

# **EXHIBIT F**

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

GERRY WILLIAMS,  
Plaintiff,  
vs. No. C 04 2409  
LT. ROSS, C/O SOTELO, C/O S.  
ROACH, C/O TUNTAKIT, C/O T.  
MAYS, AND DOES 1 THROUGH 25,  
INCLUSIVE,  
Defendants.

DEPOSITION OF WILLIAM S. BREALL, M.D.  
San Francisco, California  
Tuesday, October 17, 2006

Reported by:  
CLAUDIA A. BETTUCCHI  
CSR No. 12214  
JOB No. 3-54537

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2  
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16  
17 Deposition of WILLIAM S. BREALL, M.D. taken on  
18 behalf of Plaintiff at 900 Hyde Street, San Francisco,  
19 California, beginning at 3:33 p.m. and ending at 7:11  
20 p.m. on Tuesday, October 17, 2006, before CLAUDIA A.  
21 BETTUCCHI, Certified Shorthand Reporter No. 12214.  
22  
23  
24  
25

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1 Here is a letter dated September 20th, 2006, from myself  
2 to Dr. Breall.

3 Next is a two-paged document from Dr. Breall,  
4 which appears to be his notes. Next is a statement, or  
5 a bill, from Dr. Breall that was sent to the Attorney  
6 General's office.

7 And finally is a multi-page, standard  
8 agreement between the Department of Justice, my office,  
9 and Dr. Breall. It also contains an attachment, which  
10 is part of it, is his C.V. And then I'm passing you,  
11 which I know you already have but just to be sure, the  
12 curriculum vitae of Dr. Breall.

13 And then finally here is a fax cover sheet  
14 sent from me along with -- let's see -- an additional  
15 nine documents or ten-document fax, which is the notice  
16 of deposition from Plaintiff's counsel, which I faxed it  
17 to Dr. Breall.

18 And I believe those are the documents from  
19 Dr. Breall's file, and those are our responses to your  
20 request for production of documents. I know -- I think  
21 in one request you did ask for depo transcripts and  
22 hearing transcripts, which Dr. Breall does not have any  
23 of those, from what I understand. But obviously, you  
24 can inquire.

25 MR. CALABRO: So this is the totality of all

1 San Francisco, California, Tuesday, October 17, 2006  
2 3:33 p.m. - 7:11 p.m.

3

4 WILLIAM S. BREALL, M.D.  
5 having been administered an oath, was examined and  
6 testified as follows:

7

8 EXAMINATION

9 MR. MCDONOUGH: Okay. Tim McDonough here,  
10 representing Defendants Tuntakit and Roach. And the  
11 expert, Dr. Breall, has produced his file. I'm just  
12 going to pass these documents to you and just read them  
13 off.

14 Here's a letter dated September 21st, 2006,  
15 which is essentially the report of Mr. Breall. I  
16 believe you already have that, but I pass that to you at  
17 this point anyway.

18 The next, a fax cover sheet which is the fax  
19 cover sheet to the other documents, the ones that I've  
20 passed along to you already, which are his 2005/2006  
21 depo list.

22 Here is a letter from someone in my office to  
23 Mr. Breall dated October 4th, 2006, has to do with the  
24 contract. Here is a letter from myself, Timothy  
25 McDonough, to Dr. Breall dated September 20th, 2006.

1 documents that you believe are responsive to the request  
2 that I --

3 MR. MCDONOUGH: Well, and then are documents  
4 that we've already produced, which we also have here  
5 today for you, which are the civil complaint, which I  
6 gave to Dr. Breall; the deposition of Mr. Williams,  
7 which, obviously, you have a copy of as well; and then  
8 the medical file from doctor -- the medical file from  
9 the Department of Corrections and Rehabilitations of  
10 Mr. Williams.

11 And that has been produced to you in its  
12 entirety. It should be Bates stamped AG00001 through --  
13 I think it's AG01262, I believe. I believe that's  
14 correct.

15 So those are here for your -- if you need to  
16 ask about that and so forth. I --

17 MR. CALABRO: So other than that -- other than  
18 the documents that you've already produced and the  
19 documents that you just put on the record, you believe  
20 those are all responsive documents to the requests  
21 contained in the notice of deposition --

22 MR. MCDONOUGH: I believe so, in the notice of  
23 the deposition, in the rider, I guess is what you called  
24 it.

25

1 BY MR. CALABRO  
2 Q Dr. Breall -- okay.  
3 MR. MCDONOUGH: I'll have to check the Bates  
4 stamps on this, but I sent you a copy of this to -- with  
5 regards to your request for production of documents  
6 to --  
7 MR. CALABRO: Assuming those are the same  
8 documents that you sent, I got them.  
9 MR. MCDONOUGH: Yeah.  
10 BY MR. CALABRO  
11 Q Please state your name for the record.  
12 A William S. Breall, B-R-E-A-L-L.  
13 Q And your pronunciation is Breall?  
14 A Yes.  
15 Q Dr. Breall, my name is Toji Calabro. I  
16 represent Gerry Williams in a case called Williams  
17 against Ross, et al.  
18 Have you ever been deposed before?  
19 A Yes, sir.  
20 Q So you may be familiar with the procedures  
21 that I'm about to talk about now, but I'd like to review  
22 them with you just to make sure that we're operating on  
23 the same page.  
24 I'm going to ask you a series of questions  
25 about your evaluation of today's case. If you do not

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1 hear or you do not understand any of the questions that  
2 I ask you, please let me know because I will assume, if  
3 you answer the question, that you understand it.  
4 A Fine.  
5 Q The court reporter will be recording every  
6 word that we say. That means that we can't talk at the  
7 same time, and it means that all answers must be verbal  
8 with a yes or a no. Shrugs of the head or uh-huhs  
9 cannot properly be recorded.  
10 Do you understand that?  
11 A Yes, sir.  
12 Q At various times Mr. McDonough may decide he  
13 wants to object. His objections are only for the  
14 record, and you will still be required to answer my  
15 question without regard to his objection.  
16 Do you understand that?  
17 A Yes, sir.  
18 Q If you need a break throughout any time today,  
19 just let me know and we will try to accommodate that.  
20 Are you taking any medications today that may  
21 affect your testimony?  
22 A No, sir.  
23 Q Did you not take any medications that a doctor  
24 prescribed today that would affect your testimony?  
25 A I've taken no medication today. I don't take

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1 medication.  
2 Q Is there any other reason you cannot give your  
3 best testimony today?  
4 A No reason at all.  
5 Q Do you understand that it is important that  
6 you give full and complete answers to my questions?  
7 A Yes, sir.  
8 Q Do you understand that it's important to add  
9 all relevant information to your responses?  
10 A I do.  
11 Q I'd like to remind you that you're under oath  
12 and that you are subject to the same penalties of  
13 perjury as if you were to testify in court.  
14 Do you understand that?  
15 A Yes, sir.  
16 Q Dr. Breall, to begin, Mr. McDonough handed me  
17 some of your notes that he feels are responsive to the  
18 requests in the deposition notice that I sent you. I'm  
19 now asking you to just go ahead and read the notes that  
20 you have written there into the record.  
21 A All right. I'll be glad to do that, but you  
22 have to understand that my written report is based on  
23 these notes.  
24 Q I understand. I just -- I can't read your  
25 writing, so I just want to have it anyway.

Page 11

1 A Okay. Sure. September 21, 2006. Age 52,  
2 black male, electrocardiogram starting in 2002 showed an  
3 inferior wall myocardial infarction of indeterminate  
4 age. He had complaints of chest pain at that time. He  
5 was told that he had a silent, inferior wall infarction  
6 around the year 2000, seen on -- this was seen on  
7 electrocardiography. He has had recurring palpitations  
8 and left, anterior chest pain ever since. He has taken  
9 intermittent nitroglycerin for chest pains and  
10 palpitations. He has taken aspirin, 81 milligrams once  
11 a day, since 2003.  
12 On 8/3/03 Mr. Williams and a cell mate had a  
13 fight. The fight was broken up by correctional  
14 officers. Pepper spray was administered. After that  
15 Mr. Williams complained of trouble breathing, chest pain  
16 and palpitations. He requested medical help. He was  
17 held in a four-by-four holding cage for 1 1/2 hours  
18 before he was sent to the medical clinic.  
19 There is a past history of a gastric ulcer  
20 diagnosed on 10/3/01 on upper gastrointestinal x-ray and  
21 gastroesophagoscopy. He had a history of multiple  
22 illicit drug use in the early 1990's or earlier.  
23 On November 19, 2003, his cholesterol was 171,  
24 his triglyceride level was 80, his high density  
25 lipoprotein level was 44.7 and his low density

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3 (Pages 9 to 12)

1 lipoprotein level was 110. Electrocardiogram dated  
2 8/6/03 showed an old inferior wall myocardial  
3 infarction.  
4 On 8/8/03 electrocardiograms revealed that the  
5 inferior wall Q waves were less prominent. On eight --  
6 they were less prominent than on 8/3/03. A treadmill  
7 test performed on 3/3/03 was within normal limits. An  
8 electrocardiogram dated 11/9/02 showed an inferior wall  
9 infarction of indeterminate age. A diagnosis of  
10 arteriosclerotic heart disease with coronary artery  
11 disease was made. An electrocardiogram dated 7/19/2000  
12 was within normal limits.  
13 A treadmill test dated 7/12/2000 was within  
14 normal limits. He was first seen for chest pain on  
15 June 12, 2000. He was treated with nitroglycerin. He  
16 has had recurring chest pain ever since.  
17 He had more chest pain on 9/6/03. His blood  
18 pressure at that time was 120 over 80. His pulse was  
19 71. His oxygen saturation of his blood was 98 percent.  
20 His temperature was 99.9. He was admitted to the  
21 medical center for this condition. An electrocardiogram  
22 revealed an old inferior wall myocardial infarction and  
23 an incomplete right bundle branch block. His  
24 electrocardiograms were stable. He was treated with  
25 nitroglycerin and released. It took between 1 1/2 hours

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1 to get treated.  
2 Q Does that represent the totality of your  
3 handwritten notes for this?  
4 A Yes, sir.  
5 MR. CALABRO: Let me mark this as Exhibit 25.  
6 (Deposition Exhibit 25 was marked.)  
7 MR. CALABRO: Next I'm going to hand you what  
8 we're going to mark as 26.  
9 (Deposition Exhibit 26 was marked.)  
10 BY MR. CALABRO:  
11 Q This is the -- is that the bill that you sent  
12 Mr. McDonough?  
13 A It was a bill that I sent to Mr. McDonough for  
14 work done up to September 21, 2006.  
15 Q So you've done work subsequent to that?  
16 A Yes, sir.  
17 Q Have you billed Mr. McDonough yet for that?  
18 A No, sir.  
19 Q Do you have any records of how much time you  
20 spent on the case since September 21st?  
21 A Yes. The time that I spent was time that I  
22 spent going over these records again and time that I  
23 spent with Mr. McDonough.  
24 Q Where are those records?  
25 A Pardon me?

Page 14

1 Q Where are those records of the time that you  
2 spent going over these documents and the time you spent  
3 since October 21st?  
4 A I just made a note: 4 1/2 hours of record  
5 review and then I spent a half hour with Mr. McDonough.  
6 Q So you just referred to another document?  
7 A Yes. That's my work computer sheet.  
8 Q Was that among the documents that were just --  
9 MR. MCDONOUGH: I don't think we gave you that  
10 one.  
11 MR. CALABRO: I'm sorry. You didn't --  
12 MR. MCDONOUGH: Did we give him that one?  
13 THE WITNESS: No. I just generated that  
14 today.  
15 BY MR. CALABRO  
16 Q So you did not give me that?  
17 A No. I generated that as part of my work  
18 product that I give to my bookkeeper after things are  
19 all said and done.  
20 Q So the total amount of time that you spent  
21 since September 21st was four hours going over these  
22 documents -- is that right? -- since that bill, the  
23 total --  
24 A 4 1/2 hours.  
25 Q 4 1/2 hours?

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1 A Yes.  
2 Q Going over the documents that you've already  
3 produced in this case?  
4 A Yes. And a half hour with Mr. McDonough.  
5 Q When did you spend that half hour with  
6 Mr. McDonough?  
7 A Just prior to this deposition.  
8 Q What did you talk about?  
9 A We talked about this case specifically as  
10 represented by my report.  
11 Q What did Mr. McDonough say to you?  
12 A Really, nothing. He just listened, and I told  
13 him essentially the same thing that I set forth in my  
14 report.  
15 Q Did he ask you any questions?  
16 A I'm not sure that he did; no, sir.  
17 Q When did this meeting take place?  
18 A Between 3:00 and 3:30 today.  
19 Q That was less than an hour ago; is that right?  
20 A Yes.  
21 Q And you don't remember if he asked any  
22 questions?  
23 A All right. I can say that he didn't ask me  
24 any questions.  
25 Q So he did not ask any questions?

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1 A No.  
2 Q Did he make any statements to you?  
3 A Yes. He made a statement regarding the fact  
4 that he noticed I graduated from Reed College. And I  
5 asked him where he graduated from, and he told me Holy  
6 Cross and Villanova. But other than just talking about  
7 this case, there was really nothing in the way of  
8 questions that he asked or any other statements that he  
9 made.  
10 Q He made no statements about this case to you?  
11 A I can't really think of anything specific; no,  
12 sir.  
13 Q For a half an hour all you talked about was --  
14 you talked to Mr. McDonough?  
15 A I did most of the talking; yes, sir.  
16 Q He asked you no questions?  
17 A That's correct.  
18 Q And he made no statement, other than where you  
19 went to college?  
20 A I think that's what I said.  
21 Q I'm just asking if that's what the truth -- I  
22 just want to make sure I hear it correctly.  
23 A Well, let's see. We discussed my kids. One  
24 of my daughters is a judge and three other kids are  
25 attorneys and two are doctors. And he was interested

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1 respect to this case?  
2 A I -- well, you mean aside from the half hour  
3 before this deposition?  
4 Q I'm sorry. I'm talking about Mr. Williams --  
5 A Oh, Mr. Williams; not Mr. McDonough. No, I've  
6 never spoken to Mr. Williams.  
7 Q You didn't perform any kind of examination of  
8 Mr. Williams?  
9 A No, sir.  
10 Q Would you agree that you could do a more  
11 accurate diagnosis of Mr. Williams if you had seen him  
12 in person?  
13 A Yes, sir.  
14 Q Did you order any tests or any medical tests  
15 in relation to Mr. Williams' case?  
16 A No, sir.  
17 Q Were there any tests or medical tests that you  
18 would have liked to have ordered or performed to help  
19 your diagnosis in this case?  
20 A Yes.  
21 Q What tests would those be?  
22 A I think those are set forth in my report. I  
23 would have liked to have a stress nuclear scan of the  
24 heart and perhaps a cardiac catheterization and coronary  
25 angiographic study.

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1 about that. And I asked him if he was married, and he  
2 said no. But maybe he should -- oh, yes. He did ask me  
3 a question about diet for himself.  
4 Q That's it?  
5 A That's it.  
6 Q Okay. Have you talked to any other attorneys  
7 in preparation for your deposition today?  
8 A No, sir.  
9 Q Have you talked to any of the defendants in  
10 this case?  
11 A No, sir.  
12 Q Have you reviewed any documents from the  
13 defendants in this case?  
14 A Everything I've reviewed is right here on this  
15 desk.  
16 Q Sorry. My question was, Have you reviewed any  
17 cor- -- documents from the defendants in this case?  
18 A Other than what's on this case, no -- other  
19 than what's on this table, no.  
20 Q Have you reviewed any correspondence from the  
21 defendants in this case?  
22 A Unless it was in these records that are  
23 sitting in front of me. But I don't -- I don't believe  
24 so. I don't recall specific correspondence.  
25 Q Did you talk to Mr. Williams at all with

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1 Q Anything else?  
2 A That's it.  
3 Q Did you talk to any other medical personnel at  
4 the prison with respect to this case?  
5 A No, sir.  
6 Q And by the prison I mean Salinas Valley State  
7 Prison.  
8 A No, sir.  
9 Q Have you talked to any medical personnel at  
10 any prison with respect to Mr. Williams' medical  
11 condition?  
12 A No, sir.  
13 Q Have you talked to any other personnel at all  
14 at the prisons with respect to Mr. Williams in this  
15 case?  
16 A No, sir.  
17 Q Have you spoken with any other inmates at any  
18 of the prisons with respect to Mr. Williams?  
19 A No, sir.  
20 Q Turning to the medical documents in  
21 particular, I'd like to focus on September the 6th,  
22 2003, for just a moment. What documents do you recall  
23 reviewing regarding September the 6th, 2003?  
24 A Well, I reviewed records from the -- from the  
25 state prison system and -- I reviewed all of the medical

Page 20

5 (Pages 17 to 20)

1 records from state prison system.  
2 Q There were -- well, wait a second. Withdrawn.  
3 Can you name any well-respected treatises or  
4 authoritative texts in the cardiology field?  
5 A Sure.  
6 Q What are they?  
7 A Braunwald's "Heart Disease, A Textbook of  
8 Cardiovascular Medicine," Seventh Edition.  
9 Q This is the book sitting right on your shelf  
10 in your office?  
11 A Yes, sir. That's the bible. By Zipes, Libby,  
12 Bonow and Braunwald.  
13 Q Are there any others that you can name?  
14 A There are some others in another room, but I  
15 can't recall the titles of them right off. This is the  
16 one that I use almost exclusively.  
17 Q Have you referred to any other authoritative  
18 texts in this field, other than Braunwald, in the last  
19 two months?  
20 A As far as a textbook is concerned?  
21 Q Or any authoritative texts?  
22 A No, no other authoritative texts. I keep up  
23 on the literature every single day.  
24 Q But no other authoritative texts?  
25 A No other authoritative text.

