year?

A. No.

Q. Do you remember the names of any of the firms

– have you testified in any depositions this year?

A. Yes.

Q. Have any of these dealt with ARDS?

A. Probably.

Q. Do you remember any of the names of the firms that retained you in cases this year where you have given depositions?

A. No.

Q. But those would be on the computer list?

A. Whether or not they would be listed as depositions, I doubt very much, but they are on the list.

Q. But the case would be because they are so current, correct?

A. I suspect they would be, yes.

Q. Have you been in court this year?

A. This year, no.

Q. Were you in court last year?

A. *Yes*.

Q. How many times?

A. Twice.

Q. What court?

A. I don't remember, a small town in Ohio, not too far from Toledo, I don't remember the name of the town.

Q. And where was the other one?
A. I don't remember.
Q. Where else have you given court testimony at?
A. Southern Illinois.
Q. Whattown?
A. I don't remember the name of it. But about thirty miles south of Champaign.
Q. Whereelse?
A. Kansas City. West Virginia.
Q. Do you remember the town or the court?
A. No, I don't remember. Morgantown, perhaps, but I am not sure.
Q. All right.
A. Toledo. I had a courtroom appearance there once.
Here in Florida in Sarasota -- no, no, Clearwater, I'm sorry.
That is all I remember offhand.
Q. What is your fee for reviewing cases?
A. Three hundred dollars an hour.
Q. How about for deposition?
A. The same.
Q. And for court testimony?
A. The same, with a limit.
Q. Pardon?

A. Withalimit.
Q. What is your limit?
A. Ten hours a day.
Q. Is that the minimum?
A. No, that is the limit.
Q. Okay. And I assume you would charge fees and expenses for coming up to Chicago for testifying in court?
A. Yes.
Q. Does your corporation have a billing statement that they submit to attorneys who are considering retaining you, a fee schedule?
A. No.
Q. Do you advertise in any way?
A. No.
Q. Have you ever been affiliated with any group that has advertised consulting work, maybe not specifically for you?
A. I think there was one that Ted Stanley at the University of Utah, a consulting firm, he may have advertised. That firm went out of business about seven or eight or nine years ago, it was a firm that was organized to assist attorneys by giving a cadre of experts available for review both for plaintiff and defense.

I only reviewed one or two cases for them and I don't know if they advertised.
When I was in either Illinois or early on in Ohio I think there was a group in Kentucky that I may have reviewed a case for that was -- that would basically be an intermediary between attorneys as a defense expert. I did not sign a contract with them, would not sign a contract with them, and I don't think they referred any other cases to me. And I don't know if they advertised or not.
But to my knowledge, my name has never been advertised as an expert.
Q. Does the income you receive -- strike that.
Does your corporation break down the income that the corporation receives based on the different activities that you perform, such as speaking engagements, medical legal review, consulting work?
A. Not to myknowledge.
Q. It is just one lump sum?
A. I don't know how that is handled It is handled by an accountant out of Columbus, Ohio and I don't know how it is broken down.
Q. Do you know what percentage of your income is from acting as an expert in medical legal matters like this?

A. No, I *can* onlymake an estimate, somewhere around fifteen percent.
Q. Doctor, what have you reviewed with regard to this case?
A. The material that I reviewed is outlined in the material that you had copied.
Q. Okay.
A. I would be happy to go through that. I --
MR. CASTRO: Let's stop one second. Can you mark this as Exhibit Number 3.
(WHEREUPON, Deposition Exhibit 3 is marked for identification purposes).
A. Your question was?
BY MR. CASTRO:
Q. Doctor, first, have you had a chance to review what I have had marked as Exhibit Number 3?
A. With the exception of billing statements and so on, yes.
Q. Okay. Will you just go through those quickly just to make sure we have everything, because my question is going to be do we have a complete -- is Exhibit Number 3 a complete copy of your file?
A. Well, the answer is going to be no, because my file also includes all of the depositions that I have reviewed, plus the medical records.

Q. Okay
A. And those are not here.
Q. Excluding the deposition transcripts themselves and the medical records from Gottlieb Memorial Hospital, does Exhibit Number 3 contain the remaining portion of your file?
A. It appears to be mixed up a little bit. So the order is different than my file.
(Discussion had off the record).
(Short pause).
A. This appears to be a complete copy of my correspondence file and notes.
Q. Okay. Then other than the medical records from Gottlieb Memorial Hospital, what else have you reviewed in this case, what depositions?
A. The notes from my deposition reviews are in there, with the exception of deposition transcript from Dr. Matthay, Part 1 and Part 2, which I have just skimmed.
Also, I have reviewed then the medical records also of Baby McGhee, Carl Barsanti's deposition, DeLeon's deposition, Morris's deposition, Hanlon's deposition, Jerry McGhee, Kriio, Roth, Zucker, Orvino, Sandberg.
I reviewed a statement from Dr. Tabora and

the deposition transcript of Dr. Tabora, and the deposition transcript of Mr. McGhee.
Q. Any other documents that you reviewed for purposes of this case?
A. I read the abstract entitled "The Shock Lung Syndrome: Anemia as a Predisposing Factor" from the Surgical Forum, and the article entitled "Shock Lung Anemia as a Predisposing Factor" by Gerald Moss in the American Journal of Surgery, prior to sending that to Mr. Power.
Other than that, I don't believe I have reviewed any other material.
Q. Where is – Page 26, "The Shock Lung Syndrome: Anemia As a Predisposing Factor," where is this out of again?
A. I believe it is from the Surgical Forum.
Q. Do you have the cite for this?
A. No, I don't.
Q. This is just a one-page abstract?
A. *Yes*.
Q. Okay.
A. It was published in the early nineteen seventies in Surgical Forum, but I can't tell you the year and the date. It had to have been after 1972 because there are references to a '73 article. Well,

it might have been '72 or '73.
Q. Do you consider this an authoritative article?
A. No.
Q. How about the "Shock Lung: Anemia as a Predisposing Factor," do you consider that an authoritative article?
A. No.
Q. Have you ever worked in conjunction with Dr. Bone at any time?
A. Depends upon how you define work, worked with, we have been on panels together. We have probably collaborated on some projects together, but I can't remember precisely what the event would have been.
Q. You don't recall any specific events regarding collaboration with Dr. Bone?
A. No.
Q. Doctor, can you give me your definition of adult respiratory distress syndrome?
A. ARDS is a term that has been applied to describe patients with acute and severe lung injury resulting from a myriad of different etiologic factors, characterized by increased lung water, increased interpulmonary shunting of blood, arterial hypoxemia,

oftentimes requiring application of positive airway pressure and usually accompanied by radiologic changes characteristic of interstitial pulmonary edema.
This pulmonary edema is usually a non-cardiac origin, although cardiac failure may play some role.
The definition is -- as I mentioned, is extremely variable in the literature, and I think' although there may be general agreement, there oftentimes is some disagreement on the characteristic features that must or must not be present before one can make a diagnosis of *ARDS*. It is very frequently a catchall term used to describe someone with severe acute lung injury.
Q. Is one of the things that happens increased microvascular permeability in the lungs?
A. I would say that would be a feature, yes.
Q. Do you have an opinion in this case whether or not Brenda McGhee developed adult respiratory distress syndrome?
A. She clear would have the features that would meet criteria for that diagnosis to be made.
Q. So in your opinion Brenda McGhee did have ARDS?
A. *Yes*.
Q. And the basis of that opinion is what,

doctor?
A. She had severe arterial hypoxemia, relatively refractory to oxygen therapy, requiring application of positive airway pressure.
She had the radiologic features and clinical features that would be associated with that syndrome.
Q. What were the clinical features of that – that would be associated with that syndrome?
A. She had tachypnea, she had shortness of breath.
She had severe arterial hypoxemia, described at least on one occasion as being so severe as to produce cyanosis.
And she had radiologic signs of interstitial pulmonary edema throughout both lungs.
Q. Can you state to reasonable degree of medical certainty when Brenda McGhee developed adult respiratory distress syndrome?
A: I think it was more likely than not that she had the early features of ARDS by the time she was in the recoveryroom following her Cesarean section.
Q. What do you base that on?
A. The fact that she had severe arterial hypoxemia, refractory to oxygen therapy.
Q. Anything else?

A. Well, those were the -- since she didn't have chest x-ray at that time, you can't say much about that.
She did have, as described by the nurses, some abnormal lung sounds anteriorly following extubation that were fairly nondescript, but she didn't have a good and thorough physical examination recorded, nor did she have the chest x-ray.
So the only thing we would have to go by is the arterial oxygen tension. Although it is possible for some pathologic features to cause hypoxemia to the severe degree that she had, other than ARDS, it would be extremely unlikely.
So for that reason, I think more likely than not she had the earlyfeatures of ARDS as early as seven-thirty in the morning on the 6th of April.
Q. In your opinion, based on reasonable degree of medical certainty, the hypoxemia that Brenda McGhee was exhibiting at seven-thirty in the morning is more likelythan not due to ARDS?
A. Yes.
Q. Can you state to reasonable degree of medical certainty when the initial acute lung injury began in Brenda McGhee?
A. No. Notprecisely.

Q. Can you give any kind of range or time period when the initial acute lung injury would have began?
A. It is possible that it began at the time that her abruption began causing abnormality of her coagulation system, which would have been sometime in the early morning hours of the 6th of April.
Almost certainly it was in evolution during the Cesarean section. And clearly was manifested by the time she arrived in the recovery room followingher Cesarean section. And I don't think it would be possible to be anymore precise than that.
Q. So in your opinion, the acute lung injury might or could have began as early as when the DIC first began?
A. That is a possibility, after, not when it began, but after the DIC began to manifest itself, and intervascular coagulation was occurring.
Q. DIC is a cause of ARDS, correct?
A. That is one of the many causes that has been --
Q. Transfusions of blood products are also a cause of ARDS?
A. Debatable, but I think that there probably have been occasions when transfusion of blood products has resulted in lung injury, but that clearly is not a

frequent cause.
Q. Okay. Assuming Dr. Matthay testified in deposition that even as low as one transfusion can cause ARDS, would you agree with that statement?
A. I -- as I stated, I'm sure it has happened, especially if there is a transfusion reaction, then I'm sure that has occurred.
But, again, it would have to be considered a very rare cause of lung injury.
Q. Amniotic fluid embolism is a cause of ARDS?
A. That has been listed as a cause of ARDS.
Q. In this case, do you have an opinion whether or not Brenda McGhee may have suffered from amniotic fluid embolism?
A. I don't think she did, but it can't be ruled out conclusively.
Q. What is the basis of your opinion that she -- in your opinion she did not likely have an amniotic fluid embolism?
A. The most likely time that it might have occurred would have been in the immediate peri-operative period, perhaps even intraoperatively, She did not manifest with hemorrhagic type fluid, which often occurs, although she did have severe arterial hypoxia, which may have been with amniotic fluid.

She did not have cardiovascular changes that would be associated with it, and she did not manifest severe right heart failure, for example, which would be associated with the severe pulmonary hypertension that amniotic fluid embolism usually causes.

So for those reasons, I don't think it is likely that she had it. However, again I would reiterate, I don't think you can completely rule out the possibility of amniotic fluid embolism causing respiratory failure.

Q. What is the mortality rate generated associated with amniotic fluid embolism?

A. It is high. I can't tell you precisely what the literature would say. I have not reviewed it in manyyears.

Q. Would you agree it has been reported as high as ninety percent?

A. I can't disagree but I wouldn't necessarily agree.

Q. You don't know one way or another?

A. I don't know if it has been reported to be ninety percent --

Q. Okay.

A. -- or not. I wouldn't phrase it as I don't know one way or another.

Q. It carries a very significant mortality rate, that disease?

A. I agree with that statement.

Q. I take it in your opinion the cause of the ARDS was the DIC that she had?

A. I think that is a possibility. I think it is more likely than not, I think, that aspiration pneumonitis is also a possibility.

MR. SMITH: Could I hear that answer?

(Answer read back by the reporter).

BY MR. CASTRO:

Q. What is the basis of your opinion that aspiration pneumonitis in this case might or could have caused the ARDS in Brenda McGhee?

A. The clinical features of her respiratory failure are compatible with aspiration pneumonitis.

Dr. Tabora testified that there was no incidence of regurgitation nor, therefore, the possibility of aspiration.

However, Jerry McGhee, in his testimony, described induction of anesthesia with a technique that would be compatible with regurgitation and silent aspiration, that is, neither Tabora nor McGhee described the application of cricoid pressure during the induction of general anesthesia, and McGhee

actually described the use of positive pressure by mask, I believe, after the patient had general anesthesia induced but before the tracheal tube was inserted.

So although I don't think it is more likely than not that she aspirated, certainly the testimony by both Tabora and McGhee would be compatible with that.

Q. Do you have any criticism of the technique used by Dr. Tabora in intubating Brenda McGhee?

A. If cricoid pressure was not applied, then I would be critical of the technique, because that, in fact, was not then an appropriate and correct application of rapid sequence induction.

Q. In your opinion, the most likely cause of the ARDS is the DIC, more probably than not, is that correct?

A. That is what I stated, yes.

Q. Although you cannot rule out completely aspiration pneumonitis as a possible cause?

A. Thatiscorrect.

Q. What are the clinical features associated with aspiration pneumonitis in this case?

A. Tachypnea; dyspnea; hypoxemia, somewhat refractory to oxygen therapy and requiring positive pressure.

Q. Those are the same clinical findings that are found with ARDS?

A. Exactly, because ARDS *can* be caused by aspiration pneumonitis.

Some would claim if you *can* make a precise diagnosis such as DIC, aspiration pneumonitis or whatever, then you cannot make the diagnosis of ARDS because that, in fact, is not the case if you know what caused the respiratory failure.

Many would say that ARDS is caused by those things, so it depends which definition is used. I would define ARDS as being caused by many different things.

Q. Okay.

A. And the fact, you know, etiologic factor does not rule out that diagnosis.

Q. So in this case it is your opinion that the patient had ARDS and that it was most likely caused by the DIC, correct?

A. That is correct.

Q. Are you able to state one way or another with reasonable degree of medical certainty whether cricoid pressure was used in this case?

A. I cannot state with certainty that it was or was not used. I don't recall that that questibn was

ever asked of Dr. Tabora, and it was certainly not described.

Q. What is cricoid pressure, doctor?

A. Pressure on the cricoid.

Q. Okay, when is that generally applied in the case of induction similar to this situation?

A. With rapid sequence induction, pressure would be applied to the cricoid cartilage at the time of induction, at the time ofinjection of the barbiturate, and prior to injection of the muscle relaxant.

Q. You say it is something that is routinely done in all inductions, or something that is done when doing a rapid sequence induction?

A. Thelatter.

Q. What is the purpose of the cricoid pressure?

A. To prevent regurgitation of gastric contents into the aurophary nx.

Q. Why is the not done generallywith routine induction?

A. Because risk of regurgitation of gastro contents into the aurophary nx is minimal into normal -- patients who don't have increased intra-abdominal pressure or who have not eaten within the previous few hours, and who, therefore, would not have an increase in gastric contents.

Q. Do you know when the last time Brenda McGhee had eaten?

A. No.

Q. Does the timing of when Brenda McGhee last ate affect risk associated with aspiration pneumonitis?

A. No, not in her.

Q. Why?

A. Because she was pregnant.

Q. Why does pregnancy have nothing – whywould that not affect the pregnant woman?

A. She had markedlyincreased intra-abdominal pressure because of the enlarged uterus and she had delayed gastric emptying time because of her pregnancy, and also probably because of the anxiety and pain that she was experiencing. So she would have to be considered to have delayed gastric emptying and what we would refer to as a full stomach.

Q. Can the – strike that.

Are there radiographic findings associated with aspiration pneumonitis such that that diagnosis can be made on chest x-ray?

A. Notreally.

Q. So there is no way to differentiate in chest x-ray aspiration pneumonitis versus ARDS?

A. As I stated before, aspiration pneumonitis

is a form of ARDS, according to some defiitions. There would be some who would attempt to make a diagnosis of aspiration pneumonitis based on distribution of the pulmonary edema, but that is not at all reliable.

And x-ray findings of aspiration pneumonitis are extremely variable and not reliable in either making a diagnosis or ruling out the diagnosis.

Q. Is regurgitation something that anesthesiologistscan note?

A. It is possible.

Q. Is it generallythe situation?

A. Well, generally the patients don't regurgitate.

Q. But on those occasions when there is regurgitation, is that something that generally an anesthesiologistwill make note of?

MR. SIRACUSA Objection to foundation.

Go ahead.

A. If the regurgitated volume is sufficient for them to notice it, then they would certainly make note of that in the anesthesia record, more often than not.

On the other hand, it is well known small amounts of material may be regurgitated and might go unnoticed by the anesthesiologist.

Q. Would a small amount of regurgitation cause the degree of lung injury, in your opinion, that Brenda McGhee suffered?

MR. SIRACUSA: Objection to foundation.

BY MR. CASTRO:

Q. More likely than not?

A. Probably a, quote, small, unquote amount of regurgitation would not usuallybe associated with massive lung injury of the sort that was exhibited by Brenda McGhee.

However, if one compounds the lung injury that she had earlyin the morning, and then the fact that she was permitted to breathe spontaneously with essentially no appropriate therapy for many hours after that, it is known that an exacerbation of the lung injury may occur.

And it is possible that she began with a relatively small lung injury, enough to cause severe hypoxemia, but not enough to cause profound pulmonary edema, which then progressed over the next eight hours to the point that she emergently required intubation in the intensive care unit.

MR. SMITH: Could you read that answer back.

(Last answer read back by the reporter).

BY MR. CASTRO:

Q. Doctor, you indicated that was possible but you cannot state with reasonable degree of medical certainty that sequence of events was more likely than not the mechanism of her acute lung injury, is that correct?

A. Well, as I stated, I can't say more likely than not that she aspirated, so that would follow.

Q. Do you have an opinion as to the cause of the DIC in this case?

A. I believe that the DIC was more likely than not secondary to an abruption of her placenta.

Q. What do you base that an?

A. The chart review, the pathological diagnosis as being compatible with, although not diagnostic of, abruption.

And the fact that she had evidence of an impending DIC prior to her delivery, with beginning resolution following her delivery.

Q. When, in your opinion, did Brenda McGhee develop DIC?

A. I don't believe it is possible to put a precise time on it. We *can* say that she had a decreasing fibrinogen and probably decreasing platelet count prior to her Cesarean section, and that certainly

would be considered a program for DIC.

Whether or not the actual diagnosis could be made at that time, her platelet count didn't halt at that time or fibrinogen.

I don't know if she had fibrinogen split products done at that time, I don't think she did. And you -- we would need to know those levels before diagnosis could be certain.

Q. So to reasonable degree of medical certainty, you cannot say that the diagnosis could be made of DIC prior to the time of surgery?

A. I don't think you could make the diagnosis of DIC prior to it. However, in retrospect, the laboratory work would certainly be consistent with an impending DIC, if not an established DIC, prior to Cesarean section.

Q. All right. Is sepsis a cause of ARDS?

A. It is one of the many things that have been considered to be etiologic for ARDS.

Q. Do you have an opinion whether or not plaintiff had any evidence of sepsis on or before April 6th?

A. Well, sepsis is a rather general term. I don't believe she had evidence for generalized septicemia, certainly.

And although there may have been a possibility that she had bronchitis, I don't think even by any stretch of the defiition of sepsis one could consider that she was septic from the bronchitis prior to her Cesarean section.

Q. So in your opinion sepsis would not have been a contributing etiology to the development of her ARDS in this case?

A. I think that is highly unlikely.

Q. You cannot rule that out, though?

A. I think I *can* come as close to ruling it out as possible.

Q. Okay. And how can you do that?

A. I don't think that bronchitis is -- I am not familiar with that ever being a precipitating event for ARDS.

I would like to go back and correct one of my earlier answers. Her fibrinogen split product was elevated by thirty on the sixth, so I think one could make a presumptive diagnosis of early ARDS -- DIC as early as -- and the fibrinogen was below a hundred at that time, as well. So --

Q. The increased white blood count in this case, would that be consistent with sepsis?

A. Well, of course an increase in white blood

cells can occur with sepsis and often does, as does decreased white count, if it is a profound sepsis. So it is consistent with the diagnosis of sepsis.

Q. And the fact there is negative cultures in this case would not rule out sepsis, is that right?

A. That's correct.

Q. That is often seen with patients who are septic, negative cultures?

A. It is often seen in those patients, often that is because they are already on antibiotic therapy, as well.

Q. And was Brenda McGhee on antibiotic therapy for her bronchitis?

A. I think she was.

Q. And was her temperature normal?

MR. SIRACUSA At the time -

BY MR CASTRO:

Q. At the time of admission, do you recall, or preoperatively?

A. I don't recall that she had a significant febrile state upon admission, but I don't remember her temperature.

Q. I don't remember one, either.

You can have a relatively normal temperature and still have evidence of sepsis?

A. That is correct.
Prior to Cesarean section her temperature was ninety-seven degrees. She was not febrile.
Q. Doctor, you read Dr. DeLeon's deposition, is that correct?
A. That is correct.
Q. Do you recall Dr. DeLeon testifying that anemia does not cause or contribute to ARDS?
A. Mmm, I don't have independent recall of that. I'll be happy to review my notes of DeLeon's deposition transcript review and see if I had that in mynotes.
Your question was do I recall DeLeon saying what, I'm sorry?
Q. That anemia does not cause or contribute to the development of ARDS?
A. I would not dispute that but I don't remember him testifying one way or another on that particular --
Q. In your opinion, you would agree that anemia does' not cause or contribute to ARDS?
A. No, I think that is just too generalized a statement for me to say I agree with it.
Q. Okay.
A. Because it is not true. It *can.* It is not a direct contributing cause. But because hemoglobin is extremely important for carrying oxygen, and picking up

oxygen in the lung, then anemia *can* be a contributing factor in the manifestation of and seriousness of ARDS.
Q. Do you recall Dr. Matthay's testimony where he indicated anemia alone does not cause ARDS?
A. I don't remember that.
Q. In your opinion, would you agree with the statement that anemia alone does not cause ARDS?
A. Anemia, in the absence of any other pathologic features, to my knowledge, has not been described as an etiologic factor for ARDS.
Q. And why would anemia alone not cause ARDS?
A. That is -- that is a question that I think would be impossible to sensibly answer, why would it not cause ARDS?
Q. Let me rephrase it then. Okay?
When we use the term anemia, that would include both chronic, patients with chronic anemia, as well as acute anemia, is that correct?
A. Well, only if you specified it, I *guess.* If you don't specify it, then it is not clear whether you *are* referring to acute or chronic.
Q. Would you agree with the statement acute anemia does not cause — alone, in and of itself, does not cause ARDS?
A. Of course, you can't develop acute anemia

by itself, that is not a feature of any pathologic syndrome that I am aware of.
In other words, sudden blood loss in an adult human, or just in a human, doesn't occur, absent some other traumatic event.
Chronic anemia *can,* and I don't know of any mechanism by which that could be assumed to cause lung injury.
Q. Do you recall Dr. Hanlon testifying that anemia does not cause or contribute to the development of ARDS?
A. Could you repeat your question?
Q. Sure.
A. Please.
Q. Do you recall Dr. Hanlon testifying that anemia did not cause or contribute to ARDS?
A. In thispatient?
Q. Yes.
A. I don't recall one way or another.
Q. Do you recall that testimony, in general, that anemia does not cause or contribute to the development of ARDS?
MR. SIRACUSA: What do you mean, in general? By anyone in this case?

BY MR. CASTRO:
Q. Not related to this case.
A. I don't recall that testimony, but I would not dispute it.
Q. You don't have anything of that nature regarding that testimony in your notes about Dr. Hanlon's deposition, do you?
A. My notes do not reflect that was so testified to.
Q. Would that be something of importance regarding the consultant's opinions with regard to whether or not anemia might cause or contribute to ARDS?
A. Important to who?
Q. To you.
A. An infectious disease expert on the causation of ARDS would, generally speaking, not be very important to me, especially if she was a fact witness and not an expert witness.
Q. How about a pulmonologist, critical care expert who is a physician —
A. Whataboutit?
Q. --who is a treating physician in the case as to the cause of ARDS in a patient he or she was caring for?