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1 all the time.  
2 Q So it wasn't new to you?  
3 A No.  
4 Q Have you received any payment from the  
5 defendants in this case for your time?  
6 MR. MCDONOUGH: Object as vague and ambiguous.  
7 THE WITNESS: You mean in accordance with that  
8 bill that was sent out?  
9 BY MR. CALABRO  
10 Q That's right.  
11 A I don't know whether I have or not. That  
12 bypasses me. If it's -- if this is the up-to-date bill,  
13 then the answer is no, nothing has been paid.  
14 Q Do you have an agreement with the defendants  
15 themselves or do you have an agreement with the Attorney  
16 General's office regarding your services for this case?  
17 A With the defendants? No, with the Attorney  
18 General's office.  
19 Q So it's your understanding that you are being  
20 paid by the Attorney General's office?  
21 A Yes, sir.  
22 Q Who first contacted you with respect to your  
23 participation in this case?  
24 A Mr. McDonough.  
25 Q What did he say to you when he first called?

Page 23

1 Q Did you refer to Braunwald's in coming to your  
2 conclusions in this case?  
3 A No, sir.  
4 Q You did not?  
5 A No, sir.  
6 Q Did you refer to any authoritative text in  
7 preparing your testimony in today's deposition?  
8 A No, sir. I didn't have to.  
9 Can I explain why?  
10 Q No.  
11 A Okay.  
12 Q Have you ever heard of Hurst's "The Heart"?  
13 A Oh, sure Willis Hurst. I believe we have that  
14 in the next room.  
15 Q Is that considered an authoritative text?  
16 A Yes. Willis Hurst is a very well-respected  
17 cardiologist. He was chairman of the Board of Internal  
18 Medicine when I was one of the examiners back in the  
19 1970's, I believe. It's in my C.V.  
20 Q And I'm sorry. I was rude earlier. Please  
21 explain to me why you didn't need to consult  
22 Braunwald's.  
23 A This is a very straightforward case consisting  
24 of coronary artery disease, and I deal with this maybe a  
25 dozen times a day in various forms. I deal with this

Page 22

1 A It was a telephone call, and he asked me  
2 whether I'd be available to review some documents and  
3 act as an expert witness. And I told him I would, and  
4 that was really the sum and substance of our discussion.  
5 It was very short. And then he sent me records to  
6 review.  
7 Q Did he tell you what side he represented?  
8 A At that point -- I don't recall whether he did  
9 or not. I'm not sure that he did.  
10 Q Did he tell you what result he was looking for  
11 in the case?  
12 A No, sir.  
13 Q Did he ask you to find a certain result in  
14 this case?  
15 A No, sir.  
16 Q Did he imply or make known to you what kind of  
17 result he would like in this case?  
18 A No, sir. As far as I can recall, he was just  
19 interested in information.  
20 Q Did you, personally, prepare all drafts of the  
21 report which you have submitted in this case?  
22 A Yes, sir.  
23 Q When was the first draft of the report  
24 completed?  
25 A It was completed as of the -- as of the date

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6 (Pages 21 to 24)



1 of this report: September 21, 2006.  
 2 Q Did you send a copy of this draft to  
 3 Mr. McDonough?  
 4 A Yes, sir.  
 5 Q Do you know if Mr. McDonough reviewed it?  
 6 MR. MCDONOUGH: Objection; vague and  
 7 ambiguous, not within his personal knowledge.  
 8 THE WITNESS: I don't know if he did or not.  
 9 It's addressed to him.  
 10 BY MR. CALABRO  
 11 Q Did he tell you whether he reviewed it?  
 12 A He didn't tell me in so many words; no, sir.  
 13 Q Did he make known to you that he had looked at  
 14 it?  
 15 A Yes.  
 16 Q Did he have any comments about the report?  
 17 A No, sir.  
 18 Q Nothing at all?  
 19 A No, sir.  
 20 Q Did he ask you to make any revisions?  
 21 A No, he didn't.  
 22 Q Has anyone asked you to make any revisions to  
 23 that report?  
 24 A No, sir.  
 25 Q Have any revisions been made to that report?  
 Page 25

1 A No, sir.  
 2 Q Is it your testimony today that the testimony  
 3 you give today is objective?  
 4 A I believe it is; yes, sir.  
 5 Q That you objectively weighed the evidence and  
 6 you're rendering an objective opinion based on that  
 7 evidence?  
 8 A Yes, sir.  
 9 MR. CALABRO: I'd like to turn to page 3 of  
 10 the report. We'll mark it as Exhibit 27.  
 11 (Deposition Exhibit 27 was marked.)  
 12 MR. CALABRO: Here you go.  
 13 THE WITNESS: I've got my own copy.  
 14 MR. CALABRO: Well, we should use this one,  
 15 since it's the one that's marked with the exhibit  
 16 number.  
 17 THE WITNESS: Okay.  
 18 BY MR. CALABRO:  
 19 Q At page 3 at very bottom of that report it  
 20 says:  
 21 "Thank you very much, Mr. McDonough, for  
 22 allowing me the privilege of reviewing this  
 23 case for you. I hope this information will  
 24 be of interest and value to you."  
 25 Did you write that sentence?  
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1 A Yes, I did.  
 2 Q What did you mean by that?  
 3 A Exactly what I said. I thanked him for  
 4 allowing me to help him with this case. This is a  
 5 standard thing that I say to everybody who sends me a  
 6 case like this.  
 7 Q Did you state the opinions in any way so that  
 8 they would be more valuable to the defendants in this  
 9 case?  
 10 A I don't believe so; no, sir.  
 11 Q Are you comfortable with the idea of having  
 12 your professional reputation as a cardiologist judged by  
 13 the testimony you gave in this deposition?  
 14 A I'm not sure what you mean by that, sir. Am I  
 15 comfortable having my professional reputation what?  
 16 Judged?  
 17 Q Judged --  
 18 A I am --  
 19 Q -- by the accuracy of the testimony you give  
 20 in this deposition.  
 21 A I'm always cognisant about my professional  
 22 reputation no matter what I do, whether it's giving a  
 23 professional opinion for medical/legal matters or  
 24 whether it's giving a professional opinion for private  
 25 patient matters or consultative matters. And I try to  
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1 act accordingly and with the highest standards of  
 2 professional ethics and scientific acumen.  
 3 Q Is it your testimony, then, that you are  
 4 bringing the same degree of objective and professional  
 5 evaluation to this testimony that you would give to any  
 6 of your patients?  
 7 A Absolutely.  
 8 Q Are you comfortable with the idea of having  
 9 your character and integrity judged by the truthfulness  
 10 and objectiveness of the testimony you give in this  
 11 deposition?  
 12 A You bet.  
 13 Q What I'd like to do now is go over some of the  
 14 documents that have been produced in this case by the  
 15 Attorney Generals. The first one I want to look at --  
 16 MR. CALABRO: We'll mark this as 28.  
 17 (Deposition Exhibit 28 was marked.)  
 18 BY MR. CALABRO  
 19 Q Do you recall if you've seen this document  
 20 before?  
 21 A Yes, sir.  
 22 Q You have seen this document before?  
 23 A If it's part of this big compendium of medical  
 24 records, I've seen it. I know that I've seen records  
 25 dating back to the year 2000.  
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1 Q This one appears to be dated June 10, 2000.  
 2 A Well, June 10 and June 12; yes, sir.  
 3 Q June 10 and June 12, 2000.  
 4 Is this the kind of document that you would  
 5 normally rely on in your occupation as a cardiologist?  
 6 A Well, these are just progress notes, and these  
 7 are notes that I would see and take into consideration  
 8 when it comes to patients. These are progress notes  
 9 that are ordinarily written in hospital records or  
 10 clinic records. And yes, I would rely on these notes  
 11 with respect to symptomatology and physical findings.  
 12 Q In the June 10, 2000, entry you'll note it  
 13 says in the first line halfway through "shoulder pain  
 14 radiating to middle of chest intermittently" and then it  
 15 says "X 5 days."  
 16 Do you see that?  
 17 A Yes, I see it.  
 18 Q Does that mean anything to you, "X 5 days"?  
 19 A Well, it means -- the "X" means times, and it  
 20 means just what it says. He had right shoulder pain and  
 21 pain in the middle of his chest.  
 22 Q And he says --  
 23 A If I saw this for the first time without  
 24 knowing what went on subsequently or any of the tests  
 25 that were taken on him or electrocardiograms that were

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1 A I do.  
 2 Q Can you make out any of that?  
 3 A I can.  
 4 Q What does it say?  
 5 A Constant mid chest pain. Difficulty  
 6 breathing. Something on the right.  
 7 Q Congested feeling?  
 8 A I think that's what it says, congested  
 9 feeling, non-tender.  
 10 Q That's fine.  
 11 Is any of that consistent with having a heart  
 12 condition?  
 13 MR. MCDONOUGH: Objection; vague and  
 14 ambiguous.  
 15 THE WITNESS: Any time there is chest pain,  
 16 this could be heart pain. But any time there is  
 17 shortness of breath, this could be symptoms of a heart.  
 18 Congestion could be something different, like a  
 19 bronchitis or a pneumonia.  
 20 He had a morning -- it says a.m. productive  
 21 cough. So he could be coughing from a pneumonia or a  
 22 bronchitis. He smokes one pack of cigarettes per day.  
 23 The doctor put that down, or whoever it was who wrote  
 24 that put that down. So maybe he's got a smoker's  
 25 bronchitis.

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1 taken on him, I would have immediately -- most doctors  
 2 immediately come up with a differential diagnosis.  
 3 Is this musculoskeletal pain in the shoulder  
 4 and in the chest? Or is this heart pain? Or is it lung  
 5 pain? Or is it gastrointestinal pain? These are the  
 6 things that would cross a doctor's mind.  
 7 Q The next line says:  
 8 States pressure in mid chest when  
 9 inhaling.  
 10 A Yes, sir.  
 11 Q Is that consistent with musculoskeletal pain?  
 12 A It could be.  
 13 Q Is it consistent with heart pain?  
 14 A Pressure is consistent with chest pain, but  
 15 accentuation of the pressure with inhaling is not  
 16 consistent with heart pain.  
 17 Q Okay. And it also says that his blood  
 18 pressure there is 140 over 89.  
 19 A Yes, sir.  
 20 Q Is that high?  
 21 A It's the upper elements of normal. It's what  
 22 they call prehypertension.  
 23 Q In the June 12, 2000, there is -- it looks  
 24 like an S. And then it says, "Constant mid chest pain."  
 25 Do you see that area?

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1 But the answer is yes and no. Whenever there  
 2 is chest pain, that could be heart.  
 3 MR. CALABRO: Very good. Thank you.  
 4 We'll mark this next one as 29.  
 5 (Deposition Exhibit 29 was marked.)  
 6 BY MR. CALABRO  
 7 Q This one appears to be dated June 15th, is it?  
 8 A I think so; yes, sir.  
 9 Q First line there says:  
 10 Persistent chest pain, EKG, question  
 11 mark, old infarct.  
 12 A Yes, sir.  
 13 Q Do you read it the same way?  
 14 A I do, yes.  
 15 Q What does that mean to you?  
 16 A Well, it doesn't mean anything to me. I base  
 17 my opinion on what the electrocardiogram shows by  
 18 looking at the actual electrocardiographic tracings.  
 19 For many years I taught electrocardiography at  
 20 the University of California. And what somebody  
 21 scribbles down on a piece of paper, as far as a  
 22 diagnosis is concerned, is often meaningless. I've got  
 23 to take a look at the actual tracing.  
 24 And I will tell you without equivocation that  
 25 the first time that I saw definite evidence for a

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1 myocardial infarction was in December of 2001.  
 2 Q Well, let's talk a little bit about  
 3 electrocardiogram. An electrocardiogram is what's  
 4 commonly referred to as an EKG?  
 5 A Yes, sir.  
 6 Q Is it the same thing as an ECG?  
 7 A Yes, sir.  
 8 Q Why is there a difference in nomenclature?  
 9 A The original, old-time cardiologists in the  
 10 middle or the early part of the 20th century came from  
 11 Germany. A fellow named Einthoven invented  
 12 electrocardiography, and he was a German professor. And  
 13 in Germany they call it electrocardiogram with a K, and  
 14 so that persisted. And over in this country  
 15 electrocardiogram is with a C, so we call it ECG.  
 16 Q What does an ECG measure?  
 17 A The ECG inscribes the electrical impulse as it  
 18 travels through the heart.  
 19 Q What kinds of things can we learn from an EKG  
 20 or an ECG?  
 21 Do you prefer EKG or ECG?  
 22 A Either one.  
 23 Q What kinds of things can we learn from the  
 24 record of an EKG?  
 25 A Well, you can first of all learn about the

1 Q What are those standard techniques that are  
 2 essential?  
 3 A Well, you have to place the electrodes on  
 4 certain portions of the chest in the appropriate manner.  
 5 There are four limb leads and six chest leads, and this  
 6 will give you a view of the heart electrically through  
 7 various portholes of the body.  
 8 Q Is there anything else that's important?  
 9 A From the standpoint of performing an  
 10 electrocardiogram?  
 11 Q From the standpoint of obtaining accurate EKG  
 12 results.  
 13 MR. MCDONOUGH: Object; vague and ambiguous.  
 14 THE WITNESS: No. Just it has to be applied  
 15 properly and, the most important thing, it has to be  
 16 read by a person who knows what they are doing when they  
 17 read it.  
 18 BY MR. CALABRO  
 19 Q Is it important that a patient be reclined and  
 20 relaxed, as relaxed as possible?  
 21 A It's generally -- the patient generally is in  
 22 the -- is in the reclining position, in the supine  
 23 position, lying on the back. Occasionally, patients who  
 24 are short of breath have to be propped up just a little  
 25 bit. But as close to lying on their back is standard.

1 rhythm of the heart, whether the heart is a normal sinus  
 2 rhythm or whether it is some type of an abnormal rhythm,  
 3 with the rhythm abnormality starting in the atria or  
 4 starting in the ventricles.  
 5 You can learn about the integrity of the  
 6 atria, the two minor chambers of the heart, how big they  
 7 are, how small they are. You can learn about the  
 8 ventricles, the two major chambers of the heart, and  
 9 whether there is an enlargement of the left ventricle,  
 10 whether there is an enlargement of the right ventricle.  
 11 You can often see evidence for pulmonary heart  
 12 disease, a heart condition associated with chronic lung  
 13 disease. You can see evidence for damage to the heart  
 14 that occurs in the presence of a prior or an acute heart  
 15 attack or myocardial infarction. You can see congenital  
 16 heart problems in the electrocardiogram.  
 17 Those are just a very few of the things that  
 18 you can see.  
 19 Q Can you measure pain through an EKG?  
 20 A No.  
 21 Q Would you agree that good technique is  
 22 essential in acquiring an accurate EKG?  
 23 A Yes. There is a certain amount of standard  
 24 technique that is essential in acquiring an  
 25 electrocardiogram.

1 Q My question was, Is it important that they be  
 2 relaxed for an accurate EKG?  
 3 A Only from the standpoint of not getting any  
 4 muscle tremor artifact in the electrocardiogram.  
 5 Q Is it important that the skin be cleaned and  
 6 lightly abraded where the electrodes are attached?  
 7 A Yes, sir.  
 8 Q Is it important that the electrode pads be  
 9 placed firmly on the skin in correct positions of the  
 10 chest?  
 11 A Yes, sir.  
 12 Q Should you ensure that the limb leads are not  
 13 transposed?  
 14 A Well, you don't have to worry about that  
 15 because, as soon as an electrocardiogram is taken and  
 16 the technician brings it over to electrocardiographer,  
 17 he'll see in a minute whether the limb leads are  
 18 transposed and he will say to the technician, Hey,  
 19 switch your right and left arm leads and do it again.  
 20 Q You reviewed many EKGs throughout the course  
 21 of your evaluation of this case; is that correct?  
 22 A Throughout the -- my course of the evaluation  
 23 of this case?  
 24 Q Correct.  
 25 A Yes, sir.

1 Q Did you administer any of these EKGs yourself?  
2 A To Mr. Williams?  
3 Q Right.  
4 A No. I just reviewed the electrocardiograms  
5 that were already taken.  
6 Q So were you there when any of these EKGs were  
7 administered to Mr. Williams?  
8 A No, sir.  
9 Q Did you have any way of knowing whether the  
10 patient was as reclined and relaxed as possible?  
11 A No, sir.  
12 Q Do you have any way of knowing whether the  
13 skin was cleansed and lightly abraded as appropriate?  
14 A No, sir. All I can tell is the  
15 electrocardiograms looked fine when I saw the actual  
16 tracing.  
17 Q Do you have any knowledge of whether the  
18 electrodes were placed firmly on the skin as they were  
19 supposed to be?  
20 A According to the electrocardiograms that I  
21 reviewed, they looked like they were; yes, sir.  
22 Q But you have no idea whether they were  
23 actually done, independent knowledge of whether they  
24 were actually done?  
25 A No. I would be very surprised if they weren't

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1 patients will have serious chest pain that does not show  
2 up on an EKG?  
3 A Yes, sir.  
4 Q How probable is it that a patient that does  
5 not have a heart condition will have an EKG result that  
6 appears to show that he does have a heart condition? In  
7 other words, how probable is it that you will have a  
8 false positive?  
9 MR. MCDONOUGH: Objection; vague and  
10 ambiguous.  
11 THE WITNESS: Very, very, very improbable.  
12 BY MR. CALABRO  
13 Q I'd like to go back to Exhibit 29 that you  
14 have there in front of you. We already talked about how  
15 that note has noted that there is an old infarct in the  
16 EKG.  
17 A Question mark, old infarct.  
18 Q Question mark, old infarct on the EKG?  
19 A Yes, sir.  
20 Q And then under "A" it says, No. 1, question  
21 mark, angina; is that right?  
22 A Yes, sir.  
23 Q "A" means assessment, typically?  
24 A Yes, sir.  
25 MR. CALABRO: Okay. I'm finished with that

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1 done in the appropriate manner.  
2 Q How probable is it that a patient will have  
3 serious chest pain that does not show up on an EKG?  
4 MR. MCDONOUGH: Objection; calls for  
5 speculation.  
6 THE WITNESS: Can you repeat that question  
7 again.  
8 BY MR. CALABRO  
9 Q Sure. How probable is it that a patient will  
10 have chest pain that does not show up on an EKG?  
11 A That happens frequently.  
12 Q Does it frequently happen that a patient will  
13 have serious chest pain that does not show up on an EKG?  
14 MR. MCDONOUGH: Objection; vague and  
15 ambiguous.  
16 THE WITNESS: I wouldn't say frequent, but let  
17 me use the term "not infrequent."  
18 BY MR. CALABRO  
19 Q It is not -- it is possible that serious chest  
20 pain -- a patient -- let me start again.  
21 It's possible that a patient will have serious  
22 chest pain that does not show up on an EKG?  
23 A Sure. Or a person can have a massive heart  
24 attack and have no chest pain at all.  
25 Q And you say that it's not infrequent that

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1 exhibit. I'll take that back from you. And then let's  
2 look at the next one, which will be 30.  
3 (Deposition Exhibit 30 was marked.)  
4 BY MR. CALABRO  
5 Q These are notes dated June 17th, 2000.  
6 A Yes, sir.  
7 Q If we look at the "S" about halfway down,  
8 let's see if we can make this out together. Well, let's  
9 just start at the "S." Episodes of -- can you help me  
10 out there? Midsternal chest pain?  
11 A Midsternal chest pain.  
12 Q During the past two months.  
13 A Right.  
14 Q "This a.m." -- it looks like a "C" equals nine  
15 something. Do you see what that -- can you make that  
16 out?  
17 MR. MCDONOUGH: Objection; calls for  
18 speculation.  
19 THE WITNESS: I guess it must mean around  
20 9:00 a.m.  
21 BY MR. CALABRO  
22 Q Oh, those look like parentheses, then.  
23 Developed midsternal chest pain that has  
24 increased and decreased over a four- to  
25 five-hour period. Max of five on a scale of

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1 zero to ten.  
 2 A Yes.  
 3 Q "Currently EKG shows at 3:49 NSR."  
 4 Do you know what NSR could mean?  
 5 A Normal sinus rhythm.  
 6 Q "With no acute ST changes."  
 7 A Correct.  
 8 Q "ST" then would be referred to the ST segment  
 9 of the EKG.  
 10 A Right.  
 11 Q If we look at "A," again the assessment, that  
 12 says, Midsternal chest pain times four hours.  
 13 A Correct.  
 14 Q Meaning that it's been going on for four  
 15 hours?  
 16 A Right.  
 17 Q Then underlined it says "most likely unstable  
 18 angina"?  
 19 A Right.  
 20 Q "But need to R/O MI." Do you know what "R/O"  
 21 stands for?  
 22 A Rule out.  
 23 Q Rule out. And "MI" means myocardial  
 24 infarction?  
 25 A Correct.