MR. SIRACUSA. Would that testimony be significant to him?
BY MR. CASTRO:
Q. Would it be important to you?
A. It is possible, because they might have facts that would be important to me, but their opinion may or may not be important.
Q. Okay. In your review of Dr. DeLeon's deposition, you didn't note any opinions Dr. DeLeon had with regard to anemia being a cause of ARDS, is that your –
A. I thought you stated that he testified that he didn't think anemia was.
Q. That is what I said you are to assume, but your notes don't reflect any such testimony you recorded as being important?
A. I think that is probably accurate.
Q. Doctor, in any of the articles you published have you ever listed anemia as a contributing cause of ARDS?
A. Certainly not a sole cause.
Q. Okay. How about contributing cause, in any of the articles you published?
A. It is possible that there was a discussion of anemia as a contributing factor to hypoxemia and to

inadequacy of oxygen delivery, but I don't recall specifically. I haven't recalled most articles I have written for a long time, so ...
Q. Other than the two articles which you provided to us today, are you aware of any other articles that lists anemia as a predisposing cause to ARDS?
MS. FOX Object to the form of the question.
BY MR. CASTRO:
Q. Strike that.
Are you aware of any articles that indicate anemia as a contributing cause to the development of ARDS?
A. I don't know if there are or not.
Q. Do you recall Dr. DeLeon testifying that hypoxia does not cause or contribute to the development of ARDS?
A. I think I do remember a statement of that sort.
Q. That is not contained in your notes regarding your review of her deposition --or his or her deposition?
A. Is that a question?
Q. Yes. I don't see it, but I just want to make

sure it is not there, that I'm missing it?
A. Certainly not by that forum it is not.
Q. Is there by any forum?
A. No, I don't think so.
Q. Would you agree with the statement that hypoxia does not cause or contribute to the development of ARDS?
A. No, I wouldn't. I think it is wrong.
Q. Would you agree that hypoxia alone does not cause ARDS?
A. Well, there is no such thing as hypoxia alone. That is an impossible situation.
Q. Are you aware of experimental studies with animals, doctor, where animals were put into states of severe hypoxia and animals did not develop any ARDS?
A. Well, hypoxia is a general term and so that doesn't make sense because you are not describing where the hypoxia was.
And I am familiar with several situations where hypoxemia *can* lead to lung injury. And also where breathing hypoxic mixtures *can* lead to lung injury.
Now, does that mean somebody could publish an article and show that hypoxia of some tissue somewhere isn't associated with lung injury, I suspect that is

probably true that there is such an article somewhere, but I don't know specifically what you are referring to.
Q. You are not aware of animal studies that establish hypoxemia and reported in the literature that hypoxemia does not cause or contribute to the development of ARDS?
A. Well, one wouldn't expect --
MR. SIRACUSA: Well, the only question is are you aware of such a study?
THE DEPONENT: But his question is sufficiently vague that I can't answer it yes or no.
BY MR. CASTRO:
Q. Answer it any way you want to, doctor.
A. I don't think your question is answerable in the sense that hypoxemia is not a cause of ARDS. I believe that that is possible.
Q. What is possible?
A. That hypoxemia could be created without causing lung injury. I'm not aware of a study that did just that.
Q. Do any of your articles list hypoxia or hypoxemia as a cause of ARDS?
A. Well, depends upon what your definition of hypoxia is. I would have to say yes.

Q. What is your definition of hypoxia?
A. Low oxygen tension with a site undefined.
Q. What is your definition of hypoxemia?
A. Low oxygen tension in the blood without specifying whether arterial or venous.
Q. Do your articles list hypoxia, or hypoxemia, or both, as cause of ARDS?
A. That, per se, no, no one would do that. It is a nonsensical statement.
Q. In any of your articles have you ever reported that hypoxia causes ARDS?
A. Well, it is entirely possible that tissue hypoxia of some sort might be a cause of lung injury and, yes, that has been reported and it has been reported in some of my articles, but not under the term hypoxia alone as causing ARDS.
Q. Under the term tissue hypoxia have you reported it as being a contributing cause of ARDS?
A. I think that that could be a potential cause. And tissue could either be cardiac, pulmonary, or maybe even peripheral tissue, and certainly could be brain. It is well known hypoxia of the brain *can* cause pulmonary injury.
MR. SIRACUSA: Let me take two minutes.
(Recess taken).

BY MR. CASTRO:
Q. Doctor, in the literature, what is the general mortality rate -- strike that.
Would you agree that the reported mortality rate associated with ARDS is generally sixty to seventy percent?
A. It is as high as eighty percent.
If you look at overall populations, it is as low as twenty percent.
Q. In fact, associated with sepsis, it may even be as high as ninety percent, is that right?
MR. SIRACUSA Reported?
BY MR. CASTRO:
Q. Reported.
A. That has been reported.
Q. The general mortality rate associated with ARDS, though, is generally reported as greater than fifty percent?
A. It has been reported as greater than fifty percent in many articles since the mid 1970's.
However, it has recently, I think, been agreed upon that that -- although that is a general reported mortality rate, it need not be that high, and certainly has been reported to be lower than that.
Q. Would you agree that DIC has been shown or is

correlated with the poor prognosis in ARDS patients?
A. I don't know if it has been shown but I wouldn't agree it is associated with poor prognosis except for the fact it is usually associated with multiple organ failure and usually occurs in sicker patients, *so*, therefore, it would be associated with a higher morbidity and mortality.
But DIC alone would not necessarily portend a bad prognosis.
Q. But generally, DIC in patients with ARDS have been associated with a higher morbidity and mortality rate?
A. Generally in the literature, that is a true statement.
Q. Would you agree that patients can develop adult respiratory distress syndrome even with appropriate care?
A. Sure.
Q. Okay. Would you agree that the majority of patients who develop adult respiratory distress syndrome will die even with appropriate care?
A. Absolutely not.
Q. Okay. What is the basis of that statement, doctor?
A. My experience.

Q. Anything other than your experience the basis of that statement?
A. Sure, some of the literature would also support that.
Q. Some of the literature would support the statement I made, is that correct?
A. No, I wouldn't necessarily say it supports it. Some of the literature would say the mortality would be greater than fifty percent but it doesn't necessarily indicate that the care has been appropriate in such studies.
Q. In the articles that are published is it your understanding that the care is inappropriate?
MR. SIRACUSA: Object to foundation, without referring to specific article.
A. No, and I didn't say that.
BY MR. CASTRO:
Q. Okay.
A. Generally speaking, the care isn't outlined very accurately in the published series.
Q. Would you agree that the fact a patient develops ARDS from DIC does not mean inappropriate care was rendered?
A. That is correct.
Q. Would you agree the fact that patieht dies

from ARDS does not mean inappropriate care was given?
A. That, in and of itself, doesn't mean that, but it doesn't indicate inappropriate *care* wasn't also applied or that appropriate *care* is withheld.
Q. Would you agree that anemia is not reported – has not been – been reported as a poor prognostic factor in patients with ARDS?
A. I wouldn't agree with that. I don't know whether it has been or not.
Q. You are not aware of any articles that lists anemia as a poor prognostic factor in patients with ARDS?
A. I would say that anemia is almost a hundred percent of the time associated with ARDS, so that it wouldn't be one way or another.
Q. To answer my question, though, you are not aware of anemia ever being listed as a poor prognostic factor with ARDS?
A. Well, I did answer your question. I think the written transcript will show that.
If it is associated with ARDS nearly one hundred percent of the time, then it cannot be used as a discriminating factor, but it would be associated with people with poor prognosis as well as those people with a good prognosis.

Q. So in almost a hundred percent of the cases anemia is almost uniformly associated with ARDS or found in patients with ARDS?
A. I think that is probably not an accurate representation of what I said.
Patients with ARDS almost all of the time will have some degree of anemia is what I stated. If I didn't, then I will correct myself.
Q. Okay. Are you aware of any articles that indicate hypoxia or hypoxemia is a poor prognostic factor in patients with ARDS?
A. Yes. Several of the articles would indicate that the more severe the hypoxemia, arterial hypoxemia, which is not the same thing as hypoxia so they are not equivalent, even though the question indicates that they might be, arterial hypoxemia, the degree of that would indicate to some degree what the prognosis might be in some of the written articles.
Q. what, you have indicated there are degrees of hypoxemia, correct?
A. Sure.
Q. What is considered severe hypoxemia, arterial hypoxemia?
A. That would vary from individual to individual.

Q. Generally can you give me a range that you would consider to be severe arterial hypoxemia?
A. I don't like the term "severe" particularly and it could be variable and it could depend on the clinical situation.
If one resides in Denver, arterial oxygen tension well might be around *sixty* or slightly below, and that would be a degree of hypoxemia that would not be considered severe in Denver.
Q. Let's talk about people in Chicago at that elevation.
A. In Chicago if one had a PO2 below sixty and you are a perfectly normal individual and no reason for having hypoxemia, you would consider that very disturbing and perhaps even a severe hypoxemia.
But if it is in somebody with severe obstructive lung disease with chronic hypoxemia for many years, then it would become relative again and you would say that is not severe hypoxemia.
So you would have to add a lot more qualifiers to it before I could tell you a number that would be considered severe arterial hypoxemia.
However, in any human being, a PO2 of forty in arterial blood would be considered severe hypoxemia.
Q. I was about to ask you, in your opinion,

would you consider a PO2 of forty-six in Brenda McGhee to indicate severe hypoxemia?
A. Sure.
Q. Okay. In your opinion then, the PO2 of forty-six at eight-fifteen would be a very poor prognostic indicator for her outcome, is that correct?
A. Oh, no, I wouldn't agree with that at all. You asked me if I was aware literature said that, and I saidyes.
In fact, her PO2 of forty-six, breathing less than a hundred percent oxygen spontaneously, would not, in my opinion, indicate a poor prognosis at all.
The prognosis would depend upon the treatment of her hypoxemia and not on the degree of hypoxemia itself.
Now, in the absence of any treatment whatsoever, which is what she got for her hypoxemia, I would agree a PO2 of forty-six was a poor prognostic sign.
Q. Would you agree, doctor, that over the past twenty years there has been a lot of research in the area of ARDS?
A. A lot is very subjective. Yes.
Q. Okay. Well, would you agree that there have been advances in intensive care over the past twenty

years?
A. Some.
Q. Okay. Would you agree that despite the advances in intensive care medicine, that the mortality rate from ARDS has not significantly changed?
MR. SIRACUSA: In twenty years?-
BY MR. CASTRO:
Q. In the past twenty years?
A. No, I would not agree with that.
Q. Are you aware of articles that indicate that?
A. Yes.
Q. But you would disagree with the authors of those articles?
A. Yes, I would.
Q. Would you agree that not all patients with acute lung injury are mechanically ventilated or intubated?
A. Sure.
Q. Would you agree that the clinical recognition of adult respiratory distress syndrome is often considerably delayed from the time the initial alveoli capillary microstructure is initially injured?
A. I'm sure that is true in some cases. This is one fact.
Q. Putting it a little simpler, the diagnosis is

commonly made much later than when the initial acute injurytakes place, is that correct?
MR. SIRACUSA: Object to foundation.
A. That is probablyan accurate statement.
BY MR. CASTRO:
Q. An accurate? Or inaccurate?
A. It is an accurate statement.
Q. Would you agree that adult respiratory distress syndrome can develop quickly within hours after the inciting clinical event?
A. Yes.
Q. Would you agree that it had been hoped that therapy could be instituted before the onset of ARDS to alleviate the severity of the acute lung injury, but that -- that objective is difficult to obtain because of the acute onset of – after the inciting event?
A. That doesn't make sense.
MR. SIRACUSA: Wait.
A. Maybe because of inflection.
BY MR. CASTRO:
Q. All right. The goal of medicine is to try to get treatment started before the onset of ARDS, is that correct?
A. That is impossible. That is nonsensical. You wouldn't initiate therapy for something before it

starts.
Q. Let me read you this sentence:
"It had been hoped that therapy could be instituted before the onset of ARDS to alleviate the severityof acute lung injury.'
Would you agree that sentence is nonsensical?
MR. SIRACUSA: Objection.
A. I think that is a nonsensical --
MR. CASTRO: Let him finish his answer.
MR. SIRACUSA: Let me object before he answers. I object. "It had been hoped"? There is no – it is vague. It doesn't make sense.
A. You have obviously taken a quotation from somebody's publication out of context, and in the context that we are now hearing it, it doesn't make very much Sense because it assumes that ARDS is separate from the inciting insult and the subsequent lunginjury.
In other words, that sentence would probably assume that ARDS can't be diagnosed until somebody sees it and makes a diagnosis, which obviously would have to come before any therapy could be instituted.
BY MR. CASTRO:
Q. Okay.
A. So as stated, I think it is a nonsensical

sentence.
Q. Then if it was followed by the sentence, "However, it may be difficultto achieve that objective in many patients because of the time lag between the inciting event and – "
A. No.
MR. SIRACUSA Wait.
BY MR. CASTRO:
Q. Would you also agree it is a nonsensical sentence?
A. No, not necessarily because probably what it is stating is the lung injury and ARDS follow within a matter of seconds. Just the diagnosis is going to be delayed.
Q. Okay. So in your opinion, ARDS can follow within a matter of seconds after the inciting event begins?
A. Well, if you recall back when you asked me to define ARDS, if you go by the definition that I gave you, yes.
If you go by the definition that might be found in the Literature in other instances that says you have to have chest x-ray findings and you have to have PO2 at a certain amount, then I would say no, that it wouldn't, because you are not going to get

chest x-ray findings immediately and so on.