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1 BY MR. CALABRO  
 2 Q Is that the conclusion that you would draw if  
 3 you were relying on this during your medical evaluation?  
 4 A Yes, sir.  
 5 MR. CALABRO: I'll take that back from you,  
 6 please.  
 7 This will be 31.  
 8 (Deposition Exhibit 31 was marked.)  
 9 BY MR. CALABRO  
 10 Q Now, this is a medical report of injury dated  
 11 June 17th, it looks like.  
 12 A Right.  
 13 Q It looks like John Parsons again filled this  
 14 out?  
 15 MR. MCDONOUGH: Objection; calls for  
 16 speculation.  
 17 BY MR. CALABRO  
 18 Q Or at least signed it.  
 19 A Yes, sir.  
 20 Q Again, he's noted at the bottom there:  
 21 Unstable angina but need to rule out  
 22 myocardial infarction.  
 23 A Correct.  
 24 Q Does it appear that he's made a diagnosis of  
 25 unstable angina?

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1 Q That's another name for a heart attack; is  
 2 that right?  
 3 A Correct.  
 4 Q And then it says enzymes?  
 5 A No. It says, But need to rule out myocardial  
 6 infarction by enzymes.  
 7 Q Oh, I see. And then can you make out the rest  
 8 of that?  
 9 "Dr. Steinberg does not want this done  
 10 in infirmary."  
 11 A Correct.  
 12 Q Do you have any idea why a doctor would not  
 13 want this done in an infirmary?  
 14 A I have no idea.  
 15 MR. MCDONOUGH: Objection; calls for  
 16 speculation.  
 17 BY MR. CALABRO  
 18 Q The end of "P," the very end, we see "John  
 19 Parsons, M.D."  
 20 A Right.  
 21 Q Does it appear that John Parsons wrote this  
 22 record?  
 23 MR. MCDONOUGH: Objection; calls for  
 24 speculation.  
 25 THE WITNESS: It appears that way; yes, sir.

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1 MR. MCDONOUGH: Objection; calls for  
 2 speculation.  
 3 THE WITNESS: Well, it doesn't say --  
 4 BY MR. CALABRO  
 5 Q If you see right above his name at the very  
 6 bottom, right-hand corner it says "Prognosis" and then  
 7 it says:  
 8 Unstable angina but need to rule out  
 9 myocardial infarction.  
 10 A I'm not sure that I'm looking at the same  
 11 thing you are.  
 12 Q Sure. If you look at "Prognosis" --  
 13 A Yes.  
 14 Q -- and then it says over here --  
 15 A Oh, I see. Okay.  
 16 Q Unstable angina but need to rule out  
 17 myocardial infarction.  
 18 A Yes, he wrote it down there.  
 19 Q Does that appear to be his diagnosis?  
 20 A It appears to be. Although, under "Diagnostic  
 21 Impression" above he just left that blank. But it seems  
 22 that that's what he stated.  
 23 Q If we look up at top of the record, it says  
 24 "Mode of Arrival, ambulatory to clinic." Do you see  
 25 that, ambulatory to clinic?

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1 A Oh, yes.  
2 Q And then when he talks -- under the sort of  
3 description of the problem it says that:  
4 Inmate states he was first seen for  
5 chest pain June 12, 2000.  
6 And is that, Received NTG?  
7 A Nitroglycerin.  
8 Q So he received nitroglycerin on June 12,  
9 right?  
10 A Yes, sir.  
11 Q Had delay trying nitroglycerin due to  
12 fear. Had some mild to moderate chest pain  
13 through the night last night, worsening  
14 around 9:00 o'clock and further at  
15 1:00 o'clock in the afternoon. Approached  
16 MTA at 1420 hours and was persuaded to take  
17 first nitroglycerin tablet. Although  
18 allowing greater than five M --  
19 Do you know what that means? More than five  
20 minute intervals between pills?  
21 A Yes.  
22 Q Left chest pain decreased only from five  
23 out of a ten scale to two out of a ten scale  
24 after three doses.  
25 Does that appear right?

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1 A Yes, correct.  
2 Q Also --  
3 I can't make out the next one. Complains of?  
4 A Complains of.  
5 Q -- dull substernal pressure and left arm  
6 fatigue ache.  
7 Is that right?  
8 A Correct.  
9 Q Denies shortness of breath, nausea or  
10 neck/jaw pain.  
11 A Right.  
12 Q No other significant personal health --  
13 And is that "HX" history? Health history?  
14 A Right.  
15 Q Mother developed cardio irregularities  
16 around age 69 and died of same at age 76.  
17 A Right.  
18 Q Now, having a slight decrease in pain after  
19 three doses of nitroglycerin, is that consistent with  
20 the diagnosis of unstable angina?  
21 A It might be consistent with a lot of things.  
22 Q It's certainly not inconsistent with the  
23 diagnosis.  
24 A It's not inconsistent with it. It might be  
25 consistent with reducing the chest pain of angina, or he

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1 could be having chest pain from some other completely  
2 different cause that just coincidentally got better.  
3 There are other causes of chest pain, as I told you  
4 before: Gastrointestinal and pulmonary and  
5 musculoskeletal.  
6 Q This dull substernal pressure and left arm  
7 fatigue, is that consistent with a diagnosis of unstable  
8 angina?  
9 A Certainly could be; yes, sir.  
10 Q That his mother developed cardiac  
11 irregularities around 69 and died of a heart problem at  
12 76, would this reference indicate some degree of family  
13 history with heart disease?  
14 A Yes.  
15 Q What impact would that have on Mr. Williams'  
16 heart condition, if any?  
17 A Well, that would be a risk factor for the  
18 development of heart disease. If it's in your parents  
19 and grandparents and brothers and sisters, you have a  
20 better chance of getting it yourself.  
21 MR. CALABRO: Next one, I believe, is 32.  
22 (Deposition Exhibit 32 was marked.)  
23 BY MR. CALABRO  
24 Q This appears to be a physician's order; is  
25 that right?

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1 A Yes, sir.  
2 Q Looks like on June 17th he's admitting him to  
3 the infirmary?  
4 MR. MCDONOUGH: Objection; calls for  
5 speculation.  
6 THE WITNESS: I don't know where he's  
7 admitting him, but this is a physician's order.  
8 BY MR. CALABRO  
9 Q If you look at Line 1 there it says, "Admit to  
10 infirmary."  
11 A Yes.  
12 Q Do you agree with me that it looks like he's  
13 being admitted to the infirmary?  
14 A Yes, sir.  
15 Q No. 2 there, it says, "Unstable angina."  
16 A Yes, sir.  
17 Q And if you had diagnosed somebody with  
18 unstable angina, would you admit them to the infirmary  
19 or to see a doctor?  
20 MR. MCDONOUGH: Objection; calls for  
21 speculation.  
22 THE WITNESS: No.  
23 BY MR. CALABRO  
24 Q No?  
25 A I would admit them to the hospital.

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1 Q You would admit them to the hospital. Okay.  
 2 A Unless you call an infirmary and a hospital  
 3 the same thing. To me, it's different.  
 4 Q What's the difference between an infirmary and  
 5 a hospital?  
 6 A Well, an infirmary sounds to me more like an  
 7 out-patient type of treatment center. If I had a  
 8 patient that I knew had unstable angina, I would  
 9 immediately admit them to a hospital for specific  
 10 cardiac tests, such as a cardiac catheterization and  
 11 coronary angiogram.  
 12 MR. CALABRO: This is going to be the next  
 13 exhibit. I think it's 33.  
 14 (Deposition Exhibit 33 was marked.)  
 15 BY MR. CALABRO  
 16 Q If we look at this, it says, "Admission  
 17 Diagnosis" on the front page, "Midsternal chest pain;  
 18 unstable angina; gastritis; status post recent tooth  
 19 extraction." Right?  
 20 A Yes, sir.  
 21 Q Chief complaint, he talks about a male who  
 22 smokes.  
 23 A Yes, sir.  
 24 Q Has a cholesterol in the range of a normal at  
 25 170.

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1 A Yes, sir.  
 2 Q Complaining of intermittent midsternal chest  
 3 pain for the last two months.  
 4 A Uh-huh. Yes, sir.  
 5 Q "These chest pains are not clearly  
 6 associated with exercise."  
 7 A Right.  
 8 Q "... he hasn't been doing any  
 9 strenuous exercise."  
 10 A Correct.  
 11 MR. MCDONOUGH: Objection; mischaracterization  
 12 of the document.  
 13 BY MR. CALABRO  
 14 Q "... had about four to five hours of  
 15 moderate midsternal chest pains."  
 16 A Right.  
 17 Q "This was helped by sublingual  
 18 nitroglycerin."  
 19 A Right.  
 20 Q He was sent to the emergency room where he was  
 21 ruled out for a myocardial infarction by enzymes.  
 22 A Right.  
 23 Q Came back to the infirmary, and there he  
 24 appeared to be comfortable.  
 25 A Correct.

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1 Q That's the doctor's description of the  
 2 complaint?  
 3 A Correct.  
 4 Q If you go to the next page under "Cardiac," it  
 5 says "Cardiovascular: S1, S2 present" at the very top  
 6 of the page.  
 7 A I see that.  
 8 Q What does that mean, "S1, S2 present"?  
 9 A His first and second heart sounds.  
 10 Q So is that normal, "S1, S2 present"?  
 11 A If you don't have a first and second heart  
 12 sound, you're in big trouble.  
 13 Q Does that just mean that your heart's beating?  
 14 A It means that your heart is not beating. S1  
 15 and S2 means the heart is beating.  
 16 Q So we look at the diagnosis there, and it  
 17 says, "midsternal chest pain" and then "unstable angina"  
 18 again.  
 19 A Right.  
 20 Q Would you -- based on this -- based on this  
 21 doctor's description of the complaint, would you have  
 22 any reason to doubt or call into question his diagnosis  
 23 of unstable angina?  
 24 MR. MCDONOUGH: Objection; calls for  
 25 speculation.

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1 THE WITNESS: Well, no. If he wrote it down  
 2 there, I'd have no basis for saying it wasn't unstable  
 3 angina. I --  
 4 BY MR. CALABRO  
 5 Q Does the description of his -- of  
 6 Mr. Williams' complaint, is that consistent with the  
 7 diagnosis of unstable angina?  
 8 A It's consistent with unstable angina, but his  
 9 treatment plan is not consistent with unstable angina.  
 10 MR. CALABRO: Okay. That's it. Let's go to  
 11 the next one.  
 12 (Deposition Exhibit 34 was marked.)  
 13 BY MR. CALABRO  
 14 Q Take a minute to look at that. That looks  
 15 like a -- if you look at the top, left-hand corner, it  
 16 looks like a form that says "request for services."  
 17 A Yes, sir.  
 18 Q At the bottom it's signed by John Parsons,  
 19 M.D.  
 20 A Yes, sir.  
 21 Q If you look up there, it says, "Principal  
 22 Diagnosis: Chest pains, unstable angina."  
 23 A I see it.  
 24 Q It says, "Requested Service(s): Cardiology  
 25 consult and exercise stress test."

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1 A Right.  
 2 Q Looks like -- and then it looks like he's  
 3 marked the box that says "Urgent" there.  
 4 A Right.  
 5 Q Would you agree that a cardiology consult  
 6 would be urgent for somebody who has an unstable angina?  
 7 A You bet.  
 8 Q In fact, he even marks over here to the right,  
 9 "Please expedite."  
 10 A Right.  
 11 Q And in the next page it says -- it looks like  
 12 a form that the State makes him fill out. It says:  
 13 Does request document that service meets  
 14 CDC definition of, quote, Medical Necessity  
 15 as stated above.  
 16 He states yes. Would you agree with him that  
 17 this would be a medical necessity?  
 18 A Yes, sir.  
 19 Q Would you also agree with him that it would  
 20 prevent a loss of life -- that it's a necessity to  
 21 prevent a loss of life?  
 22 A Yes. If it turns out that this was truly  
 23 unstable angina, it could prevent loss of life.  
 24 MR. CALABRO: Okay. Finished with that.  
 25 (Deposition Exhibit 35 was marked.)

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1 A I have no idea.  
 2 Q Keep appointment with cardiology.  
 3 All right. That's it for that one.  
 4 Do you have any other comment on this?  
 5 A Nope.  
 6 (Deposition Exhibit 36 was marked.)  
 7 BY MR. CALABRO  
 8 Q This I'm just asking for your help in seeing  
 9 if I'm missing some medical terminology. The very first  
 10 entry, it looks like it's July 26th, 2000, from John  
 11 Parsons, the doctor.  
 12 A Right.  
 13 Q Not seen today. June 22nd lab review.  
 14 Can you make out what the next line says?  
 15 A Mild anemia.  
 16 Q And then what does he say?  
 17 A Consider bowl for occult blood.  
 18 Q What does that mean?  
 19 A Well, if he wants to -- if Mr. Williams is  
 20 mildly anemic, he wants to know if he's losing blood  
 21 from someplace. And the intestinal track is one of the  
 22 first places that one looks for.  
 23 Q So this says, Consider vile, did you say?  
 24 A I think it's bowl, B-O-W-L.  
 25 Q For occult --

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1 BY MR. CALABRO  
 2 Q This appears to be dated June 23rd or 27th of  
 3 2000.  
 4 A Yes, sir.  
 5 Q We can agree that it's sometime in June of  
 6 2000, it looks like?  
 7 A Right.  
 8 Q Again, complaining of chest pain on occasion  
 9 since Jan- -- I guess that's --  
 10 A Since infirmary.  
 11 Q Since infirmary, unchanged with --  
 12 A Nitroglycerin.  
 13 Q That symbol there, is it with? Does that mean  
 14 with?  
 15 A With; that's right.  
 16 Q With nitroglycerin.  
 17 And if you look at the assessment, past  
 18 angina, rule out --  
 19 A Possible. Possible angina.  
 20 Q Oh, possible angina?  
 21 A Yes.  
 22 Q Rule out -- what is that?  
 23 A CAD, coronary artery disease.  
 24 Q Okay. Old EKG shows inferior relic. What's  
 25 an inferior relic?

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1 A For occult blood.  
 2 Q What is that?  
 3 How do you spell occult? O-c-c --  
 4 A O-C-C-U-L-T. If they can't see it in the  
 5 stool, then they will take a little specimen and put it  
 6 on some special paper and a chemical and they'll be able  
 7 to bring out microscopic amounts of blood. That's  
 8 called occult blood testing.  
 9 Q The occult being the microscopic part? Or  
 10 what is occult?  
 11 A The occult is where you can see it with  
 12 chemical application but you can't see gross bleeding  
 13 with the visual eye.  
 14 MR. CALABRO: Very good. That's it for that  
 15 one. I just couldn't read it.  
 16 MR. MCDONOUGH: What number was that, 36?  
 17 MR. CALABRO: That one was 36.  
 18 THE WITNESS: Before you leave this one, I  
 19 want to call your attention to July 11, 2000. Lab shows  
 20 positive for H pylori.  
 21 BY MR. CALABRO  
 22 Q Where is this?  
 23 A This is 7/11/2000 on Exhibit No. 36.  
 24 This man had known gastric ulcers, and he's  
 25 had known upper gastrointestinal problems. And they did

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1 tests which show H pylori bacteria, so he's had some  
 2 sort of infection in his upper gastrointestinal tract.  
 3 And that also can cause chest pain.  
 4 Q And that went into your report? Did you  
 5 consider that when you were looking at your report?  
 6 A I made mention of something like that about  
 7 his upper gastrointestinal tract causing chest pain;  
 8 yes, sir.  
 9 MR. CALABRO: Exhibit 37, I guess this is.  
 10 (Deposition Exhibit 37 was marked.)  
 11 BY MR. CALABRO  
 12 Q Exhibit 37 appears to be an EKG taken on  
 13 July 19th, 2000; is that right?  
 14 A Yes, sir.  
 15 Q By looking at this EKG, does there appear to  
 16 be anything suspect in the way that it was performed?  
 17 That is to say, we talked about various things that need  
 18 to be done to make sure that you get an accurate  
 19 recording. Is there anything that looks facially wrong?  
 20 A No, sir.  
 21 Q If you look at the top, it says that there's  
 22 "sinus rhythm with signs arrhythmia."  
 23 A Right.  
 24 Q What does that mean?  
 25 A That means that the rate goes a little faster

1 at times and a little slower at times. That's a normal  
 2 variant.  
 3 Q It also says "early repolarization."  
 4 A Yes, sir.  
 5 Q What does that mean?  
 6 A That means that the ST junction, the first  
 7 part of the ST segment, is slightly elevated. And  
 8 that's a normal variant.  
 9 Q What results when the ST segment is slightly  
 10 elevated with regard to early repolarization?  
 11 A What results? When the -- when the ST is  
 12 slightly elevated, that is early repolarization.  
 13 Q What does that mean?  
 14 A Repolarization means that the electrical  
 15 consistency of the heart is chemically re-established.  
 16 When you look at the small, initial impulse, the P  
 17 wave --  
 18 Q Which number are we looking at here?  
 19 A Any one of these.  
 20 Q Okay.  
 21 A Any one of these beats, you can see an  
 22 initial --  
 23 Q Right. P wave?  
 24 A P wave.  
 25 Q Sure.