It depends upon how you define ARDS.

Q. In the way you define ARDS, ARDS follows as quickly as seconds after the inciting event?

MR. SIRACUSA: Can follow?

A. It is possible.

BY MR. CASTRO:

Q. Okay. Does it generally happen?

A. Well, I don't think that is answerable because it would depend upon the inciting event that you were going to give me in the hypothetical.

Q. How about DIC as the inciting event?

A. You can have DIC without any lung injury so it is possible you wouldn't. If you had DIC that causes lung injury, causes pulmonary hypertension and so on, that, by definition, is ARDS.

Q. Does that – obviously not all cases of DIC go on to lead to ARDS, you already stated that, corrkct?

A. That is correct.

Q. My question, though, is is when those situations do arise where the DIC is the inciting event for the development of ARDS, does the ARDS generally develop within a very brief period of time, within the first hour?

A. After what?

Q. After the DIC begins?

A. Not necessarily. The DIC may be there for days before the lung is injured.

Q. Would you agree that no therapy has been found to ameliorate the underlying injury after it occurs in patients with ARDS?

A. No, I would not agree.

Q. Would you consider that statement to be nonsensical?

A. No, I wouldn't consider it nonsensical. I just don't think it is accurate.

Q. Would you agree with the statement as result of the fact that no therapy has been found to ameliorate the underlying injury after it occurs in patients with ARDS, that therapy for ARDS is limited to supportive care?

MR. SIRACUSA: I think it depends on what underlying injury you are talking about. It is not identified in that statement.

I don't know how you can ask him to agree or disagree with the question.

BY MR. CASTRO:

Q. Doctor?

A. The first part of the sentence, you are --

it makes a statement that I believe is false.

And the second part of the statement is that any therapy is going to be supportive, I actually agree with. But I --but it doesn't --A doesn't follow B.

Q. You agree the treatment for ARDS is limited supportive care?

A. Generally speaking, that is true.

Q. When you say "generally speaking," what do you mean?

A. Well, it depends upon what the etiologic factor is. For example, if we know that DIC is the etiologic factor and you don't treat the DIC, and it continues, then lung injury continues, then -- then you would --you are withholding therapy.

If you treat the DIC and the lung injury stops, that is not supportive therapy, that is definitive therapy.

If you had somebody who continues to aspirate day after day after day and you stopped the aspiration by doing gastrostomy, that is definitive therapy, it is not supportive.

That is not what the author of your quotation is intending, however.

Q. Let me be more specific then, doctor. In the patient who is DIC and you treat the DIC and the

patient continues to manifest ARDS, the treatment for the ARDS then is supportive care, is that correct?

A. The appropriate therapy for the ARDS would be considered supportive care.

Q. Would you agree there is no way to prevent a patient from developing ARDS?

A. No, I would not agree.

Q. How do you prevent it from developing?

MR. SIRACUSA What is the etiologic factor? The question is vague.

BY MR. CASTRO:

Q. Any etiologic?

A. Prevent them from aspirating, from getting DIC, you prevent them from getting septic and so on down the line for every etiologic factor you would consider causative of the ARDS.

Q. Is there any way to prevent a patient with DIC from developing ARDS?

A. Yes, you stop DIC before the ARDS develops and you will prevent the ARDS from developing.

Q. Okay. Oftentimes would you --would you agree that oftentimes it is difficult to treat the DIC before ARDS develops in a patient?

MR. SIRACUSA: Object to form.

BY MR. CASTRO:

Q. Because of the closeness in time to the inciting event?

MR. SIRACUSA: Object to form.

A. Well, I might agree with your statement. I don't know if often would be true.

But it might be difficult to treat the DIC. But it isn't because of the proximity of the ARDS to DIC, necessarily, it is just because DIC is sometimes difficult to treat.

The DIC is a result of some other event and that has to be treated. You don't treat the DIC primariiy, you treat whatever triggers DIC.

Q. Even treating the inciting event such as an abruption with removal of the fetus and placenta, it may be difficult to prevent the development of ARDS in those type of patients, is that correct?

A. Well, that is a possibility.

'But as we have already covered, ARDS does not commonly follow abruption in DIC.

Q. What is a mechanism – strike that.

What is the cause of death when patients die of adult respiratory distress syndrome?

A. Usually it is multiple organ failure but not always. Very frequently it is sepsis and shock. There

is a myriad of different things that cause death.

Q. When we say multiple organ failure, what are we talking about, doctor?

A. More than one organ system failing at the time.

Q. Generally what type of organs go into failure in patients with ARDS?

A. Kidney, liver, heart, brain, lungs, gut.

Q. Would you agree that, although widely accepted, there is little scientific evidence to indicate endotracheal intubation or mechanical ventilation will prevent or even slow onset of ARDS?

A. No.

Q. Why not, doctor?

A. That is a statement that is reported particularly in the pulmonary literature by a few so-called authorities and experts, and I just don't agree that it is true.

I think there is pretty good evidence that supportive treatment of the lung-injured patient *can* result in improvement in oxygenation and outcome.

Q. How long have you been of that opinion?

A. But -- but let me finish, I don't believe that just sticking a tube in somebody and hooking them up to a ventilator, in and of itself, will cause any

change. There has to be someone that is manipulating the ventilator that knows what they are doing in order to be able to make that statement accurate.

Q. How long have you been of the opinion that statement would be inaccurate?

A. Since 1973, approximately.

Q. Would you agree that even when positive and expiratory pressure, commonly known as PEEP, is added to the ventilator -- mechanical ventilator of high risk patients, ARDS may or may not be prevented or severely decreased?

A. Well, I would agree that PEEP does not prevent ARDS. And the severity of ARDS may continue in spite of the addition of PEEP. But PEEP, I would still consider, to be supportive therapy for ARDS.

Q. Has there been any showing that PEEP reduces the mortality of patients with ARDS?

A. Depends upon what you mean by show. Since there has never been a blinded study and there has never been a comparison, the answer would be no.

But then, nobody has shown that the sun will rise tomorrow. But we have pretty good evidence that it will, even though nobody has done the experiment to show it will, in fact, occur.

So the fact that nobody has done a

comparative study doesn't mean that it doesn't exist, and certainly there is supportive evidence that if an individual is treated by protocol, that the severity and mortality of the ARDS will be decreased.

And that is certainly in the recent literature, as well as literature as old as fifteen years ago.

Q. Are there different types of shock, doctor?

A. Sure.

Q. Hypovolemic, cardiogenic and septic shock?

A. Those are three types.

Q. Are there others?

A. Probably.

Q. What are the others I haven't named?

A. You can have shock from a variety of etiologic factors and they have some common Features.

And I would say that you *can* have brain injury that leads to profound hypo-profusion, for example, and that could be classified as circulatory shock. But so could septic shock. There is wide overlap between those categories you read off.

Q. Are there any other general categories describing type of shock other than the three I listed?

Are those the generally descriptive terms for the types of shocks reported?

A. The three you list again?
Q. Hypovolemic, cardiogenic and septic.
A. I think there is such a wide overlap, obviously somebody could categorize it that way, but I don't know that would be an accurate way of categorizing it.
Q. Do you have an opinion whether or not plaintiff was ever in hypovolemic shock on April 6th?
A. I don't believe that she was.
Q. What do you base that on?
A. I don't believe she was hypovolemic at any time of any significant degree.
Q. Do you have an opinion whether or not plaintiff was ever in cardiogenic shock on April 6th?
A. I doubt very much that she was in cardiogenic shock.
Q. And I take it it would be your opinion she was not in septic shock?
A. No, she was not.
Q. Do you have an opinion whether or not plaintiff was in shock at any time on April 6th?
A. I doubt it.
Q. Why do you say that?
A. I don't know of any evidence that she was in shock.

Q. What evidence would you look for?
A. Inadequate profusion of peripheral tissues. Decreased urinary output. Severe and prolonged hypotension. Severe and prolonged tachycardia. Decreased sensorium due to inadequate cerebral profusion.
Q. And she didn't exhibit any of those?
A. I don't believe so.
Q. Would you agree, doctor, that there is clinical and experimental evidence suggesting shock alone is an uncommon cause of severe acute lung injury in the absence of over-aggressive fluid therapy or some other complication such as aspiration or sepsis?
A. *Yes.*
Q. Would you agree that adult respiratory distress syndrome is infrequently associated with shock alone?
A. *Yes.*
Q. Would you agree in most post-traumatic patients, the adult respiratory distress syndrome is usually linked to sepsis?
A. Not usually. That means more often than not, I would assume, in the legal sense. Greater than fifty percent of the time. And I'm not sure that is true. It could be in some series but it wouldn't be in all

series.
Q. All right. Are you familiar with the reports of the casualties in Vietnam involving development of adult respiratory distress syndrome?
A. Many of them.
Q. Would you agree that three different retrospective reviews of the course of casualties in Vietnam led to the conclusion that serious deterioration of pulmonary function seldom occurs until sepsis develops?
A. Would I agree that three of them said that? I don't know, you would have to tell me what three you are talking about. There are hundreds of reports coming out of Vietnam.
Q. *Are* you aware of some of the reports indicating that serious deterioration of pulmonary function seldom occurred until sepsis developed, regardless of the number?
A. I wouldn't disagree with that, that there probably are such reports. But, again, it would depend upon what type of injury it was.
I wouldn't agree if you take chest wound injuries, for example, if they took bullets and flack to the lung, they developed respiratory distress long before sepsis manifested itself, but that is not what

the articles are talking about you are referring to, I'm sure. And, of course, those aren't exactly relevant to this case.
There were very few placentas coming out of Vietnam, as well.
Q. Are you familiar with the articles by a Dr. Demling involving his research on sheep and putting a sheep into hemorrhagic shock?
A. What do you mean by familiar?
The fact I know they exist?
Q. Have you read articles over the course of your years in training?
A. All his articles? Probably not.
Q. Have you read some of his articles involving his research with putting sheep into hemorrhagic shock and their effect on lung injury?
A. I have read some of them.
Q. When we talk about hemorrhagic shock, we are talking about shock from excessive blood loss, is that right?
A. That is usually what is implied.
Q. Okay. And his research and findings indicate that the animals subjected to hemorrhagic shock did not have any evidence of increased microvascular permeability, is that right?

MR. SIRACUSA: Is that what his article said? Is that the question?

BY MR. CASTRO:

Q. Yes.

A. I don't know if that is what all his articles show or not.

And I don't know whether we are talking about the articles where he re-infused blood or added crystalloid.

And there *are* a number of experiments out there with hemorrhagic shock and lung injury, and I'm not sure that I can separate for you which were Demling's and which were others.

And that research has been going on for a lot longer than Demling has been doing research.

Q. Generally the finding, though, is that even in those patients who are not resuscitated or re-infused, they still did not go on to develop acute lung injury, is that correct?

A. I don't think Demling did any experiments where he subjected patients to hemorrhagic shock, then did not treat them.

Q. If that is the case, would you agree that – strike that.

Your general understanding of the research

involved with inducing hemorrhagic shock, some of those studies, they re-infused and resuscitated patients, others they did not and let the shock continue, is that correct?

A. Well, in animals, yes. But not in patients. You said patients.

Q. Animals, I am sorry, animals, the experimental studies we are talking about?

A. *Yes,* and I don't know, we *are* beating around the bush. I agree with those experiments, if Demling's or not, generally speaking do not show significant development of lung injury.

Q. Then we are beating around the bush. Thank you.

Doctor, have you – I represent Gottlieb Memorial Hospital in this case. I should have introduced myself earlier, I apologize for that.

I want to ask you now regarding opinions you have formulated with regard to this case. And I want to ask them specifically as they deal with my client, which is **Gottlieb** Memorial Hospital. So for purposes of this question, exclude for the moment any opinions you might have developed with regard to Dr. Roth, Dr. Zucker and Dr. Tabora. Okay?

A. *Yes.*

Q. Have you formed any opinions regarding any deviations from the standard of care by Gottlieb Memorial Hospital personnel?

A. First let me state that as regards the agency question, whether Tabora is an agent of the hospital, I am assuming, based on your request to limit my opinions to hospital personnel, that he is not considered an agent of the hospital and that will be a legal, not a medical, determination.

Q. All right.

A. So my criticism of the hospital personnel would be the inadequate monitoring of the patient's hypoxemic condition by nursing personnel, not in the sense that they didn't obtain the information, because they did. But, rather, that they didn't inform the appropriate people so that appropriate intervention and treatment could occur.

And that would be both the recovery room personnel and the intensive care unit personnel, nursing personnel.

That was not very articulate. In other words, I think the nurses in the ICU and the recovery room should have been very much aware that arterial saturations as low as this patient exhibited and also supported by blood gas values, should have prompted

them to have appropriate medical intervention.

Q. Okay. Any other criticisms regarding hospital personnel that you formulated?

A. I think that covers it. It may occur to me as we go on, other things may come up and I'll let you know.

Q. If it does, thank you.

Let's talk specifically then, since the criticism covers both recovery room nurse and the ICU nurse, what I would like to do is take each one separately, if that is all right.

A. Certainly.

Q. In your opinion, the recovery room nurse did not appropriately inform the appropriate persons of the – strike that.

What is the exact deviation that Nurse Kriho failed to do in the recovery room?

A. The patient had a pulse oximeter reading indicating saturations in the high seventies, low eighties, initial one being actually being fifty-nine percent.

And any recovery room nurse should be aware that those are unacceptable low readings, and perhaps even life-threatening, and should get appropriate intervention.

Upon informing Dr. Roth, Zucker or Tabora, and not getting appropriate therapy, it is my opinion that she should have immediately contacted her supervisor, who then should have contacted the appropriate medical personnel to have appropriate intervention taken.

However, according to her deposition testimony, she viewed these readings as "a little bit lower than normal," and the PH and blood *gas* at eight-fifteen of seven-point-two-four **as,** "a little bit low at seven-point-two-four."

Thus indicating to me that she did not appreciate that these were exceedinglylow values. And she clearly did not seek more aggressive therapy of the patient but, rather, transferred the patient to the surgical intensive care unit without ensuring that appropriate medical intervention occurred.

Q. The appropriate person *to* inform of the 0 2 saturations would be the anesthesiologist, Dr. Tabora?

A. Initially, that would be correct.

Q. Your understanding, Dr. Tabora was made aware ***of*** all the 02 saturations while the patient was in the recovery room?

A. That is correct.

Q. And initially, as you have indicated, that

would be appropriate care by Nurse Kriho, correct?

A. Yes, it would.

Q. And Dr. Roth, the patient's attending surgeon, was also in the recovery room for a portion **of** the time, is that correct?

A. He was in the recovery room for a period of time, but there is no indication that he was made aware of the pulse oximeter readings.

MR. SMITH: Could I hear the answer?

A. To my review.

(Last question and answers read back by the reporter).

BY MR. CASTRO:

Q. The arterial blood gas results that were obtained while the patient was in the recovery room, those were reported by Nurse Kriho to Dr. Tabora, is that correct?

A. I believe that is correct because Tabora ordered an increase in the FIO2 in response to those results, indicating, to me, he was aware of them.

Q. And that would have been appropriate care on the part **of** Nurse Kriho to report that information to the anesthesiologist, correct?

A. Well, I don't know that she reported it, so -- but it would have been appropriate if she had the

information and he didn't, for her to report it to him.

Q. And it is also your understanding that Dr. Roth, the attending surgeon, was aware of the 0 2 arterial oxygen level when he was in the recovery room, is that correct?

A. I don't remember that. It is possible. I would have to review my notes on his transcript -- on his deposition transcript.

Q. Looking at the discharge summary, doctor, Page --on Page ***5,*** I will hand this to **you** in a second, if you look at the third paragraph, the second sentence, at least according **to** the discharge summary it indicates that Dr. Tabora notified Dr. Roth of the PO2 of forty-six when the patient was in the recovery room.

If you are looking who prepared it, it was prepared by Dr. Zucker, **I** believe.

A. That is what Dr. Zucker stated. But, of course, that was not dictated until long after that event, so I don't know whether that is an accurate characterization of what really happened or not.

Q. Based on thk discharge summary, it would indicate, just on this document alone, that the PO2 was reported to Dr. Roth in the recovery room, correct?

A. That is what that indicates.

Q. Okay. Have you reviewed anything that would suggest contrary to that, that that was not, in fact, reported to him?

A. Not that I recall.

Q. Okay. Dr. Roth, as the attending surgeon, would also be an appropriate person to advise of the PO2 results, is that correct?

A. It would be appropriate for him to **be** informed of that result.

Q. So if I understand your testimony, Nurse Kriho did at least initially report and provide the information, from what you have reviewed, to the anesthesiologist, and possibly to the attending surgeon, when the patient was in the recovery room, is that correct?

A. That is possible.

Q. Okay. And **you** have not read or seen anything that would indicate contrary to that, have you?

A. No, I haven't.

Q. Okay. And **so** that is the assumption, that at least as far as your review in this case has gone, that **'2** is the assumption?

A. That she reported it to those two individuals?

Q. Yes.

A. No, it is not, I'm -- she reported it to Tabora, more likely than not, and that she possibly reported it to Roth.

Q. Your criticism then is that while acting appropriately initially and reporting to the appropriate people the appropriate information, she deviated in then not taking action when, in your opinion, appropriate care was not provided by those physicians, is that correct?

A. Not quite that way.

I would state that she deviated when she merely transferred the patient to another nursing care facility without any appropriate intervention being taken.

I believe the way you stated it might indicate I would hold the nurse responsible, if not for diagnosis, at least for therapy and knowledge of what appropriate therapy would be. And I would not.

I would state that a nurse in recoveryroom should know that a pulse oximeter reading of seventy-eight percent, which more likely than not has been confiied by a blood gas analysis result, that that nurse would know that that is an unacceptable and life-threatening situation and should seek appropriate medical intervention when she did not obtain that from

either Tabora, Roth or Zucker initially.

MR. CASTRO: Read that back very slowly to me, please.

(Last answer read back by the reporter).

BY MR. CASTRO:

Q. Okay. Doctor, just so I can make sure I'm clear, because of the length of that answer, I'm going to go back and ask it point by point, just to make sure I understand what you are saying.

You are not holding Nurse Kriho responsible or saying she has responsibilityof making a medical diagnosis in this case, is that correct?

A. Correct.

Q. Okay.

A. Only nursing diagnoses.

Q. Which is different than medical diagnoses?

A. *Yes.*

Q. And you are not holding her responsible for therapy to be instituted in this case, is that correct?

A. Not for medical therapy, that is correct.

Q. Again, just so I make sure I'm clear, you are saying that she should have the knowledge sufficient enough to recognize the severity of the information she had obtained in the recovery room, and then after initially reporting that information to the appropriate

person, Dr. Tabora, should have then sought appropriate medical intervention when the three doctors you mentioned failed to provide such, is that correct?

MS FOX. Object to the form of the question because I don't believe the facts are going to demonstrate Dr. Zucker was there.

MR. CASTRO: I agree But he just mentioned him, that is why I'm including him in his response

MS. FOX: I think there are facts that show that won't be in evidence.

A. I don't know if that is precisely what I stated or not.

I would stick with what I said before. I believe I stated what I felt was to be the case.

I think that she should seek to inform appropriate authorities so that appropriate medical intervention could occur. That would mean she might contact a nursing supervisor.

. The way you reiterated it to me, it would make it sound like she should contact another doctor, and I don't think that is necessarily the case.

BY MR. CASTRO:

Q. Okay.

A. Although that would certainly be appropriate,

as well. For example, if she contacted the medical director of the recoveryroom, that would be an appropriate step, but so would the nursing supervisor.

Q. So either nursing supervisor, or another physician, possibly the director of anesthesia – I mean director of the recovery room, in your opinion, was required, by standard of care, for Miss Kriho to contact after failing to get a response from the physicians in the recovery room?

A. Well, I didn't say she failed to get a response. And I really, I'll stand with the way I said it first.

Q. Okay.

A. Rather than your reiteration of what I said.

Q. She did get, in fact, a response from Dr. Tabora and Dr. Roth regarding how this patient was going to be managed, is that correct?

A. I don't know she got a response from Dr. Roth or not.

Dr. Tabora increased her inspired oxygen concentration, and I stated that before. He then left the care of the case. He took himself off of the case.

And Dr. Roth transferred the patient to -- or left an order to transfer the patient to the ICU, so, yes, I think there was a response.

Q. You disagree with the response by the physicians in this case, correct?
A. No, I don't disagree with it. That is what happened.
Q. Okay. I'm talking about you disagree with the appropriateness of the response by the physicians in this case?
A. I think the initial increase in FIO2 was okay, that there was no further response that was -- was appropriate on the part of Tabora, that I do disagree with.
And further I don't believe there was an appropriate medical response that was complete by Roth in that all he did was transfer the patient and request a consult from a critical care physician, without any assurance that it would occur in a timely fashion.
Q. Nurses are not responsible for determining what tests should be ordered, is that correct?
A. Not always, but they certainly can be.
Q. Generally speaking, though, tests are ordered by physicians, is that right?
A. Yes.
Q. And, in fact, you are familiar with the Illinois licensing requirements, nurses can't order medical tests, is that correct?

A. I'm not familiar with that. I would have assumed that ARNP's in the state of Illinois could order tests under protocol described by a physician. But if you -- if that is not the case, no.
But in the case of recoveryroom nurse, or ICU nurse, unless it is done by protocol under physician order, I would assume that would be the case.
Q. And nurses can't order blood to be given except under physician protocol?
A. I assume that is true.
Q. Ordering of tests and ordering of blood is the practice of medicine, is that right?
MR. SIRACUSA Object to the vagueness of the question.
A. Not necessarily.
BY MR. CASTRO:
Q. What would it be if it is not the practice of medicine?
A. Well, I think there are probably some tests that can be ordered by some people that wouldn't necessarily be a practice of medicine.
Q. Okay. Ordering arterial blood gases, ordering transfusions of blood, that is generally considered the practice of medicine?
A. As far as I know, it is.

Q. Okay. And nurses are prohibited from practicing medicine, is that correct?
A. Nurses practice nursing. I believe that only people licensed to practice medicine *can* practice medicine. So, therefore, I guess that would be prohibited, but I don't know if the law states specifically that nurses cannot practice medicine.
Q. Would you agree that the nurse can rely, to some degree, on the physician to manage how the patient will be treated?
A. Yes.
Q. Would you agree that a nurse – strike that.
One of the things a nurse takes into consideration in her nursing care of a patient is the care plan or management that is being developed by the patient's physicians, is that correct?
A. I doubt it. I don't know many care plans are developed by physicians, and I sure didn't see any evidence of one in this case.
Q. Let me rephrase it then.
A. Nurses usually develop care plans, not physicians.
Q. Let's take the words "care plan' out. Nurses can rely on the therapy that is going to be implemented by the physicians, is that correct?

A. I don't think that sentence, that statement, makes much sense. That they would rely on it? To do what?
Q. Well, in determining a sense of patients, their patients' well-being, one of the things they take into consideration is what the physicians have ordered for that patient, correct?
A. Well, I don't know if I agree with that. Certainly that is not applicable in this case.
Q. Well, let me give I an example. If no orders whatsoever are given for a patient, a nurse may have some sense of alarm, versus if numerous orders, consultants, tests, therapies have been ordered, isn't that correct?
MR. SIRACUSA. Object to the vagueness of the question.
BY MR. CASTRO:
Q. Do you understand what I'm asking, doctor?
A. I understand your question. It is not applicable in this case.
Q. I'm not asking about this particular case, doctor.
A. Okay, if you are hypothetical.
Q. In general.
A. If it does not relate to this case, thed I

would sayyes, general speaking, the nurses could rely upon the physician to relay orders that would be appropriate for their patient's care.

Q. And depending upon what those orders may be, might reflect the urgency in which the nurse may or may not go up the chain of command, correct?

MR. SIRACUSA The same objection.

A. The urgencywith which the nurse would go up the chain of command?

BY MR. CASTRO:

Q. Or whether or not she will go up the chain of command?

A. No, I think the patient's degree of **illness** would determine the urgencywith which she would go up the chain of command, and not what the orders **are.**

Q. Well, doctor, what if the patient is severely **ill** but the patient has gotten all appropriate orders as far as calling in consultants, getting all appropriate care and all appropriate management by every team in the world, is it your opinion, because of the patient's condition, she still has to go up the chain of command?