1 A That's electrical activation of the atria, the  
 2 smaller chambers of the heart. Then this spike that you  
 3 see in every single one of these beats, that's  
 4 electrical activity of the ventricles.  
 5 Q Uh-huh.  
 6 A And then the T wave is electrical  
 7 repolarization of the heart. That's reconstitution  
 8 electrochemically of the heart after the beat has  
 9 transpired. And if the ST segment is slightly elevated,  
 10 that means early repolarization. That's a term that  
 11 describes that.  
 12 Q I understand that. I guess I'm not being  
 13 clear. My question is, What does that mean to a person  
 14 in everyday life if they have early repolarization?  
 15 A It doesn't mean a thing.  
 16 Q No extra pain?  
 17 A No.  
 18 Q No more likelihood of having any kind of  
 19 disease?  
 20 A No, sir. Sometimes you will see markedly  
 21 elevated ST segments when a person is having an acute  
 22 heart attack. But in that case the ST segment is  
 23 straightened; it's not humpback in configuration.  
 24 Or sometimes you will see early repolarization  
 25 in a person who is having a pericarditis, an

1 inflammation of the outside lining of the heart. But  
 2 that wouldn't be here because that's usually associated  
 3 with a rapid heartbeat of a hundred beats per minute or  
 4 greater. And here, this is beating at the rate of 67  
 5 beats per minute, too slow to be a pericarditis.  
 6 This is something that you see in many, many,  
 7 many normal people.  
 8 Q What I find interesting looking at some of  
 9 these EKGs is that the QRS complex, I guess is what it's  
 10 referred to --  
 11 A Yes.  
 12 Q -- sometimes looks like it goes up and  
 13 sometimes it looks like to goes down. Right? If you  
 14 look at this one, it looks like it's going up; and this  
 15 one, it looks like it's going down.  
 16 A Sure.  
 17 Q Why is it that sometimes it goes up and  
 18 sometimes it goes down?  
 19 A It's the same heart and the same electrical  
 20 transmission throughout the heart. But all of these are  
 21 leads. There's a series of 12 leads in this  
 22 electrocardiogram, and these leads give you different  
 23 views of the heart.  
 24 Q I see.  
 25 A And sometimes, when you have a view of the

1 heart, say, in V2, which is right here, the  
2 electrical -- the sum total of the electrical impulses  
3 go away from this lead; and therefore, the spikes go  
4 down. When you go out to V6 or V5, the view of the  
5 heart is such that the electrical impulses go toward  
6 that lead; and therefore, the electrical impulses are  
7 upright.  
8 Q So it all has to do with the relative position  
9 on the body?  
10 A It has to do with the --  
11 Q The electrode's relative position on the body?  
12 A That's right.  
13 Q So when we read this, it looks like time  
14 passes and there is some sort of electrical indication  
15 as time passes.  
16 A That's right.  
17 Well, what do you mean "as time passes"?  
18 Q So each one of these boxes is, like, .2  
19 seconds or something, right?  
20 A That's right.  
21 Q So by that I mean time is passing and there's  
22 an electrical current that is making this line.  
23 A That's right.  
24 Q Does that mean that V1 is being read before V4  
25 is being read?

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1 A No. They are all being read at the same time.  
2 They are all being produced at the same time.  
3 Q Why does V1 appear here -- at least appear to  
4 be temporally before V4?  
5 Do you understand my question?  
6 A It's just mounted that way. But in all  
7 actuality, all of these beats are occurring at exactly  
8 the same time.  
9 Q I see.  
10 A Now, you may not be able to take them on  
11 identically -- well, let's see. Can we on our new  
12 electrocardiograms? You'll be able to take the entire  
13 electrocardiogram within a matter of a second or two.  
14 But I will guarantee you that this configuration of the  
15 QRS in V1 is going on at the same time that this  
16 configuration in V5 is going on. And the same thing in  
17 Leads I, II, III, aVR, aVL, aVF.  
18 Q So it's inaccurate to read this as, This  
19 happened before this, which happened before this, which  
20 happened before this, which happened before this, which  
21 happened before this?  
22 A That's correct.  
23 Q That's an incorrect way to read this?  
24 A That's totally incorrect. They are all  
25 happening at the same time. If there is any temporal

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1 difference between one lead to another, that's just due  
2 to the mechanics of taking the electrocardiogram. And  
3 that's only a matter of a second or two.  
4 Q I'd like to look at -- if we look at V2 to  
5 V3 --  
6 A Yes.  
7 Q -- it looks like the ST segment in V2 is more  
8 elevated than the ST segment in V3.  
9 A Right.  
10 Q Should that be any cause for concern?  
11 A I don't think so. What is the date? This is  
12 7/19/2000. I don't think so. This is an early  
13 repolarization that you will see in a lot of people, a  
14 lot of normal people. But every now and then -- say,  
15 1 percent of the time -- you'll get fooled and this  
16 might mean an acute current of injury.  
17 Q In your opinion, why was this labeled a  
18 borderline ECG?  
19 A Probably on the basis of early repolarization.  
20 Dr. Avina was not quite sure if that was normal or not  
21 normal. The term "borderline" -- the term "borderline"  
22 among electrocardiographers means, I see something here  
23 and I'm not quite sure whether it's normal or abnormal.  
24 Okay? If I were reading this, I would have called it  
25 normal.

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1 MR. CALABRO: Okay. All right. Next exhibit  
2 will be 38.  
3 (Deposition Exhibit 38 was marked.)  
4 BY MR. CALABRO  
5 Q This is Exhibit 38. On November 22nd -- or  
6 excuse me -- November 26th, the second entry, it says,  
7 "Old inferior MI unchanged EKG." Do you see that?  
8 A I see that; yes, sir.  
9 Q Looks like it's from Dr. Brasell?  
10 A I'm not sure who the doctor is. But if you  
11 say that's who it is, then I'll accept that.  
12 MR. MCDONOUGH: Objection; calls for  
13 speculation.  
14 BY MR. CALABRO  
15 Q What inferior MI is he referring to in this  
16 case?  
17 A I don't know because I didn't see any  
18 electrocardiographic evidence for a myocardial  
19 infarction until December of 2001. So I can't help you  
20 there.  
21 Q Is it possible that he was referring to the  
22 unstable angina that we saw earlier with Dr. Parsons?  
23 MR. MCDONOUGH: Objection; calls for  
24 speculation.  
25 THE WITNESS: I don't think so because

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1 unstable angina and a myocardial infarction are two  
2 different things. But he says "old inferior MI  
3 unchanged EKG." So it's obvious that he's referring to  
4 some type of electrocardiogram. And I didn't see one in  
5 the records that demonstrated a myocardial infarction.  
6 BY MR. CALABRO  
7 Q Do you know if you reviewed an EKG from  
8 November 2000?  
9 A I reviewed electrocardiograms -- I reviewed  
10 every single electrocardiogram in this collection of  
11 medical records. And I don't recall that specifically;  
12 no, sir.  
13 MR. CALABRO: That's it for this one.  
14 THE WITNESS: Before we go on, can I ask you a  
15 question? I know you're supposed to be asking the  
16 questions, but in order --  
17 MR. CALABRO: If we go off the record, you can  
18 ask me whatever you want.  
19 THE WITNESS: Well, no, I think it should be  
20 on the record. This is very important. This isn't  
21 going to detract from anything. If you don't want me  
22 to, then I won't.  
23 MR. CALABRO: I'm happy to go off the record  
24 and talk about it, then.  
25 THE WITNESS: No. I thought I would be

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1 helpful to you on the record. But if you don't want me  
2 to be helpful, then I won't.  
3 MR. CALABRO: This will be 39.  
4 (Deposition Exhibit 39 was marked.)  
5 BY MR. CALABRO  
6 Q This again appears to be progress notes.  
7 A Yes, sir.  
8 Q If we look at the second entry -- so the  
9 second half of the page --  
10 A Yes, sir.  
11 Q -- it says 46-year-old male --  
12 A Yes, sir.  
13 Q -- complaints of chest pains.  
14 A Yes, sir.  
15 Q EKG, possible old infarct?  
16 A Yes, sir.  
17 Q History of cocaine use.  
18 A Yes, sir.  
19 Q What effect would a history of cocaine use  
20 have on a heart?  
21 A That's exactly what I was going to ask you:  
22 Is he taking any illicit drugs during his incarceration?  
23 Because cocaine can cause coronary artery spasm, which  
24 can cause angina, and it can cause myocardial  
25 infarction.

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1 Dextroamphetamine, or speed, can cause  
2 coronary artery spasm, which in some people can cause  
3 angina and a myocardial infarction. Marijuana in some  
4 sensitive people can cause coronary artery spasm and a  
5 myocardial infarction.  
6 And if you look up in the initial entry,  
7 medications, Cafergot, among other things. He was given  
8 Cafergot for his migraine headaches. Cafergot is a  
9 medication that many of us cardiologists eschew because  
10 it will cause spasm of arterials all over the body. And  
11 more than one person has had a myocardial infarction due  
12 to Cafergot therapy.  
13 Q If it appears that Mr. Williams' medical  
14 history had substantial use of Cafergot, would that  
15 affect your opinion in this case today, your evaluation  
16 of Mr. Williams?  
17 A I don't think so, no.  
18 Q When we just talked about --  
19 A Let's go back on that: My opinion that I'm  
20 giving you in this deposition is including Cafergot --  
21 Q Okay.  
22 A -- from the standpoint of coronary artery  
23 spasm.  
24 Q Okay.  
25 A When I rendered an opinion in my report, I

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1 talked about coronary artery disease. But the one thing  
2 that I didn't talk about in this report is a possibility  
3 that other things can cause infarcts and angina. And  
4 those other things are items that will cause coronary  
5 artery spasm: Cafergot being one; cocaine being one;  
6 dextroamphetamines, or speed, being another.  
7 Q Okay. Well, we'll get to that in -- a little  
8 bit later.  
9 A Okay.  
10 Q But when we were talking about cocaine, when  
11 you just said that cocaine can cause these spasms --  
12 A Yes, sir.  
13 Q -- is that when the cocaine is being used at  
14 the time or immediately thereafter only?  
15 A When it's being used at the time or  
16 immediately thereafter. That's why I asked you whether  
17 he was possibly -- after all, you're his counsel. You  
18 would know whether he was on or receiving somehow  
19 illicit medications or drugs while incarcerated.  
20 Q Would chronic use of cocaine affect coronary  
21 artery disease?  
22 A Chronic use of cocaine can cause chronic,  
23 recurring angina. Chronic use of cocaine can cause  
24 myocardial infarctions.  
25 Q Does chronic use of cocaine have any effect on

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17 (Pages 65 to 68)

1 the lining of arteries and vessels within the body?  
2 A I'm not sure that it has any lasting effect on  
3 the lining of the body -- of the arteries of a body. It  
4 just causes spasm. And then as soon as that medication  
5 wears off -- if the patient hasn't died from a cardiac  
6 arrhythmia, a ventricular fibrillation or a massive  
7 myocardial infarction -- then the effects and the pain  
8 and everything will go away.  
9 Q Or if a person was a chronic user of cocaine,  
10 would the effects of that chronic use accumulate within  
11 the patient?  
12 A No. He would just have recurrent hits from  
13 the standpoint of his heart.  
14 Q Would there be any hardening of the vessels or  
15 arteries as a result of chronic use of cocaine?  
16 A Not that I'm aware of; no, sir.  
17 Q I understand that there is a lot of research  
18 into the cocaine effect on coronary artery disease in  
19 the literature; is that right? Or do you not know?  
20 A Yeah, there is a lot of discussion.  
21 Q What does some of that discussion say with  
22 respect to those arteries and vessels?  
23 A Well, I haven't seen anything that indicates  
24 deterioration of the vessels themselves. Just as I told  
25 you, cocaine can cause coronary artery spasm. This will

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1 produce angina, can produce a myocardial infarction. It  
2 can produce sudden death from a cardiac arrhythmia or  
3 ventricular fibrillation.  
4 Q Does it at all affect long-term blockage of  
5 arteries and vessels in the body?  
6 A Generally not; no, sir.  
7 MR. CALABRO: All right. This will be 40.  
8 (Deposition Exhibit 40 was marked.)  
9 BY MR. CALABRO  
10 Q This again appears to be a medical report of  
11 injury.  
12 MR. MCDONOUGH: Do you have three documents  
13 there?  
14 MR. CALABRO: Three pages in this exhibit.  
15 THE WITNESS: Yes, sir.  
16 BY MR. CALABRO  
17 Q If we look at the nurse's history of  
18 occurrence, it says -- I can't really make this out. It  
19 says:  
20 Assessed inmate in cell. Complaining of  
21 chest pain. Grabbing on left chest.  
22 Complains of dizziness.  
23 A Correct.  
24 Q Nondiaphoretic?  
25 A Nondiaphoretic.

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1 Q Phoretic.  
2 A Yes.  
3 Q What does that mean, nondiaphoretic?  
4 A He's not sweating. We doctors have to put in  
5 these fancy terms to confuse everybody. It would have  
6 been easier if we just put, Wasn't sweating.  
7 Q Right. No res -- no respiration distress?  
8 A No, respiratory distress. Again, they could  
9 have just put down, No SOB, no shortness of breath.  
10 Q But then in the next line it says, But voiced  
11 episodes of SOB, which is shortness of breath, during  
12 chest pain.  
13 A That's what it says.  
14 Q Are you skeptical of that claim?  
15 A No. Whatever she put down, I'll accept. I --  
16 Q What does shortness of breath --  
17 A Pardon me. Let me just answer that further.  
18 What I gather from that, he didn't look like  
19 he was in any respiratory difficulty but he must have  
20 told her that, when he had the chest pain, he would also  
21 have associated trouble breathing. So it would be  
22 intermittent.  
23 Q When we look down at treatment, it says -- it  
24 looks like, Transport to the CH -- or does that initial  
25 mean anything medically? -- for further eval.

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1 A "CH" could be county hospital. I don't know  
2 what it could be.  
3 Q All right.  
4 A They must be a little confused because then  
5 they are giving him Prilosec, which is a stomach pill,  
6 as well as nitroglycerin. So they are covering all the  
7 bases.  
8 Q The next page, it says March 21, '02. It  
9 says, EKG viewed -- I'm sorry. EKG reviewed, showed NSR  
10 rate 78.  
11 A Normal sinus rhythm rate's 70/78.  
12 Q And that's normal?  
13 A Correct.  
14 Q With old inferior infarct Q's III and VI.  
15 Is that Quadrants 3 and 6?  
16 A No. Q is three and VI.  
17 Q Three and VI.  
18 A VI.  
19 Q So I thought I had attached --  
20 A There's an electrocardiogram attached.  
21 Q But it doesn't look like it's the right one  
22 because the date is off.  
23 A Yes, but this is an important  
24 electrocardiogram.  
25 MR. CALABRO: Let's go ahead and make this a

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1 different exhibit, then. Let's make the  
 2 electrocardiogram Exhibit 41.  
 3 (Deposition Exhibit 41 was marked.)  
 4 THE WITNESS: Did you want this Exhibit 40  
 5 back, then? Are we all through with 40?  
 6 MR. CALABRO: Yes. Let's stop one second.  
 7 No, we're okay. Let's stop with that. Let's  
 8 look at 41.  
 9 THE WITNESS: Okay.  
 10 BY MR. CALABRO  
 11 Q Now, here we have -- we'll just look again.  
 12 This is another EKG taken on December 20th of 2001?  
 13 A Correct.  
 14 Q Does there appear to be anything that would  
 15 indicate to you that the EKG was not taken properly?  
 16 A No, sir.  
 17 Q It looks like there is a sinus rhythm, it says  
 18 at the top.  
 19 A That's correct.  
 20 Q And what is a sinus rhythm?  
 21 A It means that the electrical impulse starts in  
 22 the atria and they go down to the ventricles and then  
 23 they are repolarized, as evidenced by the T wave. And  
 24 this happens over and over and over again in the  
 25 sequential manner. That's called a sinus rhythm because

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1 the electrical impulse starts in the sinus node in the  
 2 right atrium.  
 3 Q Why would a doctor put "sinus rhythm" at the  
 4 top of this report? Is there any medical reason for  
 5 doing so?  
 6 A Just to let the reader know that it's a  
 7 regular rhythm without any arrhythmias.  
 8 Q I got it.  
 9 Then it says, Probable inferior infarct?  
 10 A That's correct.  
 11 Q What does it mean by "inferior infarct"?  
 12 A The inferior leads are Leads Roman II, Roman  
 13 III and aVF. And if you --  
 14 Q So Roman II, Roman III and aVF.  
 15 A And those are the inferior leads of the heart  
 16 that indicate the bottom of the heart, hence inferior.  
 17 Q We're using "inferior" meaning bottom?  
 18 A Inferior means bottom. And in this case there  
 19 are QS waves in Leads III and aVF. And these represent  
 20 an inferior wall myocardial infarction of indeterminate  
 21 age. If I were reading that, I would have left off the  
 22 word "probable." I would have put down, Inferior wall  
 23 myocardial infarction of indeterminate age.  
 24 Q Can you show me what the waves would look  
 25 like?