A. No, I -- and I didn't state that, either.

Q. So it is not necessarily the patient's condition, **but** what the physicians are doing in

response to the patient's condition is taken into consideration by the nurse in deciding whether or not to go up the chain of command, is that correct?

A. No, I think the patient's condition also relates. If the physician does nothing, but the patient is not very sick, there wouldn't be any reason for the nurse to go up the chain of command.

Q. So the nurse is going to take into consideration how sick the patient is and what the physicians have been – are ordering for that patient in deciding whether or not to go up the chain of command?

A. I think that would be appropriate.

Q. Okay. Have we covered your opinion regarding Nurse Kriho and the basis **for** that opinion?

A. *Yes.*

Q. Okay. Regarding the ICU nurse, doctor, what is it that the ICU nurse – in what way did the ICU nurse deviate from the standard of care?

A. I believe that the nurse who received the patient in transfer approximately between nine-thirty in the morning, as reflected by her first vital **sign** recording, and ten o'clock, according to her first narrative, failed to recognize the severity of the patient's pulmonary condition and failed to insure that

the patient received appropriate and supportive medica1 care.

There is no indication, according to her note, that she contacted anyone regarding the patient's condition, and there is no indication that she did anything other than take vital signs every thirty minutes and record those dutifully, while not recognizing the patient's deterioration.

Q. With regard to communicating to someone, the person that – the initial person that the nurse would communicate with – strike that – one of the appropriate persons that the nurse might communicate with in the ICU would be the attending physician, is that correct?

A. I would assume that is true.

Q. All right. And you would agree that would at least be an appropriate initial person to communicate with, correct?

A. Unless a consultant had been obtained who would obviate that communication.

Q. All right. And you are not aware of that being done in this case?

A. To my knowledge, that was not done in **this** case.

Q. Okay. Nurses receive -- strike that.

ICU nurses receive reports from the recovery room nurse when the patient is transferred?

A. Are you talking in general?

Q. In general?

A. In general, that is true. That is if the patient is being transferred from recoveryroom to the intensive care unit.

Q. So you would assume in this case that that practice was followed, that a report would have been given to the ICU nurse by the recovery room nurse?

A. I would assume that that did occur.

Q. Okay. And one of the things that might be included in a report -- strike that -- one of the things that is oftentime included in a report from nurse to nurse is what communication and information has already been relayed to the patient's attending physician, is that correct?

MR. SIRACUSA: Objection to foundation.

A. That would be appropriate.

BY MR. CASTRO:

Q. Okay.

A. We have no evidence that that occurred in this case, however.

Q. Well, you don't know if it did or didn't, correct?

A. That is what I just said, I don't have any information that would indicate that that occurred in this case.

Q. When a nurse contacts an attending physician depends, in part, on that nurse's understanding as to the information already provided to the attending physician, isn't that correct?

MR. SIRACUSA Objection, foundation.

A. That might be in a stable patient, but that is not appropriate in a patient that is unstable such as this one.

BY MR. CASTRO:

Q. All right. You indicated that the patient deteriorated in the ICU. Is that your opinion, doctor?

A. *Yes*, it is.

Q. What do you base that on?

A. I base it on, first, the note that the nurse wrote at four o'clock in the afternoon stating, "Patient developed respiratory distress."

Q. Anything else?

A. I further base it on the fact that the respiratory rate, which initially was thirty-two but then fell to twenty-four, which, in part, could have been due to administration of narcotic which is a respiratory depressant, which was also inappropriate,

but then --

MR. SMITH: I'm sorry, I didn't hear that?

A. -- inappropriate, but then steadily rose from twenty-four to twenty-eight, then twenty-six, then twenty-four, thirty-four, finally to thirty-six.

And by virtue of the fact that the lungs, which were initially clear, deteriorated first to having anterior rhonchi, then just to rhonchi, which would indicate to me probably diffuse, and then in addition to that, crackles on the right side.

Q. Anything else?

A. No.

MR. SMITH. Could I hear the previous answer back, please?

(Last answer read back by the reporter).

BY MR. CASTRO:

Q. Doctor, the respiratory rate remained stable at least through two p.m. in the afternoon, is that correct?

A. No, that is not correct.

Q. There was no Significant rise in the respiratory rate between nine-thirty a.m. and two p.m.?

A. Well, initially it actually fell from thirty-

two to twenty-four. As I mentioned, she was given a narcotic, which is a respiratory depressant.

Q. I understand that.

A. So that would be expected to decrease her respiratory rate. Her respiratory rate actually fluctuated, it went up to twenty-eight at ten-thirty from twenty-four. And then it fell to twenty-six, and twenty-four, then it began gradually going up, beginning at twelve o'clock noon.

Q. Well, twelve o'clock noon, doctor, it was twenty-four?

A. Right, then twenty-six at one o'clock, thirty-four at two o'clock, and thirty-six at three o'clock, as I stated before.

Q. Do you consider a change in respiratory rate of twerrty-four to twenty-six significant?

A. I do when it is in continuum, as it is in this case, where it is progressively going up each hour.

If it was an isolated increase and then fall, I wouldnot.

Q. Well, in this case from eleven o'clock to twelve o'clock it did fall down to twenty-four, correct?

A. From twenty-six.

Q. Correct.

A. Correct. But it didn't continue that trend to twenty-two and twenty, and if it had, I would have considered that decrease also significant.

Q. Eleven-thirty, twenty-four, and twelve o'clock, twenty-four, right?

A. I explained, I suspect that was due to the fact she was given a narcotic, which is a respiratory depressant.

Q. Prior to one o'clock, would you agree her respiratory rate was not significant?

A. No, I think her respiratory rate is significant. It would be insignificant if it was zero. Her respiratory rate was elevated. Normal respiratory rate is ten to twelve breaths per minute.

Q. There was no deterioration in her respiratory rate between ten o'clock and one o'clock, would you agree with that?

A. There was no increase or decrease between ten o'clock and twelve o'clock.

Q. Okay. And in your opinion, a change at twelve o'clock from twenty-four, to twenty-six at one o'clock, is a significant change?

A. It is when we take into account that that is the beginning of a progressive increase from twenty-

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four, to twenty-six, to thirty-four, to thirty-six.
Q. Okay. I'm not talking retrospective, doctor. You have got the benefit of looking at this whole thing in retrospect.
A. You are absolutely correct. I have that benefit and, yes, it is significant in retrospect.
Q. Nurses don't that have benefit or the doctors treating this patient, correct?
A. No, but this nurse also had a pulse oximeter and a number of other things.
Q. I understand, but I'm talking about respiratory rate right now, doctor. Okay?
In prospective, looking at this patient, is it your testimony the fact it changed from twenty-four to twenty-six significant in a patient like this, looking at the information that you have as of one o'clock?
A. I believe that I answered that question.
Q. Well, you did it so retrospectively because you included what went on afterwards, and I'm asking you now, don't use hindsight.
I'm asking you at one if a nurse got a respiratory rate of twenty-six, as opposed to twenty-four, which it had been the hour before, and then twenty-four at eleven-thirty, in your opinion that is

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a significant change?
A. If you are giving me a hypothetical that assumes that no change occurs after twenty-six, is a change in respiratory rate of two beats per minute going to be significant in that hypothetical, then I'll say no, an increase of two breaths per minute with no other changes following that is not going to be significant.
Q. Okay. And you don't know what the other changes are until they occur, correct?
A. No, I do know.
Q. Well, you know because you have the benefit of looking retrospectively, correct?
A. That's correct.
Q. But people caring for this patient don't have that luxury, though, do they?
A. They do now.
Q. But they didn't at the time?
A. I wouldn't consider that a luxury of knowing what is coming in the future.
However, I think a nurse caring for a patient who has saturation in the seventies and eighties, and then to say that they don't know what the respiratory rate is going to be one hour from now and, therefore, they aren't responsible for caring for the patient

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appropriately, is ludicrous.
Q. That is not my question, doctor. People caring for Brenda McGhee at the time didn't have the luxury of knowing what was going to happen in the future, did they?
A. Well, they could have --yes, I think they did, with saturation in the seventies, you could pretty much predict what is going to happen.
Q. By one o'clock, the consultant had been called into this case, is that correct?
A. Consultant had been notified, not called in, no.
Q. What is the difference?
A. The consultant did not arrive, I don't believe, at one o'clock.
Is that your understanding?
Q. Let me make sure we are on the same wavelength.
What is your understanding of called in? Does that mean arrived? Or contacted?
A. I believe that Tabora had requested a consult, I thought it was before one o'clock but perhaps not -- not Tabora, Roth, excuse me.
Q. A consultant had been reached and orders rendered prior to one o'clock, is that correct?

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A. And orders received from the consultant?
Q. Yes.
A. I need to look at the order sheet to see whether I agree with that or not.
MR. CASTRO: Do you have *those* handy, you guys?
A. The consult to Dr. Banerji is not timed, unless that is a time, and I certainly can't read it, there is a check mark.
The next timed order from Dr. Banerji is at two-fifty-five.
Q. So we don't know when Dr. Banerji actually was spoken to initially, but we have orders from him at two-fifty-five?
A. No. We can assume that at two-fifty-five Dr. Banerji was contacted, because that is when he gave orders.
The previous order was to consult Dr. Banerji, and that was a telephone order from Dr. Zucker. But it does not indicate that that, in fact, occurred until two-fiity-five.
Q. And we don't know when that order was given?
A. No, because there is not a time.
Q. When were rhonchi reported, doctor?
A. I'msorry?

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Q. When did the nurse make the note of rhonchi in the lungs?

A. Well, the recoveryroom nurse did it following extubation. The ICU nurse noted anterior rhonchi at ten-thirty in the morning.

Q. And then I think you indicated ifprogressed to rhonchi in both lungs, as you understood it to be?

A. I assumed it was both lungs. It just states rhonchi, and I think I said uniform rather than just anterior.

Q. Okay. When did that take place?

A. Eleven-thirty, it is noted at eleven-thirty.

(Recesstaken).

BY MR. CASTRO:

Q. Doctor, the various persons that would have been appropriate for the nurse to speak with in the ICU would have been the attending physician, or nursing supervisor, or someone associated with the intensive care unit?

A. Repeat the question, please.

Q. Sure. I think you indicatedthat she deviated in not contacting anyone – the appropriate persons regarding the patient's condition when a patient was in the ICU under her care? That is a general paraphrase of my question.

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I want – I just want to – my question is the appropriate persons that she could have contacted would include the attending physician, the – her nursing supervisor, or the medical director of the ICU?

A. That would generally be appropriate. They may have in their protocol a different sequence of individuals to contact and rules or policies and procedures for the intensive care unit, and I wouldn't disagree with that if it deviated slightly from what I had suggested.

But clearly a standard of care would dictate that the nurse should recognize that the patient's respiratory status was very precarious and that she was in serious distress, and that was the case prior to the time that the patient was intubated, which was at approximately three-thirty, three-forty-five, it is difficult to tell.

And standard of care would further dictate that she contact an appropriate individual to institute appropriate medical therapy.

Q. Have we covered all of the opinions you have regarding the ICU care?

As far as the nurse, I mean, that is the criticism you have regarding – the opinions you have regarding the nursing care in the ICU, correct?

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A. *Yes.*

Q. You told me now the bases for that opinion, correct?

A. Yes.

Q. Doctor, can you state to reasonable degree of medical certainty had the patient not been given the narcotic, that the patient more likely than not would have survived?

A. I don't believe that, given -- I don't believe that the narcotic Vistaril she received had any effectwhatsoever on the eventual outcome of this case.

Q. Doctor, I want to talk to you now about Dr. Tabora.

I assume you have certain opinions regarding Dr. Tabora's care?

A. Yes.

Q. Do you have any opinions regarding deviations from the standard of care by Dr. Tabora while the patient was in the operating room?

A. Potentially, *yes.* I believe that a rapid sequence induction, including cricoid pressure, was indicated for induction of anesthesia in this patient.

If Dr. Tabora failed to properly execute a rapid sequence induction, I believe that that would be deviation from an acceptable standard of care.

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Q. Okay. Other than the question of whether or not cricoid pressure was applied, is there anything you have that suggests that his induction was inappropriately performed?

A. *Yes.* Jerry McGhee's deposition said he saw Dr. Tabora apply a mask and administer anesthetic gases prior to insertion of the tracheal tube, and that would be inappropriate.

Q. Why would that be inappropriate, assuming it was actually done that way?

A. Because that is deviation from the way a rapid sequence induction would be performed.

Q. In your opinion, did applying a mask and administering anesthesia gases before insertion of an ET tube, if it had occurred, cause Brenda McGhee to die?