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1 A These downward deflexions, waves, there and  
 2 there. Any upward deflection is called an R wave.  
 3 Q Right.  
 4 A Any initial downward deflexion is called a Q  
 5 wave. And then if you have an R wave -- if you have --  
 6 if you have an R wave and then a downward deflexion  
 7 following a little R wave, then that's an S wave. But  
 8 if the downward deflexion comes before any R wave, it's  
 9 called a Q wave. Or if that's all you have is a  
 10 downward deflexion without any upward or R waves, then  
 11 it's called a QS wave. And this is highly abnormal.  
 12 And when you see this in III and aVF, the two  
 13 inferior leads -- two out of the three inferior leads,  
 14 that means inferior wall myocardial infarction. And in  
 15 fact, this is the very first time in all of the  
 16 electrocardiograms that I saw there is a representation  
 17 of a prior myocardial infarction.  
 18 Now, I see the information that we went over  
 19 in the previous exhibits where they discussed inferior  
 20 wall infarction. I don't recall seeing those. Maybe  
 21 those electrocardiograms are stuck away in some room  
 22 over there at the clinic and they didn't make it into  
 23 the records.  
 24 What I did just prior to meeting with  
 25 Mr. McDonough was I went over every single one of these

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1 electrocardiograms only to see when the first time was  
 2 that I could find evidence for an inferior wall  
 3 infarction, and this was the date.  
 4 Q Can you tell -- I know that this is age  
 5 undetermined. Does that mean that they don't know when  
 6 this infarct occurred?  
 7 A They don't know when this infarct occurred.  
 8 But as I stated in my report, I saw other  
 9 electrocardiograms taken in the year 2000 that failed to  
 10 reveal a myocardial infarction. So it occurred sometime  
 11 between July of 2000 and December of 2001.  
 12 Q Okay. If we look at V4 and V5 --  
 13 A Yes, sir.  
 14 Q -- again it looks like a slight ST depression.  
 15 A No.  
 16 Q No?  
 17 A There's no ST depression. There's --  
 18 Q It looks like the ST in V5 does not go as high  
 19 as the ST in V4.  
 20 A What are you looking at?  
 21 Q If you look at this right here, that doesn't  
 22 look like -- that looks like a higher slope, I guess,  
 23 than this one here.  
 24 A If you take a look at the ST junction --  
 25 that's the beginning of the T wave -- you'll see that

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1 that is exactly the same in -- with respect to the QRS  
2 complex.  
3 Q So the critical inquiry is the junction?  
4 A It's the junction. And the junction will set  
5 the tone for ST elevation or depression. And there is  
6 neither ST elevation nor depression in this  
7 electrocardiogram.  
8 Because of the lack of ST elevation or  
9 depression, that's why this electrocardiogram, from a  
10 standpoint of a myocardial infarction, looks old, looks  
11 like an old myocardial infarction. If there was any ST  
12 elevation or any ST depression, then perhaps you would  
13 think maybe it's more recent, like in a matter of hours  
14 or days. Could it be a week old or two weeks old?  
15 Could be. Or it could be a year old.  
16 (Deposition Exhibit 42 was marked.)  
17 BY MR. CALABRO  
18 Q Looks like another physician's order dated --  
19 well, it looks like they are all dated March 21, '02.  
20 At least the top part is.  
21 A Right.  
22 Q I'm interested in the second entry. This  
23 says, Cardiac enzymes, CKMB, chem 25.  
24 A Right.  
25 Q Now, right before it says cardiac enzymes, do

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1 Q CK, is that -- that's creatine kinase?  
2 A Yes, creatine kinase.  
3 Q And what's the "MB" stand for?  
4 A That's the part of the creatine kinase enzyme  
5 that demonstrates heart injury.  
6 Q The Chem 25, is that the chemical panel that  
7 you referred to earlier?  
8 A Yes.  
9 Q Would that include a screening for troponin?  
10 A No. No, you have to order the troponin  
11 separately.  
12 Q Troponin. Excuse me.  
13 A Yes, the chem panel has electrolytes, sodium,  
14 potassium, chloride, protein in the blood, kidney tests,  
15 liver tests. I'm sure I'm leaving a whole bunch of  
16 things out.  
17 Q We can agree that troponin is not one of the  
18 enzymes that would be screened under a chemical panel  
19 Chem 25?  
20 A That's correct.  
21 Q Do you feel like a troponin screening would  
22 have been helpful in this case?  
23 A If you're ordering cardiac enzymes, troponins  
24 are always helpful.  
25 Q And that's because troponins are probably the

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1 you see that word that's sort of written diagonally?  
2 A Yes.  
3 Q Do you have any idea what that means?  
4 A I think that's the nurse's name, or whoever it  
5 was that acknowledged this order and made sure that it  
6 was done.  
7 Q So this is a --  
8 MR. MCDONOUGH: Is there a confusion here?  
9 There seem to be two lines there.  
10 MR. CALABRO: Oh, you're right.  
11 MR. MCDONOUGH: I don't know if you're talking  
12 about --  
13 MR. CALABRO: This one here.  
14 THE WITNESS: Right.  
15 BY MR. CALABRO  
16 Q The one above cardiac enzyme.  
17 A That's right. That's the one I'm looking at.  
18 Q You believe that's somebody's name?  
19 A I believe so.  
20 Q What does this appear to be, this entry? Does  
21 it look like they are ordering --  
22 A That's right. It was phoned in by a Dr. Naz.  
23 They ordered cardiac enzymes, consisting of CKMB  
24 enzymes, and they -- they ordered a chemical panel,  
25 Chemical Panel 25.

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1 most sensitive of the enzymes to detect?  
2 A The most sensitive; yes, sir.  
3 Q That means that there could have been an  
4 angina or some other acute cardiac event. No CKMB would  
5 have been found, but troponin could have been found?  
6 A It could have been. But I don't know what  
7 cardiac enzymes would mean. Usually when they order a  
8 test, they would order CKMB. If they are ordering  
9 cardiac enzymes, maybe that all encompasses other  
10 things, including troponins. Do you see what I'm  
11 talking about?  
12 Q I do. I see that.  
13 Later on down it says that 3/21/02, cancel  
14 discharge. Do you see that?  
15 A Yes, sir.  
16 Q Is there any indication on this page why they  
17 would cancel the discharge?  
18 A No, sir.  
19 Q So we have no idea why that is?  
20 A Correct.  
21 MR. CALABRO: Okay. Finished with that  
22 exhibit.  
23 (Discussion off the record.)  
24 (Recess.)  
25 (Deposition Exhibit 43 was marked.)

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1 BY MR. CALABRO

2 Q This appears to be a refusal of examination on  
3 March 22nd of '02.

4 A Right.

5 Q It says:

6 "Inmate leaving against medical advice.  
7 Dr. Naz spoke to inmate. Inmate's refusing  
8 housing in outpatient housing units.  
9 Refusing medical treatment and medications.  
10 Explained to inmate that refusing treatments  
11 and medications can lead to heart attack,  
12 stroke, or even the possibility of death.  
13 Inmate assumes full responsibility of  
14 consequences."

15 A That's what it says.

16 Q Do you know of what was happening around March  
17 of 2002 that would require Mr. Williams to be in the  
18 hospital or risk heart attack, stroke or the possibility  
19 of death?

20 MR. MCDONOUGH: Objection; assumes facts not  
21 in evidence.

22 THE WITNESS: I don't know, other than the  
23 fact that he had been having ongoing chest pain.

24 BY MR. CALABRO

25 Q And that chest pain could have led to a heart

1 is a block of the electrical activity going to the left  
2 ventricle, then there will be more electrical activity  
3 going to the right ventricle.

4 And this will cause what is called a left axis  
5 deviation, with a QRS in Leads II and III and aVF  
6 pointing more downward than they should. That's called  
7 a left axis deviation.

8 But the reason this has a left axis deviation  
9 is not because of a left fascicular or a left anterior  
10 fascicular block; it's because of an old inferior wall  
11 myocardial infarction.

12 Once again, you have QS waves in Leads Roman  
13 III and aVF and even a little, almost microscopic Q wave  
14 in Lead Roman II. So that's why you have a left axis  
15 deviation. If I were reading this, I would have never  
16 read it as left anterior fascicular block.

17 Q So this --

18 A And I would have also not put in "cannot rule  
19 out." I would have just put down, Old inferior wall  
20 myocardial infarction.

21 Q If it's still showing up in an EKG, the  
22 inferior infarct, does that mean that there is still  
23 damage to the heart?

24 A There is permanent damage to the heart in that  
25 area, in the inferior wall; yes, sir.

1 attack?

2 MR. MCDONOUGH: Objection; calls for  
3 speculation.

4 THE WITNESS: If this proved to be angina,  
5 then -- especially unstable angina, this could lead to a  
6 heart attack and even lead to death.

7 MR. CALABRO: Okay. This will be Exhibit 44.  
8 (Deposition Exhibit 44 was marked.)

9 BY MR. CALABRO

10 Q This appears to be EKGs performed on November  
11 9th, 2002.

12 A Yes, sir.

13 Q It says, "Normal sinus rhythm."

14 A Right.

15 Q "Left anterior fascicular block." What does  
16 that mean?

17 A Well, that is a diagnosis that is not present  
18 here.

19 Q Can you explain what a left anterior  
20 fascicular block is?

21 A Fascicular block.

22 Q Fascicular block.

23 A There are two fascicles or electrical conduits  
24 that go down the septum and supply electrical activity  
25 to both the right and the left ventricle. And if there

1 Q Does that lead him to have a greater  
2 proclivity to having a heart attack or some other heart  
3 condition in the future?

4 A The thing that caused the inferior wall  
5 infarction leads him to have a greater chance of having  
6 another heart attack in the future.

7 Q Is there any harm to having this permanent  
8 damage that was a result -- that we call this inferior  
9 infarct? Let me start again:

10 This inferior infarct is damaged muscle tissue  
11 in the heart?

12 A In the inferior portion of the heart; yes,  
13 sir.

14 Q The lower portion of the heart?

15 A Yes, sir.

16 Q How does that affect the cardiovascular  
17 system?

18 A You really can't tell by looking at the  
19 electrocardiogram. You would have to get an  
20 echocardiogram to see what the contractility of the left  
21 ventricle looks like and how much of the total of the  
22 left ventricle has been injured or damaged.

23 And you would do that by looking at the  
24 inferior wall and seeing how it moves, and you would do  
25 that also by looking at the ejection fraction. And you



1 could only get the ejection fraction by looking at an  
2 echocardiogram or by doing a cardiac catheterization.

3 The ejection fraction is that percentage of  
4 blood that is ejected with each contraction of the left  
5 ventricle. And you can see that in a doctor's office,  
6 in a cardiologist's office, such as this, by doing an  
7 echocardiogram.

8 The lower limbs of normal at rest is  
9 55 percent in a cardiologist's office. If there was  
10 massive, massive destruction of heart muscle, it would  
11 be lower than 55 percent. It may get as low as 30 or 20  
12 or 15 percent. And that doesn't augur well for  
13 longevity.

14 But many people will have heart attacks and  
15 will end up with a normal ejection fraction because  
16 other portions of the heart muscle will take over and  
17 maintain a normal ejection fraction. And with a normal  
18 ejection fraction, the circulation throughout the rest  
19 of the body will be relatively normal, at least at rest.

20 Now, he had treadmill tests, and they were  
21 also normal. So in his case everything seems to be  
22 normal.

23 Q Also on here it's indicated "Poor R wave  
24 progression."

25 A Yes.

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1 the first three pages are really unchanged one from the  
2 other, and the fourth page looks like a rhythm strip.

3 You can hardly see it. And it just shows the sinus  
4 rhythm, nothing more.

5 MR. CALABRO: We're finished with that one,  
6 then. This is 45.

7 (Deposition Exhibit 45 was marked.)

8 BY MR. CALABRO

9 Q This appears to be another physician  
10 requesting services.

11 A Yes, sir.

12 Q Principal diagnosis, coronary artery disease  
13 and ASHD.

14 A That's shorthand for arteriosclerotic heart  
15 disease.

16 Q Is that different than what you diagnose as  
17 atherosclerotic coronary artery disease? Well, I guess  
18 that wasn't your direct -- let me start again.

19 You said ASHD was atherosclerotic heart  
20 disease?

21 A Yeah, ASHD is arteriosclerotic heart disease.

22 Q Arteriosclerotic.

23 A But the more proper term is atherosclerotic  
24 coronary artery occlusive disease.

25 Q Are arteriosclerotic and atherosclerotic --

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1 Q What does that mean?

2 A That means the R wave, or the initial upward  
3 spike on the QRS complex, does not develop well in the  
4 first three leads. It --

5 Q Especially two, I guess?

6 A Yeah V2 and V3 -- V1, V2 and V3. It could  
7 mean nothing. It could mean a slight alteration in  
8 electrode placement of the heart -- of the electrodes on  
9 the chest wall. Or it could mean that he might have had  
10 a small heart attack in that -- in that area of the  
11 heart. But there is not enough evidence on the  
12 electrocardiogram to state this.

13 Q A small heart attack in addition to the  
14 inferior infarct that we've already noted?

15 A Yes, a small anterior wall infarction. That's  
16 a possibility. Not a probability, but a possibility.

17 Q Is there anything else of note on this EKG?

18 A No.

19 MR. MCDONOUGH: Are you done with just the  
20 first page or --

21 THE WITNESS: I have three pages in this  
22 exhibit. No, four pages.

23 BY MR. CALABRO

24 Q You have four pages? Oh, yes. Four pages.

25 A And they are all dated the same, and they --

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1 I'm sorry. How do you pronounce it again?

2 A Atherosclerotic.

3 Q Atherosclerotic. Are those two terms  
4 synonymous?

5 A No, not exactly. A lot of people will use  
6 them interchangeably nonetheless. Arteriosclerotic  
7 heart disease -- arteriosclerosis is disease of all of  
8 the layers of the artery. Atherosclerosis is when there  
9 is an accumulation of disease on the inner lining of the  
10 artery. That's atherosclerosis.

11 Q So he notes that the requested service is  
12 cardiology. He says that it's an urgent, and again, he  
13 cannot rule out inferior infarct, has chest pain on  
14 nitroglycerin.

15 A Right.

16 Q Why does he want to rule out inferior infarct?

17 MR. MCDONOUGH: Objection; calls for  
18 speculation.

19 THE WITNESS: I don't know. I think you can  
20 rule it in by just taking a look at the  
21 electrocardiogram. What you can't rule -- what he  
22 should have said is, Cannot rule out unstable angina.

23 You can rule out the fact that he had a heart  
24 attack, an inferior wall infarction, just as I have done  
25 by looking at those electrocardiograms. But what you

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1 want to know is, Is he having ongoing unstable angina?  
2 That might be detrimental to him if not treated  
3 appropriately.  
4 MR. CALABRO: All right. Now we're getting a  
5 little bit closer to the end of exhibits.  
6 This is 46.  
7 (Deposition Exhibit 46 was marked.)  
8 BY MR. CALABRO  
9 Q This appears to be the physician's progress  
10 notes from August 3rd, 2003.  
11 A All right.  
12 Q This was the night of Mr. Williams' -- or the  
13 morning of Mr. Williams' cell fight.  
14 A All right.  
15 Q It looks like here inmate was complaining of  
16 chest pains again. His blood pressure was 160 over 101.  
17 A Right.  
18 Q Is that high?  
19 A That's high. Anything over 140 and anything  
20 over 90 is high.  
21 Q Pulse at 100. Is that high?  
22 A That's the upper limits of normal.  
23 Q RESP 24.  
24 A That's the respiratory rate.  
25 Q Is that normal?

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1 stress can affect a sick heart. Anything that would  
2 cause a heart to work harder and require more oxygen in  
3 order to keep it functioning at a higher pace would  
4 result in more angina chest pain if the heart -- or if  
5 the arteries were clogged and they could not get  
6 adequate oxygenated blood to the heart muscle.  
7 BY MR. CALABRO  
8 Q My question was whether the OC spray could  
9 affect the heart.  
10 A Yes. If he was having trouble breathing, he  
11 would become more stressed out and that would cause a  
12 greater work of the heart, which would require more  
13 oxygenation.  
14 If he had a limited amount of oxygen going  
15 into his lungs because of the pepper spray, then he  
16 would be deprived of oxygen that he needed. I'm not  
17 saying "he" but people, patients or felons or people who  
18 get sprayed.  
19 Q Is it consistent with the facts that you  
20 evaluated in this case that the OC pepper spray caused  
21 Mr. Williams to have a hard time breathing?  
22 MR. MCDONOUGH: Objection; calls for  
23 speculation.  
24 THE WITNESS: Shortness of breath can come  
25 from two reasons: Either the pepper spray or due to his

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1 A That's high. Normal is about 10 to 12.  
2 Q What does that indicate if it's high, the  
3 respiratory rate?  
4 A It could be that he was sick, or it could be  
5 that he was tense and nervous and under stress.  
6 Q All of which would seem to be consistent after  
7 having a fight?  
8 A Absolutely. Same thing with the elevated  
9 blood pressure. That will occur with acute emotional  
10 distress or acute physical stress.  
11 Q One of the allegations that occurred -- well,  
12 not the allegations. One of the facts that happened in  
13 this case was that Mr. Williams was sprayed with OC  
14 pepper spray during the cell fight. Would that have any  
15 effect that you know of on his breathing?  
16 A It could.  
17 Q What could it -- what effect could it have?  
18 A It could irritate the bronchial lining. The  
19 linings of his bronchial tubes, they could swell and he  
20 would have trouble breathing.  
21 Q Could it have any effect on his cardiovascular  
22 system?  
23 MR. MCDONOUGH: Objection; calls for  
24 speculation.  
25 THE WITNESS: Any type of acute emotional

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1 heart condition. The heart condition itself can cause  
2 shortness of breath.  
3 BY MR. CALABRO  
4 Q If you look at the next entry -- the page is  
5 cut off, but we can probably assume that that's  
6 August 4th, 2003.  
7 A Okay. Sure.  
8 MR. MCDONOUGH: Objection; lacks foundation.  
9 BY MR. CALABRO  
10 Q Inmate Williams was brought over by  
11 correctional officers with complaints of  
12 chest pain left side running down left --  
13 A Arm.  
14 Q -- arm.  
15 What would this indicate to you?  
16 A Well, it could indicate the heart. That would  
17 be the first thing that one has to think about. It  
18 could indicate musculoskeletal pain. But of course, the  
19 heart would be right up there on top.  
20 Q Especially because of the pain radiating down  
21 his left side?  
22 A Radiating into the left arm; yes, sir.  
23 MR. CALABRO: Done with that one. Next one  
24 would be 47.  
25 (Deposition Exhibit 47 was marked.)

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23 (Pages 89 to 92)

1 BY MR. CALABRO

2 Q This is another EKG for you to review. Looks  
3 like it's from August 3rd, the same day.

4 A Right.

5 Q First indication is a sinus tachycardia?

6 A Sinus tachycardia. That's about 104 per  
7 minute. Anything that's over 100 would be tachycardia.

8 Q And what is tachycardia?

9 A Rapid. Rapid heart rate.

10 Q What would that indicate to you?

11 A It could indicate a lot of things. It could  
12 indicate that he was under stress. It could indicate  
13 that he was sick. It's nonspecific.

14 Q Just a high heart rate?

15 A Fast heart rate; yes, sir.

16 Q Then it again notes the inferior infarct. Is  
17 this the same inferior infarct that --

18 A That's right. It's an old inferior wall  
19 myocardial infarction. It's still there.

20 Q Is that what caused this abnormal ECG, or is  
21 there something else?

22 A No, that's the only thing that's abnormal.

23 Q And he notes that the left anterior fascicular  
24 block is no longer present?

25 A That's what he says, but it was never present

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1 seen thousands of similar tracings. And half the time  
2 it turns out to be enlargement, and half the time you  
3 put them under the echocardiogram machine and the left  
4 atrium is perfectly normal.

5 Q What cause for concern would an enlargement of  
6 the left atrial -- is it the valve, atrial valve?

7 A No, left atrium.

8 Q Oh, the left atrium?

9 A The left atrium is the left smaller chamber of  
10 the heart.

11 Q What cause for concern would we have if it was  
12 an enlargement of the left atrium?

13 A Well, if you do have a truly enlarged atrium,  
14 a markedly enlarged atrium, that you can demonstrate on  
15 the echocardiogram, then these people are more  
16 vulnerable to going into a cardiac arrhythmia, like  
17 atrial fibrillation.

18 Q The next thing it notes is incomplete right  
19 bundle branch block.

20 A Yes.

21 Q What is the right bundle branch block?

22 A Well, there is a little R wave going up in V1.

23 You see that R wave? That wasn't there before. An  
24 upward spike, and that wasn't there before.

25 Q So that's the one right after this thing right

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1 in the first place.

2 (Deposition Exhibit 48 was marked.)

3 BY MR. CALABRO

4 Q This appears to be an EKG from August 6th,  
5 three days later than the one we just reviewed. The  
6 second thing it notes is that there is a left atrial  
7 enlargement. Do you agree with that diagnosis?

8 A I see what he's calling, but I think that's a  
9 little bit of an overread. I don't think I would have  
10 called that; no, sir.

11 Q Where do you see what you think he was  
12 referring to as the left atrial enlargement?

13 A The P waves in V2 are a little more prominent,  
14 and the P waves in V1 are biphasic with a downward  
15 tendency.

16 Q Would you mind circling on the exhibit where  
17 you're talking about?

18 A P wave in V2 are a little more prominent. And  
19 many electrocardiographers think that, if you have a  
20 biphasic or downward element to the P wave in V1, that  
21 also signifies an enlargement of the left atrium.

22 Q Why do you think that this is an incorrect  
23 diagnosis?

24 A I don't say that it's incorrect, but I'm  
25 saying that it may be a little bit of an overread. I've

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1 here?

2 A Right after the S wave. Right after the  
3 downward complex, or right after the Q wave. And that  
4 is a normal variant that you'll see sometimes and you  
5 won't see sometimes in some patients. It means nothing.

6 Q What is it -- the incomplete right bundle  
7 branch block means nothing?

8 A It means nothing in this case.

9 Q What would it mean in other cases?

10 A It never means anything, unless you have a  
11 widening of the QRS complex. In this case there is no  
12 widening of the QRS complex. The QRS complex is still a  
13 0.06 seconds. Unless you get a widening, you don't have  
14 an intraventricular delay, electrical delay of any sort.  
15 So it's meaningless.

16 Q What would happen if there was the widening?

17 A If there was widening, then that means you  
18 would have disease in the conducting system of the heart  
19 causing a delay in electrical conductivity throughout  
20 the heart. And that could mean scarring of these  
21 bundles. It could mean atherosclerotic involvement  
22 causing lack of oxygenation to the electrical conduits.  
23 But in this particular case with a narrow QRS, it  
24 doesn't mean a thing.

25 Q And also the V3 is now defective, which

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1 apparently --  
 2 A The V3 is not really there.  
 3 Q What happened there, do you think?  
 4 A The electrode must have slipped while the  
 5 electrocardiogram was being taken.  
 6 Q So you would disagree with his conclusion that  
 7 incomplete right bundle branch block is now present?  
 8 A No, I wouldn't disagree with it, but it's  
 9 meaningless.  
 10 (Deposition Exhibit 49 was marked.)  
 11 BY MR. CALABRO  
 12 Q This is an EKG from August 8th, two days  
 13 later. Again notes the right atrial enlargement. Do  
 14 you still disagree that there is --  
 15 A Wait a second. They called this a left atrial  
 16 enlargement the last time. Left atrial enlargement.  
 17 Now they are calling it a right atrial enlargement?  
 18 Yes. No, this isn't a right atrial enlargement because  
 19 a right atrial enlargement doesn't look anything like  
 20 this at all.  
 21 Q And then it says "Incomplete right bundle  
 22 branch is no longer present."  
 23 A Right.  
 24 Q And it also says "Criteria for inferior  
 25 infarct no longer present."

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1 (Deposition Exhibit 50 was marked.)  
 2 BY MR. CALABRO  
 3 Q This appears to be a physician's progress  
 4 notes from September 6th, 2003. This would be the day  
 5 in question in this lawsuit.  
 6 A Right.  
 7 Q It says, Inmate Williams was brought over by a  
 8 correctional officer, probably escort. Complaint of --  
 9 or maybe let's stop. I'm sorry. Let's back up.  
 10 It says Inmate Williams was brought over by C,  
 11 slash, O, and then that symbol. Do you have any idea  
 12 what that reading means?  
 13 A Yes. Brought over by correctional officer  
 14 with complaint of chest pain --  
 15 Q Very good.  
 16 A -- on left side.  
 17 Q Stated that pain was running down his  
 18 left arm.  
 19 A Right.  
 20 Q He kept clutching at his chest.  
 21 A Correct.  
 22 Vital signs taken were the following:  
 23 Blood pressure 120 over 80.  
 24 Q Which is normal?  
 25 A Right.

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1 A That's right. You don't see it on this  
 2 electrocardiogram. And sometimes it will happen. It  
 3 will wax and wane. Sometimes you'll see it very  
 4 profoundly, and other times it will tend to become  
 5 modified.  
 6 You see little Q waves in Leads III and aVF.  
 7 But if you were reading this without knowing the prior  
 8 electrocardiograms, you would be hard pressed to see the  
 9 old inferior wall myocardial infarction.  
 10 Q Does that mean that the damage has been  
 11 abated?  
 12 A No.  
 13 Q It's just not reading on the EKG?  
 14 A That's right. It just isn't picking it up,  
 15 for some reason or another.  
 16 Well, let me put it this way: If you get a  
 17 whole series of electrocardiograms that hereafter don't  
 18 show the inferior wall infarction, then the answer is  
 19 yes, it can heal to the point where it won't be seen  
 20 anymore.  
 21 Q Is that what happened in this case?  
 22 A I don't remember. I don't think so. I think  
 23 it -- I think it came back. I think you could see it  
 24 again in subsequent electrocardiograms.  
 25 MR. CALABRO: This is No. 50.

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1 Q Saturation -- that would be oxygen saturation  
 2 of 98 percent?  
 3 A Oxygen saturation of the blood, 98 percent.  
 4 Q P 71?  
 5 A Pulse of 71.  
 6 Q And temperature 99.9.  
 7 A Correct.  
 8 Q Is that about normal?  
 9 A Yeah. It's a little high normal.  
 10 Q 49-year-old black male. ER nurse  
 11 notified. Was taken to ER to obtain an EKG.  
 12 A Right.  
 13 Q If we look at 9/12 it looks like follow-up  
 14 EKG. And then 187, do you have any idea what that would  
 15 refer to?  
 16 A That's his weight.  
 17 Q His weight?  
 18 A And I wouldn't know otherwise, except that  
 19 I've seen this before in the records that his weight was  
 20 around 185-187.  
 21 Q 107 over 76. Now, is that low?  
 22 A It is a little on the low side, but it could  
 23 be normal for many people.  
 24 Pulse is 90. Respirations are 16. It's  
 25 interesting: They always give the weight, but they

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25 (Pages 97 to 100)

1 don't give the height. If he was 5 feet 2, 187 would  
2 make him markedly obese. But if he's 6 feet 2, that  
3 would be a good weight.  
4 MR. CALABRO: Okay. We'll hold onto that one  
5 because it refers to the 9/6/03 -- or 9/12/03 EKG.  
6 The next one is 51, I believe.  
7 (Deposition Exhibit 51 was marked.)  
8 BY MR. CALABRO  
9 Q This appears to be the emergency care flow  
10 sheet from that same night. It looks like he arrived at  
11 9:50 and left at 10:50 in the evening.  
12 A Correct.  
13 Q If we look at the vitals, at 9:50 it looks  
14 like his blood pressure was 135 over 80?  
15 A Correct.  
16 Q Would you say this is normal range.  
17 A Yes, sir.  
18 Q And then after that it looks like it's 144  
19 over 82.  
20 A Or 140 over 82. Could be 144. To me it looks  
21 like 140.  
22 Q If it was a 140, that's borderline high, you  
23 said?  
24 A Yes, it's the upper limits of normal.  
25 Q If it were 144, that would be --

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1 A That would be slightly over the limits of  
2 normal.  
3 Q I'm going to ask you to read the box where it  
4 says treatments, notes and orders because I'm having a  
5 hard time making that out.  
6 A You mean the thing at the bottom?  
7 Q Right where it says "called by" I think "MTA.  
8 Inmate complaining of chest pain."  
9 A To B medical.  
10 Maybe that's the area that he was taken to.  
11 Inmate holding left pectoral region. No  
12 shortness of breath. Vital signs within  
13 normal limits, stating that he has had this  
14 symptom before.  
15 I don't know what the next is. I'm something.  
16 Q Probably inmate. And then given --  
17 A Given aspirin times one, nitroglycerin.  
18 No reduction of discomfort. Continued to  
19 have the pain in the left chest.  
20 And then they said they took an  
21 electrocardiogram, which was normal.  
22 Q What was before that? What's on that same  
23 line but before that?  
24 A I haven't got any idea what all those initials  
25 are.

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1 Q It looks like CTC would be Correctional  
2 Treatment Center. Went to the Correctional Treatment  
3 Center ER?  
4 A Could be.  
5 Q V -- something about environment?  
6 A Don't have any idea.  
7 Q That was -- okay.  
8 A Now, down below:  
9 Complaints of discomfort now more  
10 gastric. Dr. Wong called.  
11 Q Now, did you review the EKG for September 6th,  
12 2003?  
13 A Well, I reviewed every electrocardiogram  
14 there. If it was in there, then I reviewed it.  
15 Q My question is, I haven't seen one, so I want  
16 to know if you've seen one.  
17 A I saw subsequent ones, but I didn't see --  
18 let's me see what my note reflects.  
19 I indicate that the electrocardiogram was  
20 unchanged. And I may have gotten that from the notes  
21 rather than looking at the actual tracing, so I just  
22 don't remember. There's a certain number of these  
23 electrocardiograms in reference to your exhibits that  
24 just weren't there.  
25 Q So you don't remember if you looked at the

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1 September 6th, 2003, EKG?  
2 A Not specifically.  
3 Q And when you said in the notes in your report  
4 here that:  
5 "His electrocardiogram at that time and  
6 subsequently remained essentially stable and  
7 unchanged from previous electrocardiograms  
8 showing the old inferior wall myocardial  
9 infarction and an incomplete right bundle  
10 branch block,"  
11 You were really referring to subsequent EKGs,  
12 not the September 6th EKG?  
13 A The subsequent ones and the  
14 electrocardiogram -- or the statement that said the  
15 electrocardiogram was normal. Well, I doubt that it was  
16 normal. I would just say that it was probably -- a  
17 better way of putting it, it was stable.  
18 Q When you wrote this, "His electrocardiogram at  
19 that time," what was the basis for you writing that in  
20 that report?  
21 A I just don't remember now. Let me take a look  
22 at my notes, see if that will give me a clue.  
23 What date was that?  
24 Q September 6th, 2002.  
25 A No, I've got written down here -- I must have

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1 seen an electrocardiogram of 9/6/03. I have written  
2 down here, Electrocardiogram old inferior wall  
3 infarction and incomplete right bundle branch block  
4 stable.  
5 Q I'm going to have to ask you to look through  
6 those documents to find it, then, because I don't have  
7 it.  
8 A How much time do you have? I'll be glad to do  
9 it.  
10 Q Can we agree that you will send it to me as  
11 soon as you -- within two days, or something like that?  
12 Is that fair?  
13 A Sure.  
14 Q I don't like to keep everybody here.  
15 MR. CALABRO: Is that okay with you, Tim?  
16 MR. MCDONOUGH: Yeah. If you could take the  
17 time to look through and at least pull the number.  
18 MR. CALABRO: If you've got the number, that  
19 will work. The AG whatever number will work.  
20 THE WITNESS: The Bates stamp. Sure.  
21 MR. CALABRO: 52, two pages.  
22 (Deposition Exhibit 52 was marked.)  
23 BY MR. CALABRO  
24 Q 52. There are two pages. I don't know which  
25 one is clipped to yours first. The one I'm looking at

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1 first is the one that says "Unconfirmed."  
2 A Okay.  
3 Q In big capital letters it says:  
4 "Previous ECG has different patient  
5 name, manual comparison required."  
6 Do you see that?  
7 A Yes.  
8 Q Maybe what happened was that on September 6th,  
9 2003, the EKG that was done was not filed under  
10 Mr. Williams' name and it was in a different file,  
11 maybe.  
12 A Maybe.  
13 Q And that's why we don't have it here. But if  
14 you find it, that would be great if you could send it  
15 on.  
16 A I will try to find it.  
17 Q Let's look at the November 20th, 2003, EKG.  
18 What does it mean when it says "unconfirmed"?  
19 A That means it was read by the computer but it  
20 was not overread by a cardiologist. But then --  
21 Q Which one of these do you feel -- the data is  
22 the same.  
23 A They are both identically the same.  
24 Q With regard to the data, correct?  
25 A That's right.

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1 Q One thing that's different is that in the  
2 confirmed one by Dr. Grove he says that he "Cannot rule  
3 out inferior infarct" and in the computerized one it  
4 says "Inferior infarct."  
5 A Right.  
6 Q Which one of those would be closer to your  
7 diagnosis?  
8 A Well, there is a definite old inferior wall  
9 myocardial infarction.  
10 Q So you would agree more with the unconfirmed,  
11 computer-generated, computer-read EKG than the one  
12 that --  
13 A Right. Correct.  
14 Q Is there anything else remarkable about this  
15 EKG?  
16 A No. But let me make one statement about this  
17 alleged incomplete right bundle branch block.  
18 Electrical activity on one side of the heart will cause  
19 electrical activity on another side of the heart. And  
20 when there are downward deflections on one side of the  
21 heart, there can be upward deflections on another side  
22 of the heart.  
23 The waxing and waning of this R wave in V1  
24 that they call an incomplete right bundle branch block  
25 may not even be an incomplete right bundle branch block

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1 but may represent the waxing and waning of the downward  
2 deflections in III and aVF because of the myocardial  
3 infarction.  
4 Q When you say "waxing and waning," what does  
5 that mean?  
6 A That means sometimes you see it better than  
7 other times, depending on the day. There are changes in  
8 electrical positions of the heart, depending on the  
9 height of the diaphragm.  
10 The diaphragm is changed depending on how much  
11 he's had in his stomach from a previous meal or how much  
12 carbonated water he has, how much gas he's got in his  
13 stomach that could lift his diaphragm up and lift his  
14 heart up so that you'll get a little different view of  
15 the heart.  
16 And that will cause a waxing and waning of  
17 this inferior wall infarction pattern. And with that  
18 will come a waxing and waning of this R wave in V1.  
19 That is really just an opposite wall effect of the  
20 infarct and not really a bundle branch block, whether  
21 complete or incomplete.  
22 You can't really call it an incomplete right  
23 bundle branch block unless you have some abnormal  
24 widening of the QRS complex, and indeed there is none.  
25 So I think that's the best explanation I can give you.

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27 (Pages 105 to 108)



1 MR. CALABRO: Very good. We're finished with  
2 those two exhibits, I believe.  
3 THE WITNESS: Okay.  
4 MR. CALABRO: 53.  
5 (Deposition Exhibit 53 was marked.)  
6 BY MR. CALABRO  
7 Q This appears to be an EKG from a few months  
8 later, February 8th, 2004. "Left axis deviation," the  
9 computer notes. Do you agree with that?  
10 A It's a left axis deviation because of the  
11 downward deflexions in the III and aVF. And here is  
12 what I want to point out to you: There's less of a Q  
13 wave in aVF. And with less of a Q wave in aVF, he's  
14 lost his R wave in V1.  
15 He's lost that incomplete right bundle branch  
16 block pattern that they were calling. And this could be  
17 just due to a different position, electrical position of  
18 the heart, based on a lot of circumstances. I mentioned  
19 the gas in the stomach, the food in the stomach. Maybe  
20 he had his belt on too tight. All kinds of things can  
21 happen like that.  
22 Q But you are noting the left axis deviation?  
23 A Yes.  
24 Q Is that due to the infarct?  
25 A That's due to the infarct; yes, sir.