A. It is possible that could result in regurgitation of gastric contents, aspiration of same, and ARDS secondary to aspiration pneumonitis.

Q. If he did not apply cricoid pressure and if he applied a mask and administered anesthesia gases prior to the Insertion of the ET tube, in your opinion that would – that technique would be deviation from the standard of care, correct?

A. Well, I don't know I would call it a

technique, and I didn't call it a technique.
Q. Those steps?
A. But that sequence would be a deviation from the acceptable standard of *care.*
Q. Okay. The only way those – that sequence would have caused or contributed to Brenda McGhee's death is if, in fact, she developed aspiration pneumonitis, is that correct?
A. The only way that would be what?
Q. That would have caused or contributed to her death is if, in fact, she did develop aspiration pneumonitis?
A. Yes.
Q. Okay. Is there anything that can shed light one way or another in the anesthesia record regarding the sequence of events?
A. No. Not that I'm aware of.
Q. Other than the sequence of induction that we have talked about, the care by Dr. Tabora in the operating room, in your opinion, met the standard of care for an anesthesiologist?
A. I believe so.
Q. Doctor, somewhere in your notes I notice a reference to hemodilution with regard to the intra-operative hemoglobin hematocrit that was performed –

strike that.
Do you recall – strike that.
Hemodilution can occur when there is an infusion of fluids which might artificially drop a hemoglobin level when a hemoglobin hematocrit is taken, is that correct?
A. It would drop the hemoglobin concentration.
Q. The same amount of hemoglobin would be in the blood, it is just that because of the infusion of fluid the concentration appears lower, is that correct, or the concentration is lower?
A. Your statement is not accurate.
Q. Okay.
A. The same amount of hemoglobin would not necessarily be in the blood.
Q. Okay. Why is that?
A. Well, you could have blood loss that would decrease the amount of hemoglobin.
Q. I'm not talking about blood loss, I'm just talking about the infusion of fluid can artificially lower the hemoglobin level, is that correct?
A. It is not an artificial lowering, it is a real lowering of the concentration.
Q. Okay.
A. Not level.

Q. But the concentration – strike that.
The amount of hemoglobin contained in the body is still the same, it is just that the concentration, because of infusion of fluid, is lower, is that correct?
A. Well, it depends on the hypothetical. If your hypothetical is, number one, the hemoglobin amount total stayed the same and you add more fluid, then the concentration will decrease. That is not a medical --
Q. I understand that.
A. -- concept, that is, you know, that is -- that would be just a common sense conclusion.
Q. Exactly. So when we talk about hemodilution, we are not necessarily talking about a lower amount of actual hemoglobin in the body simply because of infusion of fluid, correct?
A. I don't think your statement is accurate.
Q. What is inaccurate about it?
A. Well, you said when we are talking about it.
Q. Right.
A. Well, maybe you should repeat -- have the question read back.'
Q. All I want to make sure I'm clear is that when a patient gets infused fluid and you obtain a hemoglobin hematocrit, the number you get, the

concentration will be lower because of the increased fluids that you have administered into the body, is that correct?
A. That isn't necessarily true because it depends on the type of fluid that is administered and it also depends upon the amount of fluid administered.
If it is a crystalloid solution, that contains no protein, it is entirely possible that the majority of it will leave the vascular system, or that it will be urinated out. As in this case, this patient had a very high urinary output.
So that it may be that none of the fluid you have given is retained in the vascular system and there may be no change in the reading of the hemoglobin concentration if there has been no blood loss.
Q. Can you state to reasonable degree of medical certainty that there was no hemodilution effect in this case as result of the fluids Brenda McGhee received intraoperatively?
A. No, I can't. I think there was hemodilution.
But I certainly think there was large blood loss, as well, so they were both going on at the same time.
Q. How – strike that.
One unit of blood will generally raisk the

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hemoglobin one point?

A. It depends. Depends upon the size of the person.

Q. Okay. In a patient –

A. Circulating blood volume, a lot of things.

Q. In a patient such as Brenda McGhee, how much rise in hemoglobin would you expect one unit of blood to cause?

A. Again, it would depend upon a lot of things. You say such as her, so that is somebody who has acute blood loss going on, fairly large urinary output, massive infusion of clear fluids at the same time, you couldn't make any *guess* about what one unit of blood would do to the hemoglobin hematocrit because of all these other compound variables occurring at the same time.

Q. Would you expect two units of blood to raise the hemoglobin from four-point-seven to eight?

A. In somebody who is bleeding?

Q. Somebody who is bleeding?

A. Is receiving large amount of crystalloid and urinating at the same time and so on?

Q. Yes.

A. I would say that it would be possible, but it is just -- it is possible it would.

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Q. Would a patient who is continuing to bleed, would it be unlikely, although possible, that two units of blood would raise the hemoglobin four-point-seven to eight?

A. It would depend again on the size of the patient, so it would be possible, because if the patient is continuing to actively bleed when it is four-point-seven, and there has been a lot of crystalloid infused, then not only would the crystalloid be being bled out, but also it would be leaving the vascular system, so there would be a relatively hemo concentration going on.

So I believe that is possible. I would not -- it would not lead me to believe it was an inaccurate measure, if that is what you are getting at.

Q. You are saying it is possible and I agree.

Is it likely that two units of blood in a patient whose hemoglobin is four-point-seven, in a patient such as Brenda McGhee, who is continuing to bleed, will raise their hemoglobin up to eight?

A. It depends on a lot of other variables. It is certainly a believable value, it is not something that *can* be --you say, "Hey, that can't be accurate." I think it could be accurate.

MS. FOX: You are referring to the reading

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of eight?

A. I'm referring to the four-point-seven to eight with hemo being transfused, with all these -- these things going on, it is possible her hemoglobin could *go* from four-point-seven to eight with no units being added.

Q. Doctor, you indicated earlier that in your opinion the increasing of oxygen from forty percent to sixty percent initially by Dr. Tabora after receiving the ABG results was appropriate, is that correct?

A. It was appropriate. It didn't do anything but it was appropriate.

Q. Do you have any opinions regarding deviations from the standard of care by Dr. Tabora in the recovery room?

A. Yes.'

Q. Can you list for me what those are?

A. First, he removed the tracheal tube, and that was inappropriate.

Second, he did not initiate appropriate ventilator therapy, which would include application of continuous positive airway pressure. To not apply that therapy was a deviation from the acceptable standard of *care.*

Third, he prematurely relinquished

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responsibility for the *care* of the patient to Dr. Roth.

Q. Is that it?

A. That is what I recall right now.

Well, let's add to it, following his removal of the tracheal tube, he failed to reinsert it when he recognized that she had *ARDS* or its equivalent, I don't know how he defines ARDS, but he made that diagnosis and he failed to treat her appropriately.

Q. After he extubated the patient, he ordered arterial blood gas, is that correct?

A. *Yes.*

Q. And that would have been appropriate?

A. *Yes,* it is appropriate.

Q. Would you agree that anesthesiologists do not need to order arterial blood gases before extubating patients?

A. Yes. Not always.

Q. I understand.

A. Not always.

Q. Anesthesiologists oftentimes use clinical assessment and judgment in deciding whether or not to extubate a patient?

A. They often do, but never when the pulse oximeter reading is fifty-nine percent to seventy

percent. Standard of care would dictate that not occur.

Q. So the basis of your first criticism that he removed inappropriately the ET tube is the pulse oximeter reading?

MR. SIRACUSA: One of the bases.

BY MR. CASTRO:

Q. Right?

A. Repeat your question, please.

Q. One of the bases for your criticism that he removed inappropriately the – that he inappropriately extubated the patient are the pulse oximetry readings obtained prior to that extubation, would that be fair?

A. One of the bases, yes.

Q. Any other bases?

A. Well, he failed to do the appropriate test to determine that the patient could safely be extubated.

Q. Whichare?

A. Well, auscultation of her lungs to make sure that she had clear breath sounds.

Q. Did Brenda McGhee have clear breath sounds at seven-thirty?

A. Well, one of the nurses reported she had clear breath sounds, but the anesthesiologist did not confirm that. She, in fact, did not have clear breath

sounds following extubation.

Q. However, those breath sounds immediately cleared up within fifteen minutes after that, didn't they, doctor?

A. Mmm, I don't know that that is true.

Q. Isn't that what Nurse Kriho reported in her report, doctor?

A, I don't recall that. That is a possibility.

Q. All right. Anything else that forms the basis of your opinion that –

A. To go back to your previous question.

Q. Sure.

A. I'll quote, "After extubation, patient has coarse breath sounds on expiration in upper lung lobes."

So I don't believe that she reports that the lungs were clear after extubation.

Q. In forming criticisms of the care being rendered, would the breath sounds being noted after extubation be an important piece of information for you?

A. After extubation?

Q. Yes.

A. I can't -- can you repeat your question?

Q. Yes, she better read that back.

(Question read back by the reporter).

A. I suppose "important" is a relative term. Yes, it has some importance.

Q. Okay. Going back to my question then, any other basis for your first criticism, other than the pulse oximetry readings and his failure to auscultate the lungs to see if they were clear?

A. Well, in the face of the pulse oximeter reading, failure to do a blood gas, because he assumed that the pulse oximeter readings were inaccurate, and so prior to pulling the tube he should have insured that, in fact, she was not severely hypoxemic, and he didn't do that.

Q. What is the basis of your opinion that Dr. Tabora thought the pulse oximetry readings were inaccurate?

A. His deposition testimony.

Could I go back to another question you asked about the hemoglobin going from four-point-seven to eight?

Q. Sure.

A. I believe that the basis for that was the blood *gas* slip that had the hemoglobin reading of eight. And the four-point-seven was read from the laboratory culture counter. Those are two

completely different devices.

The laboratory reading had hematocrit and hemoglobin differently, it went from four-point-seven to seven-point-four when measured on the same equipment, and not eight. Eight being blood *gas* analyzer, which is a very inaccurate way to determine blood *gas* concentration.

So if we put in your hypothetical seven-point-four instead of eight, then I think the answer is -- they are the same but even more plausible.

Q. Doctor, is it your understanding that Dr. Tabora believed that the low PO2 might have been due to the low hemoglobin and anemia that the patient was suffering from?

A. That is my impression, yes.

Q. Okay. In your opinion, would that be at least a reasonable belief on his part?

A. No. That is not reasonable.

Q. Whynot?

A. Because it is not accurate,

Q. What is the basis of that?

A. Standard physiologic principals.

Q. Can you explain, doctor, why that would not be a reasonable assumption?

A. Yes, because the pulse oximeter reading

doesn't depend upon hematocrit.
Q. I'm not talking about pulse oximetry reading, I'm talking about the PO2 of forty-six that was obtained by arterial blood gas?
A. Oh, okay. That also doesn't depend upon hematocrit.
Q. So in your opinion the PO2 of forty-six was not in any way related to the hemoglobin level the patient was suffering from?
A. No, and I didn't say it wasn't in any way related, I said it wasn't due to that.
Q. Okay.
A. Anemia may have a mild contributing part on hypoxemia that, in fact, is the basis for the diagram that is listed in Exhibit Number 3 that says, "Faxed 11/29/94."
In fact, that diagram *explains* why there *can* be a slight decrease in arterial oxygen tension in the face'of severe anemia, but there cannot be any hypoxemia that is due solely to the anemia. There has to be a contributing component from either ventilation profusion mismatching, or right to left intrapulmonary shunting of the blood.
Q. In this case, it is your opinion that the hypoxemia is evidenced by the arterial blood gas

results of eight-fifteen as result of adult respiratory distress syndrome, is that correct?
A. No, it was the result of right to left intrapulmonary shunting of blood.
Q. Caused by what?
A. Right to left pulmonary shunting of blood was caused by profusion of non-ventilated alveolar spaces, which is characteristic of a patient with ***ARDS.***
Q. In your opinion, was Dr. Tabora's recommendation to give two more units of blood in the recovery room appropriate?
A. It was okay,
Q. Doctor, can you state to reasonable degree of medical certainty what Brenda McGhee's mortality rate was at the time she presented to the recovery room?
A. It is my opinion that the mortality rate that one would predict for a patient such as Brenda McGhee at the time that she hit the recovery room with a saturation on the pulse oximeter of fifty-nine percent would be, in part, dependent upon the type of therapy that she received.
In other words, had she had appropriate ventilator therapy instituted immediately, I believe that her likelihood of survival in a reasonable hospital with reasonable physicians and nurses caring

for her would have been in the range of -- her survival would have been predicted to be in the range of *sixty* to ninety percent.
Q. What do you base that opinion on, doctor?
A. My past experience.
Q. Anything else?
A. Reading the medical literature, selective medical literature.
Q. When you say selective medical literature, you are talking about –
A. Not editorials written by people who pontificate that in spite of modern therapy survival rates have not changed and, therefore, nothing we have done for twenty-five years really makes any difference in the overall prognosis or outcome of respiratory failure, and that is sort of a summary of what some people have stated.
Q. Can you name any such authors, doctor?
MR. SIRACUSA: Pontificating authors? Or others?
BY MU. CASTRO:
Q. Any pontificating editorials?
A. Not that would have verbatim stated what I just stated.
Q. In general.