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1 Q We're still seeing the infarct in  
2 February 2004?  
3 A Yes. The infarct is harder to see at this  
4 time. You know it was there because of previous  
5 electrocardiograms. You know that Lead III is abnormal  
6 because, before he ever had his infarct, he never had  
7 those downward deflexions.  
8 So that by itself is an abnormal appearing  
9 lead. But you wouldn't dare call it if this were the  
10 first and only electrocardiogram you ever saw in this  
11 man.  
12 Q Anything else remarkable about this EKG?  
13 A The only thing remarkable is that they no  
14 longer called it a left atrial enlargement.  
15 (Deposition Exhibit 54 was marked.)  
16 BY MR. CALABRO  
17 Q This is an EKG from May 24, 2004, a few more  
18 months afterward.  
19 A Yes, sir.  
20 Q Normal sinus rhythm; left atrial enlargement  
21 has returned.  
22 A Yes, sir.  
23 Q What is your opinion on that?  
24 A It could be a left atrial enlargement. It  
25 looks a little full in V2. I wouldn't argue with that.

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1 If I were teaching electrocardiography up at UCSF and  
2 the cardiology fellow wrote that down, I'd let that  
3 pass.  
4 Q RSR or -- or I'm sorry. We decided what  
5 was -- what is the impact of having a large left atrium  
6 again?  
7 A If it's large enough, then that could  
8 predispose an individual to atrial arrhythmia, such as  
9 atrial fibrillation, a rapid and irregular heart rhythm.  
10 Q Is it large enough in this EKG to have cause  
11 for concern of that happening with Mr. Williams?  
12 A You can't quantify it on electrocardiogram.  
13 You have to do the next step and take an echocardiogram,  
14 and then you can measure it.  
15 Q Would this EKG cause you to do an  
16 echocardiogram for Mr. Williams for this left atrial  
17 enlargement?  
18 A I would do an echocardiogram but not because  
19 of the atrium. I would do an echocardiogram to assess  
20 his ventricular contractility or function and see what  
21 his left ventricular ejection fraction was. That would  
22 be infinitely more important.  
23 Q Is that due to the possible inferior infarct  
24 we have been talking about?  
25 A Yes, sir.

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1 Q The RSR -- it says up there in line 3:  
2 "The RSR or QR pattern in V1 suggests  
3 right ventricular conduction delay."  
4 A Yes.  
5 Q Is this again related to the inferior infarct?  
6 A Yes. There is no conduction delay because the  
7 measurement of the QRS complex is within normal limits.  
8 And there is no RSR. There is no initial R. There is  
9 an S and then a subsequent R. And I believe the  
10 subsequent R is because of the more prominent downward Q  
11 waves in the inferior leads.  
12 Q Is there anything else remarkable about this  
13 EKG?  
14 A No, sir.  
15 Q I'd like to talk more about your report now.  
16 A Okay.  
17 Q In November of 2002 you noted that  
18 Mr. Williams was diagnosed with arteriosclerotic heart  
19 disease.  
20 A Yes, sir.  
21 Q Is that the same thing as coronary artery  
22 disease?  
23 A Yes.  
24 Q Is coronary artery disease a serious medical  
25 condition?

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1 A Yes, sir.  
2 Q Do you agree with that diagnosis of  
3 arteriosclerotic heart disease?  
4 A I'm not sure. I think that's way up on my  
5 differential diagnosis list. As I told you earlier in  
6 this deposition, he either has this or he has coronary  
7 artery spasm due to taking of illicit drugs.  
8 Q But you mentioned that he would have to be  
9 taking these illicit drugs while he was in --  
10 A While he was incarcerated.  
11 Q -- incarcerated?  
12 A Correct.  
13 Q If Mr. Williams was not taking illicit drugs  
14 while he was incarcerated, does that lead you to  
15 conclude that Mr. Williams likely had arteriosclerotic  
16 heart disease?  
17 A If somehow you could confine him in such a way  
18 that he wouldn't get illicit drugs in a penitentiary and  
19 you could be certain about that, then he definitely has  
20 arteriosclerotic heart disease or atherosclerotic  
21 coronary artery occlusive disease, or otherwise  
22 shorthand known as coronary artery disease.  
23 Q On March 3, 2002, you noted that there was a  
24 treadmill test performed?  
25 A Yes, sir.

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1 Q What is a treadmill test?  
2 A An individual is hooked up with electrodes on  
3 his chest, six electrodes on the chest itself and,  
4 instead of putting them on the arms and legs, they put  
5 them -- they put two electrodes on the lower portion of  
6 the chest and then two other electrodes on the upper  
7 portion of the chest to be close to the arms and legs.  
8 And that individual is then put on a  
9 treadmill, and various stages of activity or exercise  
10 are performed by the patient during which time an  
11 electrocardiogram -- an ongoing, continuous  
12 electrocardiogram -- is being visualized on the cardiac  
13 monitor. And every three minutes a printout, 12-lead  
14 electrocardiogram, comes out of the machine.  
15 This is an attempt to see if exercise will  
16 bring out ischemia or impairment of blood flow to the  
17 heart muscle when the heart is made to work hard and  
18 beyond the capability of being able to transmit  
19 oxygenated blood to itself through narrow coronary  
20 arteries.  
21 Q Is this the most accurate way to diagnose  
22 ischemia?  
23 A No.  
24 Q Is it the most accurate way to diagnose any  
25 other kind of heart conditions?

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1 A No. This is one way to diagnose ischemia.  
2 But a more -- a better way is to do a treadmill test  
3 with a stress echocardiogram. That way you can see if  
4 the heart muscle is moving in an abnormal way during the  
5 height of exercise. Sometimes it doesn't show up on the  
6 electrocardiographic printouts but it does show up on  
7 the stress echocardiogram. Or another way is to do it  
8 with a nuclear scan of the heart.  
9 The treadmill test by itself is about  
10 60 percent accurate. The stress echocardiogram or the  
11 nuclear scan of the heart is 90-plus percent accurate.  
12 Of course, it's 100 percent accurate if you do an  
13 angiogram.  
14 Q Why would somebody choose -- why would a  
15 doctor choose to do an electrocardiogram treadmill test  
16 as opposed to these others if it's not as effective or  
17 accurate?  
18 MR. MCDONOUGH: Objection; calls for  
19 speculation.  
20 THE WITNESS: I don't know. We don't do them  
21 anymore.  
22 Well, let's see. Sometimes you will do just a  
23 plain treadmill test to -- in a patient that you know  
24 has heart disease because you want to assess his degree  
25 of functional capability. You already know the

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1 diagnosis, and what you want to do is assess his  
2 functional capability.  
3 But if you're looking for ischemia, then the  
4 only thing to do is either stress echocardiogram or a  
5 nuclear stress test.  
6 And there would certainly be nothing wrong  
7 with taking the patient right to the cardiac  
8 catheterization laboratory because you have  
9 electrocardiograms that show that he has a heart attack.  
10 So you have to assume that at one time or another he's  
11 had blockages.  
12 And so whether you see ischemia on the plain  
13 treadmill or the stress echocardiogram or on a nuclear  
14 stress test or not, you still have to -- you are still  
15 faced with the fact that you have an abnormal  
16 electrocardiogram showing an old inferior wall  
17 infarction.  
18 So why not? Why not forget about those tests  
19 and take him right to the cath lab and do the  
20 gold-standard test and find out where these obstructions  
21 are, how many they are, how severe they are, and if they  
22 need correcting either by coronary angioplasty and  
23 stenting or if he needs bypass surgery?  
24 BY MR. CALABRO  
25 Q Is it cheaper to do an EKG test than an

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1 echocardiogram or a cardiac catheterization?  
2 A Sure.  
3 Q It is cheaper?  
4 A Yes.  
5 Q How much cheaper? I mean, half the cost? A  
6 tenth of the cost?  
7 A Well, a nuclear scan of the heart -- no, I say  
8 a nuclear scan of the heart costs about the same as an  
9 angiogram.  
10 But it's a lot more fuss to do an angiogram.  
11 You've got to put the patient in the hospital. They  
12 have got to be there either overnight or at least go in  
13 the morning and stay there all day. It's an invasive  
14 test. You have to stick tubes and pipes into his heart,  
15 into the arteries of his heart. It's much more of a  
16 hassle.  
17 It's easier to do these other tests.  
18 Obviously, if these other tests show that there is  
19 ischemia, then you have to go the next step and do the  
20 angiogram.  
21 Q Did any of the tests show that Mr. Williams  
22 suffered from ischemia?  
23 A None. His plain treadmill test was normal and  
24 did not show any ischemia.  
25 Q But we just said that that's 60 percent

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1 accurate?  
2 A That's right.  
3 Q It's possible that it was just a false  
4 negative?  
5 A That's correct.  
6 Q 40 percent chance, in fact, that it was a  
7 false negative?  
8 A 40 percent chance that he could still have  
9 ischemia.  
10 I will tell you, in all probability there is  
11 100 percent chance that he's got ischemia, from the  
12 description of his ongoing, recurring chest pain in the  
13 face of unknown, seen, visible inferior wall myocardial  
14 infarction.  
15 Q And would you characterize that as a serious  
16 medical condition, this ischemia?  
17 A It certainly could be.  
18 Q In your opinion, is it more serious a  
19 condition than nausea?  
20 A Yes.  
21 Q Is it a more serious condition than headache?  
22 A You bet.  
23 Q Is it a more serious condition than having the  
24 shakes?  
25 A Yes, sir.

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1 Q In your opinion, is it a more serious  
2 condition than depression?  
3 MR. MCDONOUGH: Objection; calls for  
4 speculation.  
5 THE WITNESS: Well, it can be. But I've seen  
6 some awful severe depressions. You know, if a person  
7 gets markedly depressed and they jump off the Golden  
8 Gate Bridge, then there is nothing more serious than  
9 that.  
10 BY MR. CALABRO  
11 Q In terms of harm to one's self that isn't done  
12 on purpose, is it a more serious condition than  
13 depression?  
14 MR. MCDONOUGH: Objection; vague and  
15 ambiguous.  
16 THE WITNESS: Same answer I gave you before.  
17 BY MR. CALABRO  
18 Q In your opinion, is ischemia more serious than  
19 the discomfort one would typically experience as a  
20 result of incarceration?  
21 MR. MCDONOUGH: Objection; calls for  
22 speculation, over broad and vague.  
23 THE WITNESS: Well, ischemia means -- the  
24 symptoms of ischemia can be chest pain and shortness of  
25 breath. I'm not sure what the symptoms of incarceration

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1 can be. I'm sure there are a multitude of symptoms,  
2 including boredom and depression and fear and sorrow and  
3 all kinds of other symptoms.  
4 BY MR. CALABRO  
5 Q Do you think that the ischemia was caused by  
6 his incarceration?  
7 MR. MCDONOUGH: Objection; calls for  
8 speculation.  
9 THE WITNESS: I don't know.  
10 BY MR. CALABRO  
11 Q Is there any evident that the ischemia was  
12 caused by his incarceration?  
13 A No. If a person has this much chest pain on  
14 an ongoing basis, there is a good probability that he  
15 will continue to have this much chest pain on an ongoing  
16 basis even if he was not incarcerated, especially when  
17 you see demonstrated an old inferior wall myocardial  
18 infarction.  
19 Q If one of your patients had the ischemia that  
20 Mr. Williams had, would you consider it important to  
21 comment to this patient about it, to tell him about it?  
22 A Sure.  
23 Q If one of your patients had this condition,  
24 would you consider it important to treat it?  
25 A You bet.

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1 Q Could the failure to treat this condition  
2 result in further significant injury?  
3 A It could in the future. I don't believe that  
4 it has up to now, but it certainly could. And I think I  
5 alluded to that in my report.  
6 Q Could the failure to treat this condition  
7 result in chronic or substantial pain?  
8 MR. MCDONOUGH: Objection; calls for  
9 speculation.  
10 THE WITNESS: He has a chronic pain.  
11 BY MR. CALABRO  
12 Q Because of this ischemia?  
13 A Yes. Ischemia -- the pain is a manifestation  
14 of ischemia.  
15 Q Is it your opinion that this condition  
16 significantly affects his daily life?  
17 MR. MCDONOUGH: Objection; calls for  
18 speculation.  
19 THE WITNESS: It could, yes.  
20 BY MR. CALABRO  
21 Q It could or it does?  
22 MR. MCDONOUGH: Objection; calls for  
23 speculation.  
24 THE WITNESS: I'm not quite sure that I know.  
25 But all I could say is, It could.

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1 BY MR. CALABRO  
2 Q Does it affect the way that he would exercise?  
3 A Yes, it could.  
4 Q Does it affect his dietary restrictions?  
5 A Well, he should be on dietary restrictions;  
6 yes, sir.  
7 Q Does it affect whether he should smoke or not?  
8 A Yes, sir.  
9 Q In your opinion, wouldn't those affect  
10 someone's daily life?  
11 A I'm sorry?  
12 Q In your medical opinion, wouldn't those be  
13 conditions that affect somebody's daily life?  
14 MR. MCDONOUGH: Objection; calls for  
15 speculation.  
16 THE WITNESS: Anybody who has recurring chest  
17 pain due to myocardial ischemia, whether they are  
18 incarcerated or not, will have an effect on their daily  
19 life; yes, sir.  
20 BY MR. CALABRO  
21 Q And this ischemia -- the pain that he was  
22 experiencing on September 6th of 2003 was this ischemia,  
23 was related to this ischemia?  
24 MR. MCDONOUGH: Objection; calls for  
25 speculation.

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1 THE WITNESS: I would say that that's either a  
2 possibility or a probability. I'm not 100 percent  
3 certain because there are other factors in him that  
4 could cause chest pain.  
5 BY MR. CALABRO  
6 Q Can you name any specific facts that would  
7 contradict your opinion -- can you name any specific  
8 facts that would indicate that Mr. Williams was not  
9 suffering from ischemia on September 6th -- the pain  
10 that he was -- let me start again.  
11 Can you name any specific facts that would  
12 indicate that on September 6th, 2003, Mr. Williams was  
13 not suffering from ischemia?  
14 A No, sir.  
15 Q In the report you say that you conclude that  
16 Mr. Williams was suffering from atherosclerotic coronary  
17 artery occlusive disease.  
18 A Yes, sir.  
19 Q We already talked about what atherosclerotic  
20 means. What does "occlusive" mean?  
21 A Atherosclerosis in the inside of the coronary  
22 arteries causing occlusion of the coronary arteries.  
23 Q "Occlusion" means?  
24 A Closure of the coronary arteries. Or marked  
25 closure, either 70 percent or greater, of a coronary

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1 artery.  
2 Q So it's your medical opinion that  
3 Mr. Williams' arteries are blocked by at least  
4 70 percent?  
5 A It's my opinion that that's the No. 1  
6 diagnosis on the differential. Perhaps I should have  
7 put an asterisk after that because of the -- of my  
8 knowledge that he was an illicit drug user.  
9 And since I'm a big watcher of CSI and these  
10 other things on television, I know that these type of  
11 drugs are found in places of incarceration. So if he's  
12 still taking them, then he could be getting his  
13 ischemia, not from atherosclerosis, but from coronary  
14 artery spasm.  
15 But still, the No. 1 item on the differential  
16 is atherosclerotic coronary artery occlusive disease  
17 that has to be addressed sometime in the future,  
18 probably sooner than later.  
19 Q He was suffering from this on September 6th,  
20 2003?  
21 A I believe so; yes, sir.  
22 Q Let's clarify that. If he wasn't taking any  
23 illicit drugs, it's your medical opinion that he was  
24 suffering from atherosclerotic coronary artery occlusive  
25 disease on September 6th, 2003?

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31 (Pages 121 to 124)

1 A Yes. If somehow you could state with a  
2 100,000 percent certainty that he wasn't, then he has  
3 the No. 1 diagnosis: Atherosclerotic coronary artery  
4 occlusive disease.  
5 Q And even if he was taking drugs, illicit  
6 drugs, which is cocaine or marijuana, there is still a  
7 good probability that he's suffering from  
8 atherosclerotic coronary artery occlusive disease?  
9 A Are you asking me even if he was on --  
10 Q Even if he was on these drugs.  
11 A On an ongoing basis?  
12 Q Correct.  
13 A No. Then all bets are off. It could be just  
14 due to the drugs.  
15 Q Okay. What kind of regularity would there  
16 have to be to assume that the atherosclerotic coronary  
17 artery occlusive disease diagnosis is invalid?  
18 A If he were shown to be taking cocaine or  
19 dextroamphetamine and then had pain immediately  
20 thereafter, then that would be proof positive.  
21 Q My question was, How often would he have to be  
22 taking these drugs for this diagnosis to be inaccurate?  
23 A Well, if he took it on an ongoing basis and he  
24 had chest pain on an ongoing basis while he was taking  
25 it, then it would be due to the drugs.