A. But I know some people that have expressed such thoughts in the literature.
Q. Can you tell me –
A. Dr. Bone is one.
Q. You would put him in that classification?
A. Of what? Of having stated something of that sort?
Q. Pontificator?
A. No, I did not say that. I said I stated that he has made such editorial commentary in the past.
Q. Okay.
A. I believe. I believe that Dr. John Weg from Michigan has probably stated that, W E G.
And Dr. Dantzker, D A N T Z K E R.
Q. Where is he at?
A. I don't know where he is now. I believe he maybe at the University of Texas in Houston but I'm not sure.
Weg is in Michigan.
So is bone now, I guess.
And some other people have stated similar opinions.
Q. Would other selected literature suggest a much lower survival rate for Brenda McGhee at the time she hit the recovery room?

A. Much lower than what?
Q. Than the sixty to ninety percent that you have indicated based on selected literature you are relying on?
A. No, because that literature that I quoted, and those people would insist upon having, for example, x-ray evidence of ARDS, ausculatory changes in the lung, which is missing.
So the only evidence that we have to go by is one isolated pulse oximeter reading at the time she arrives from the recoveryroom. And I doubt very much whether Dr. Bone or anyone else would make a prognostic judgment of survival less than fifty percent based on one pulse oximeter reading, but perhaps they would.
Q. Let me rephrase the question. Assuming Brenda McGhee had, in fact, developed ARDS from DIC, by the time she arrives in the recovery room with a pulse oximetry level at fifty-nine, would you agree that there are other authors in the literature who would suggest a much lower survival rate than what you've indicated?
A. Well, I would hope you could find one, so I'm sure that there are.
They would not, however, have any basis for that in terms of the literature. I don't think.

Q. What was her – strike that.
Did that mortality rate for Brenda McGhee change, in your opinion, after she arrived in the recovery room?
MR. SIRACUSA: Yes, it went to a hundred percent when she died. What do you –
MR. CASTRO: Then he can say that and I'll ask him when it changed.
A. I think that the failure to institute appropriate supportive therapy for her severe respiratory failure for more than eight hours significantly changed her likelihood of survival.
BY MR. CASTRO:
Q. At four p.m. on April 6th, in your opinion, what was her mortality rate?
A. I think it was more likely than not that she would not survive as of four p.m. on that day.
Q. You don't have any criticisms of the care rendered after the consults were involved in the care at four o'clock on?
A. My area of expertise has been anesthesia, critical care, especially as it deals with respiratory failure, and I do not have any criticism of the respiratory care that was delivered to her following that.

I have not been asked to render an opinion on the anesthetic management or the diagnosis and treatment of her ischemic colon and so on.
Q. So you have no opinions in that regard?
A. I have not been asked to express any opinions in that regard and don't intend to unless asked, and I am sure you'll be notified ahead of time if I was asked to do so.
Q. Your third criticism regarding Dr. Tabora involves the relinquishing of *the* patient's care to Dr. Roth prematurely, do you recall that?
A. *Yes*, I recall that.
Q. Okay. Is it your understanding that Dr. Tabora, at or around eight-thirty to eight-forty-five, had made certain orders for administration of blood, is that correct, ordered two units?
A. No, I don't think so.
Q. And that Dr. –
A. I have to review it. I think he – he had told nurses to do it, and Roth countermanded the order. Is that the one you are referring to?
Q. That is what I'm talking about.
A. You weren't referring to the first two units?
Q. No, I'm sorry, I'm talking about eight-thirty or eight-forty-five Dr. Roth – Dr. Tabora made

recommendationfor giving blood which Dr. Roth countermanded?
A. Right, actually, I think he made the order, I thought the nurse said she didn't write it down because Roth countermanded it.
Q. All right. And at that period of time, it was Dr. Tabora's belief that he was primarily being taken off the case, is that correct?
A. No, I – now, that is not Roth's judgment. The surgeon can't remove an anesthesiologist from the care of a patient in the recovery room where the anesthesiologist has primary responsibility for the care.
The fact that he countermanded the anesthesiologist's order for blood did not remove the responsibility Tabora had to continue to care for his patient until the patient's care was taken over by an appropriate individual.
Q. Okay. When the patient is transferred to the ICU, the attending surgeon would then be responsible for either caring for that patient or obtaining whatever necessary consultants that could provide appropriate care?
A. I don't disagree with that statement. However, the patient shouldn't be transferred from the

recovery room until released by the anesthesiologist.
Q. But once released, that is when the attending surgeon will take over, when the patient is in the ICU?
A. Correct, and that is my criticism of Tabora, he released the patient prematurely, in my opinion.
Q. Doctor, patients such as Brenda McGhee often go from OR straight to ICU without ever being recovered in the recovery room, is that correct?
A. Such as Brenda McGhee?
Q. Yes.
A. I suppose in some hospitals that might be the case. It certainly hasn't been the case in any hospital where I have ever worked.
Q. You are not aware of critically ill patients being directly sent to ICU from OR?
A. Well, of course she wasn't recognized as being critically ill when she went to the recovery room.
Q.' That is not my question, doctor.
A. Well, it was your question.
Q. No. You are not aware of critically ill patients being sent directlyto the ICU from OR?
A. I didn't state I wasn't aware.
Q. That is my question, that is what I'm asking you.

A. You asked if I wasn't aware of it.
Q. I can phrase it any way I want, but my question is aren't you aware that critically ill patients often go straight to ICU from OR?
A. The record will reflect I think he did not ask it that way.
And the answer is, yes, I am aware of that.
Q. So patients such as Brenda McGhee can go straight to ICU from OR, isn't that correct?
A. Well --
MR. SIRACUSA What, appropriately?

BY MR. CASTRO:
Q. Appropriately.
MR. SIRACUSA: As opposed to physically?
BY MR. CASTRO:
Q. Because she's critically ill?
A. But you just stated a minute ago you didn't phrase it that way, that she was critically ill,
Q. That is why – I don't like to reread questions, that is why -- each question will be different. If I start to repeat –
A. It certainly is, even when you claim they are the same.
Q. No, I'm asking different questions

A. You are. But you are phrasing them as though they are not different questions.
Q. Well, but I'm asking different questions. I'm not here to repeat things. So each question of mine is different.
A. I know that.
Q. Okay. It would be appropriate to send a patient such as Brenda McGhee, who you believe to be critically ill, straight from OR to ICU, isn't that correct?
A. I don't believe that Brenda McGhee was recognized as being critically ill at this point in time.
Q. Regardless of whether they recognize it, my question to you is it would be appropriate for a patient such as Brenda McGhee, who is considered critically ill, to be sent straight from OR to ICU?
A. Can be -- regardless of whether she is critically ill and then considered to be critically ill.
Q. I'm talking in general, a patient, I'm not talk about Brenda McGhee directly.
A. But you are mixing -- you are saying at one point she's not critically ill, then you are saying in another she's recognized to be critically ill.

Q. Let me get the question out very carefully.
Patients such as – who have the condition – strike that.
It would be appropriate to transfer critically ill patients directly from OR to ICU?
A. In which hospital?
Q. In any hospital?
A. No, not necessarily. Because the ICU nurses are trained to take care of patients in the post-operative period, and in many hospitals intensive care units are not trained to take care of recovering patients, patients recovering from an anesthetic, whether they are critically ill or not.
Q. And the hospitals you have been affiliated with through your years do not on occasion transfer critically ill patients straight from OR to ICU?
A. Is that a question? Or statement?
Q. It was a question.
A. I don't believe I stated that.
Q. That is why I'm asking you, doctor?
A. Ask it again, please.
MR. CASTRO: Read it back.
(Question read back by the reporter).
A. Well, hospitals don't transfer patients. The anesthesiologist does.

And I would say in every hospital that I have been affiliated with, I have on occasion taken patients directly from the operating room to the intensive care unit.

However, not because they *are* critically ill but because the nurses there would be appropriate to take care of the patient that I was transferring.

On many occasions, I have taken critically ill patients to the recoveryroom so I could continue to take care of them while still in proximity of the operating room.

Q. Dr. Tabora left the care of this patient approximately fifteen or twenty minutes before the patient was transferred to ICU?

A. It is difficult to say, because as I told you before, the nurses indicate that the patient was transferred variably from nine-thirty to ten o'clock in the morning, and it is not clear to me when Tabora actually walked out of the unit.

We have recording of vital signs at nine-o-five by the recoveryroom personnel, so I assume that the patient was transferred sometime after nine-o-five and before nine-thirty.

Q. I'm just looking, I thought somewhere it was noted the patient was transferred around nine-o-five or

nine-ten that morning to ICU.

MR. SIRACUSA: Well, I think what the doctor is referring to is the admit note at ten a.m., so it gets confusing.

A. Then there is vital sign recorded in ICU at nine-thirty.

BY MR. CASTRO:

Q. The patient then would have been, assuming vital signs taken at nine-thirty in ICU, patient would at least have been in ICU at nine-thirty, according to the record?

A. According to the record.

Q. And assuming Dr. Tabora left the case at around eight-forty-five, eight-thirty to eight-forty-five, do you have an opinion whether or not leaving the case thirty to forty-five minutes early caused or contributed to Brenda McGhee's death?

A. Yes, I do, I think it did.

Q. In what way, doctor?

A. Well, Dr. Tabora, by abandoning the patient at that point in time, which I think he did, failed to initiate and maintain appropriate care for her respiratory failure.

Q. Do you know what care Dr. Tabora would have provided had he remained on the case?

MR. SIRACUSA: What care he would have? Or should have?

BY MR. CASTRO.

Q. Would have.

A. Well, that is a hypothetical that is difficult to answer because he didn't. And he didn't render any particular care before he left.

So if one assumes he continued, he would have continued the same lack of care after eight-thirty as he did before, then there wouldn't have been any difference in care.

The only thing that I can judge from his deposition testimony is that he felt very strongly that more blood should be given, and that was the basis for his leaving, because Dr. Roth wouldn't allow him to give more blood, he felt that he should -- he had been dismissed from the case and he should leave.

So I assume had he had the authority and power to do what he wanted to, he would have given more blood.

Q. Okay. Do you have an opinion whether or not the administration of blood in this case of two units, everything else being the same, would have prevented Brenda McGhee from dying?

A. No, I don't think it would have. The

additional two units you *are* talking about?

Q. The additional two units.

A. I don't believe it would have prevented her from dying.

Q. So in your opinion would you agree that it is more likely than not that even if Dr. Tabora had kept himself on the case, that the outcome in this case would not have been any different?

A. I agree with that.

Q. So that the failure to – that the premature relinquishing of care by Dr. Tabora did not cause Brenda McGhee to die, is that correct?

MR. SIRACUSA: Just with respect to the blood?

MR. CASTRO: No.

MR. SIRACUSA: Well, he's including the ventilator –

MR. CASTRO: Dr. Tabora didn't do that, and I want to know –

A. But that is like saying that the fact that he left --

MR. SIRACUSA: Yes?

A. -- didn't have anything to do with her dying because if he stayed he would have given inappropriate care anyway. He would have given negligent care even if he had stayed, so it didn't make any difference if

he left. So I guess I'll agree with that.

BY MU. CASTRO:

Q. So all I'm saying is without knowing what Dr. Tabora would have done had he stayed, it is speculation and conjecture to say his premature relinquishing of care caused or contributed to Brenda McGhee's death, would that be fair?

A. I think his premature leaving did contribute to the death because his premature leaving did preclude him from administering appropriate care.

Now, had he stayed and still not administered appropriate care, then I would say his failure to administer appropriate care contributed to her death. But I'm not going to agree that his leaving didn't contribute to it because he wouldn't have given her good care anyway.

Q. Any other opinions that you have regarding deviations from the standard of care by Dr. Tabora?

A. I don't believe so.

Q. Have we covered all of the bases for that?

A. I believe so.

MU. CASTRO: That is all I have, doctor, for now. I just want to read your notes.

(Deposition continues in Volume 2).