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1 diagnosis is atherosclerotic coronary artery occlusive  
2 disease because that's what happens to people with -- at  
3 his age. He's in the right age range.  
4 But he's never had definitive tests of his  
5 coronary arteries to see whether he has these  
6 cholesterol plaques, so you don't know with 100 percent  
7 certainty whether that's the cause of his old infarct or  
8 not.  
9 It could be that he took a powerful dose of a  
10 coronary constricting drug that caused him to have a  
11 heart attack. It could be that at times in the  
12 subsequent months and years he would take illicit drugs  
13 that were watered down and he didn't have any chest  
14 pain. And it could be that he took illicit drugs at  
15 times and he did have chest pains.  
16 Or it could be that he had true  
17 atherosclerotic coronary artery occlusive disease with  
18 an old inferior wall myocardial infarction due to an  
19 atherosclerotic obstruction of one of his coronary  
20 arteries, presumably the right coronary artery, because  
21 that's what supplies the inferior portion of the heart,  
22 and a lot of the chest pain could be due to continued  
23 obstruction of his coronary arteries.  
24 But here's the kicker: He could still have  
25 chest -- recurring chest pain from taking illicit drugs

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1 If he took it on an ongoing basis and  
2 sometimes he had chest pain and sometimes he didn't,  
3 well, you wouldn't know because sometimes people will  
4 have it and sometimes people will not have it, depending  
5 on the batch and the purity of the illicit drug that  
6 he's taking.  
7 Q Is it a fair characterization of your  
8 testimony that in order for this No. 1 diagnosis, the  
9 atherosclerotic coronary artery occlusive disease, to be  
10 invalid, each time Mr. Williams was suffering from pain,  
11 chest pain that would otherwise be attributable to  
12 atherosclerotic coronary artery occlusive disease, he  
13 would have received that pain immediately after taking  
14 one of these illicit drugs?  
15 Tell me if that was too confusing.  
16 A That was a little confusing.  
17 MR. MCDONOUGH: Objection; vague and  
18 ambiguous.  
19 MR. CALABRO: Timely.  
20 THE WITNESS: I think I can help you out,  
21 though.  
22 BY MR. CALABRO  
23 Q Please do.  
24 A We have a man with a known old inferior wall  
25 myocardial infarction. No. 1 on the differential

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1 at the same time. He could have those two conditions  
2 simultaneously.  
3 Q They are not mutually exclusive?  
4 A They are not mutually exclusive.  
5 Q But for the purpose of this report, your  
6 conclusion is that Mr. Williams has atherosclerotic  
7 coronary artery occlusive disease?  
8 A Most likely.  
9 Q And that that disease is a serious medical  
10 condition?  
11 A Yes.  
12 Q It is a condition which you believe is more  
13 serious than nausea?  
14 A Yes, unless the nausea is caused by unstable  
15 angina.  
16 Q You believe that this atherosclerotic coronary  
17 artery occlusive disease is more serious than a  
18 headache?  
19 A Yes, sir.  
20 Q It's more serious than having the shakes?  
21 A Yes, sir.  
22 Q It's more serious than depression?  
23 A I didn't say that. I never said that. I'm  
24 very respectful for depression. I've had a couple of  
25 depressed patients that took their own lives.

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1 So it's -- if it's a mild depression, I would  
2 say yes, it's more serious than a mild depression. All  
3 of us get depressed every now and then, you know, about  
4 something. But a severe depression can be the worst  
5 disease in the world, worst than cancer.  
6 Q In your opinion, is atherosclerotic coronary  
7 artery occlusive disease more serious than a  
8 discomfort -- everyday discomfort from prison  
9 incarceration?  
10 MR. MCDONOUGH: Objection; calls for  
11 speculation.  
12 THE WITNESS: They are two different things,  
13 and I just don't think I can answer that.  
14 BY MR. CALABRO  
15 Q Do you have any specific facts that would  
16 contradict that conclusion?  
17 MR. MCDONOUGH: Objection; vague and  
18 ambiguous.  
19 THE WITNESS: Let me rephrase the question,  
20 then.  
21 Q Do you know of any specific facts that would  
22 contradict the conclusion that atherosclerotic coronary  
23 artery occlusive disease is more serious than the  
24 everyday discomfort one would typically experience as a  
25 result of incarceration?

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1 MR. MCDONOUGH: Objection; calls for  
2 speculation.  
3 THE WITNESS: I don't have any facts, but I  
4 think that this probably depends on the individual. It  
5 probably depends on the individual.  
6 BY MR. CALABRO  
7 Q The answer is that you don't know of any  
8 specific facts that would contradict that?  
9 A That's correct.  
10 Q If one of your patients had this condition,  
11 would you find it important to tell him about it?  
12 A Yes, sir.  
13 Q If one of your patients had this condition,  
14 would you consider it important to treat it?  
15 A Yes, sir.  
16 Q If one of your patients had this condition --  
17 I'm sorry. Let me start again.  
18 Could the failure to treat this condition  
19 result in further physical injury?  
20 A The failure to treat this condition how?  
21 Q At all. Could the failure to treat  
22 atherosclerotic coronary artery occlusive disease result  
23 in further significant injury?  
24 A It could.  
25 Q Could the failure to treat this condition

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1 result in chronic or substantial pain?  
2 A Well, treatment of this condition will, if  
3 successful, eliminate the pain.  
4 Q So if you fail to treat it, the pain will  
5 still be there?  
6 A In some instances, yes.  
7 Q In Mr. Williams' instance?  
8 MR. MCDONOUGH: Objection; vague and  
9 ambiguous.  
10 BY MR. CALABRO  
11 Q Do you understand the question?  
12 A Yes, I understand the question.  
13 He is being treated, to a certain extent.  
14 He's being given nitroglycerin.  
15 Q If he weren't being treated for this  
16 condition, he would -- that would result in pain,  
17 chronic or substantial pain?  
18 A Even being treated with nitroglycerin without  
19 any definitive treatment of his coronary arteries, if  
20 they are occluded, by means of angioplasty or stent or  
21 bypass surgery, even though he's being continuously  
22 treated with nitroglycerin, he would still have  
23 recurring pain, which he has had.  
24 Q Sir, my question is: If he was receiving no  
25 treatment for this condition, would he experience

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1 chronic or substantial pain?  
2 A He is receiving chronic and substantial pain  
3 even with the treatment that he's getting.  
4 MR. CALABRO: Let me just strike the answer as  
5 nonresponsive.  
6 Q My question is: If Mr. Williams receives no  
7 treatment for this pain or for this condition, the  
8 atherosclerotic coronary artery occlusive disease  
9 condition, would the failure to treat this condition  
10 result in chronic or substantial pain?  
11 MR. MCDONOUGH: Objection; vague as to time  
12 and length.  
13 THE WITNESS: No more chronic than he already  
14 is receiving with his degree of treatment.  
15 BY MR. CALABRO  
16 Q Let me ask the question in a different way.  
17 If Mr. Williams did not receive treatment for  
18 atherosclerotic coronary artery occlusive disease, would  
19 he experience pain that results from this disease?  
20 MR. MCDONOUGH: Objection; incomplete  
21 hypothetical.  
22 THE WITNESS: If he has -- which I think he  
23 has -- atherosclerotic coronary artery occlusive  
24 disease, then he would have pain as a result of  
25 ischemia.

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1 BY MR. CALABRO  
2 Q If he were not treated?  
3 A If he were not treated. And if he were just  
4 treated intermittently, as he is being done with  
5 nitroglycerin, he would still have pain.  
6 Q Would the pain be more severe or less severe  
7 in those situations?  
8 A Same.  
9 Q The same pain?  
10 A Yes. It's just that with nitroglycerin the  
11 pain would be ameliorated intermittently.  
12 Q So he would have less pain when treated than  
13 without being treated?  
14 A He would have a shorter duration of pain. The  
15 pain may still be just as intense.  
16 Q But it would be shorter duration of pain?  
17 A Yes.  
18 Q That would be less pain?  
19 A Yes.  
20 Q Let's talk about the second impression that  
21 you had, old inferior wall myocardial infarction,  
22 secondary to No. 1.  
23 A Yes, sir.  
24 Q What do you mean by secondary to No. 1?  
25 A Secondary to his atherosclerotic coronary

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1 the left shoulder and down the left arm and up into the  
2 jaw. This pain will persist, despite bedrest and  
3 despite administration of nitroglycerin. This is  
4 classic pain for a myocardial infarction.  
5 But as I told you earlier, there is no  
6 "classic." I've seen massive myocardial infarctions  
7 with no pain whatsoever. I've seen myocardial  
8 infarction where there's been only a transient pain that  
9 looked like just another angina attack. I've seen  
10 classic myocardial infarction with an overriding symptom  
11 of shortness of breath and weakness.  
12 I saw one patient who had a severe heart  
13 attack where his pain -- no, this was a lady -- where  
14 her pain was in the left wrist, severe crushing pain in  
15 the left wrist, without any tenderness to palpation.  
16 This was not an orthopedic problem that one could  
17 discern right away.  
18 So there is no "classic." But what I gave you  
19 initially was the classic thing that will happen which  
20 is described in textbooks. Sometimes the pain will  
21 radiate into the upper abdomen; sometimes the pain will  
22 radiate between the shoulder blades and the back.  
23 Sometimes the pain will be in the right chest and go  
24 down the right arm as opposed to the left. So they are  
25 all variations.

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1 artery occlusive disease. If there is a significant  
2 obstruction of a coronary artery causing a total  
3 occlusion of that coronary artery, then there would be  
4 impairment of blood flow to the heart muscle causing  
5 that muscle to die and become injured and result in a  
6 heart attack or a myocardial infarction.  
7 Q I guess my question is, I am not understanding  
8 what you mean by "secondary." Is it less important  
9 than --  
10 A No, no. I don't mean less important; I mean  
11 it's due to.  
12 Q I understand.  
13 A It's due to.  
14 Q The myocardial infarction in fact is due to  
15 the atherosclerotic coronary artery occlusive disease.  
16 A That's right.  
17 Q Can you describe the pain that's normally  
18 associated with myocardial infarction?  
19 A I'll describe the classic pain, but seldom is  
20 there a classic pain. A classic pain is a severe,  
21 pressing, squeezing, constricting pain in the substernal  
22 area in the front center of the chest, which is often  
23 associated with shortness of breath, profound sweating,  
24 at times nausea, at times weakness and lightheadedness.  
25 And the pain classically will radiate up into

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1 Q If a patient is suspected of having a  
2 myocardial infarction, should he be admitted as soon as  
3 possible to the emergency room?  
4 A If he's suspected of having a myocardial  
5 infarction, he should be admitted to an emergency room  
6 as soon as possible and certain tests should be taken;  
7 yes, sir.  
8 Q Is the pain that Mr. Williams described on  
9 September 6th, 2003, inconsistent with having a  
10 myocardial infarction?  
11 A What date did you say?  
12 Q September 6th, 2003.  
13 A No. Any chest pain is consistent with a  
14 myocardial infarction, whether it's classic or not  
15 classic.  
16 Q That Mr. Williams had had a previous heart  
17 attack or myocardial infarction, does that increase the  
18 risk factor that Mr. Williams was suffering another  
19 myocardial infarction?  
20 A It increases the probability that he might be  
21 having another myocardial infarction; yes, sir.  
22 Q Does the fact that he's over 35 -- or does  
23 Mr. Williams' age create another risk factor that he  
24 was -- or increase the probability -- let me start  
25 again.

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1 Does Mr. Williams' age create another factor  
 2 that would increase the probability that Mr. Williams  
 3 was suffering from a myocardial infarction?  
 4 A Yes, sir.  
 5 Q If Mr. Williams was your patient and you knew  
 6 his past history and had heard the complaints that he  
 7 complained of on September 6th, 2003 --  
 8 A Yes, sir.  
 9 Q -- and he said that he wanted to be seen by a  
 10 doctor, what would you recommend that he do?  
 11 A I would have -- well, I'd see him.  
 12 Q As soon as possible?  
 13 A As soon as possible, yes.  
 14 Q Would you wait 45 minutes before seeing him?  
 15 A It all depends on how long it would take to  
 16 get him down to see me. Sometimes it takes patients a  
 17 while to get down to see their doctor.  
 18 Q If you were minutes away from Mr. Williams,  
 19 would you tell him to wait 45 minutes before he came to  
 20 see you?  
 21 A No. When patients call me up on the phone, I  
 22 say, You'd better come and see me right away. And they  
 23 will see me within a half hour to two hours sometimes.  
 24 I had a patient who called me from the south  
 25 of France two weeks ago. His wife -- he didn't call me;

1 his wife called me.  
 2 And she said, "Andre is having an upset  
 3 stomach. He's got to severe pain in his chest, and it's  
 4 going down his left arm. I want to forewarn you: I'm  
 5 getting him on an airplane and taking him to see you."  
 6 I said, "Gretchen, don't do that. Have him  
 7 see a cardiologist right away." Which he did, and he  
 8 had a myocardial infarction.  
 9 Q If a patient such as Mr. Williams -- if a  
 10 patient with Mr. Williams' history and his complaints  
 11 had called you, would you think that failure to treat  
 12 Mr. Williams could result in further, significant injury  
 13 on September 6th, 2003?  
 14 MR. MCDONOUGH: Objection; vague and  
 15 ambiguous.  
 16 THE WITNESS: It could.  
 17 BY MR. CALABRO  
 18 Q Could the failure to treat his condition  
 19 result in chronic or substantial pain?  
 20 A Well, he already is having chronic and  
 21 substantial pain. And so failure to treat wouldn't  
 22 increase his likelihood of having it; he already had it.  
 23 Q Could it prolong his chronic or substantial  
 24 pain?  
 25 A It could, yes.

1 Q Could it lead to death?  
 2 A If he was having truly a severe enough  
 3 ischemia, it could lead to death.  
 4 Q Knowing Mr. Williams' history and what he  
 5 would be complaining of on September 6th, 2003, it's  
 6 possible that those factors, without being treated,  
 7 could have led to death?  
 8 A Whenever a patient has a known old myocardial  
 9 infarction and they complain of ongoing chest pain, one  
 10 always worries that the chest pain may be cardiac and  
 11 may be ischemic and may lead to death; yes, sir, that  
 12 would concern me.  
 13 Q So on September 6th, 2003, you would have  
 14 considered Mr. Williams' request for medical assistance  
 15 to be -- his condition at the time to be a serious  
 16 medical condition?  
 17 A Potentially serious, yes.  
 18 Q I'd like to talk about the third impression,  
 19 which is recurring angina pectoris. Could you describe  
 20 what that is?  
 21 A Angina pectoris is recurring heart pain due to  
 22 impairment of oxygenated blood flow to the heart muscle.  
 23 And this impairment of blood flow to the heart muscle is  
 24 only temporary so that it doesn't result in a myocardial  
 25 infarction. It's heart pain without infarction.

1 Q So the pain that you feel with a myocardial  
 2 infarction is the same as angina; it just doesn't --  
 3 let's start again.  
 4 Angina is basically a heart attack light?  
 5 A No, it's not a heart attack light. It's just  
 6 heart pain without a heart attack. And the only real  
 7 difference, if you want to quantify it from the pain  
 8 standpoint, is a heart attack has much more pain. The  
 9 pain is more intensive; it's more prolonged. And the  
 10 nitroglycerin generally does not help it.  
 11 Q Does angina lead to myocardial ischemia?  
 12 A Angina is myocardial ischemia. Angina is a  
 13 symptomatic manifestation of ischemia. The definition  
 14 of ischemia is impairment of blood flow to the heart  
 15 muscle. And when a person has angina, that means  
 16 cardiac chest pain due to diminished oxygenated blood  
 17 flow to the heart muscle on a temporary basis.  
 18 Q Is angina normally induced by exercise?  
 19 A It can. Anything that will increase the work  
 20 of the heart beyond the heart's capability of pumping  
 21 adequate oxygenated blood to itself through narrow  
 22 coronary arteries will result in angina.  
 23 Q But exercise is one of those things that can  
 24 lead to angina?  
 25 A Exercise is one thing, and acute emotional



1 distress is another thing.  
2 Q And the pain of angina can range from sort of  
3 a vague ache or discomfort up to an intense crushing,  
4 painful sensation?  
5 A Yes, sir.  
6 Q I've read in some of the literature that pain  
7 has a crescendo pattern at onset and builds up. Do you  
8 know what this refers to?  
9 A Well, I'm not sure that that's true. The pain  
10 will just happen. Sometimes a person will have a mild  
11 pain.  
12 I saw a person earlier today, prior to this  
13 deposition, who has chronic, stable angina. He's had  
14 several angiograms with angioplasty and stents to open  
15 up his coronary arteries, and they are all open. His  
16 coronary arteries are all open. But he must have some  
17 smaller arteries that aren't open because every time he  
18 gets his pulse rate up beyond 100 per minute, either by  
19 exercise or emotional stress, he has a little burning in  
20 his neck consistent with angina.  
21 Q So you would say that angina pain doesn't  
22 normally build throughout an angina attack?  
23 A I'm not impressed by that, no.  
24 Q I'm sorry. I don't understand what you mean.  
25 A I'm not impressed that that's true. Maybe it

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1 is in some people, but for the most part, they just  
2 develop angina.  
3 Q And the pain would be constant throughout the  
4 entire episode of angina?  
5 A Yes, unless they're nitroglycerine hone and  
6 they get an angina attack and they don't have any way of  
7 stopping it and then they get tense and upset because  
8 they can't stop it, and then I can see where the angina  
9 attack can get more severe and be more crescendo.  
10 Q The pain of angina is usually felt to the left  
11 of the chest midline?  
12 A Usually, it's right in the center, substernal.  
13 It can be to the left. If it's going to be on one side  
14 or the other, it's more commonly on the left. Most  
15 commonly, it's on the front center. It can be on the  
16 left. More rarely, it's on the right side; and  
17 occasionally, it's in the top of the abdomen.  
18 Q Does it have the characteristic of radiating  
19 to the left arm or the back and the throat and the jaws,  
20 as the pain of a myocardial infarction?  
21 A Less so than a myocardial infarction, but it  
22 can happen.  
23 Q Is it fair to say that, if somebody complains  
24 to you of having chest pain that radiates to the back or  
25 down the left arm, it's more consistent with myocardial

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1 infarction than angina?  
2 A No, it's not more consistent. One has to  
3 certainly rule out a myocardial infarction whenever this  
4 is prolonged or whenever this happens.  
5 Q How long does the pain of angina usually last?  
6 A Until you make it stop with nitroglycerin.  
7 Q Without being treated with nitroglycerin, it  
8 would go on indefinitely?  
9 A Without being treated with nitroglycerin, it  
10 can last anywhere from seconds to 15 or 20 minutes. If  
11 it's more prolonged than 20 minutes or a half hour, then  
12 one would strongly suspect the presence of a myocardial  
13 infarction.  
14 Q Do you characterize angina as a serious  
15 medical condition?  
16 A Somehow you're asking me the same questions  
17 over and over.  
18 The answer is yes.  
19 Q In your opinion, is it more serious than  
20 nausea?  
21 A Unless the nausea is associated with the  
22 angina.  
23 Q Is angina more serious than a headache?  
24 A Yes, sir.  
25 Q Is angina more serious than having the shakes?

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1 A Yes, sir.  
2 And it's not more serious than depression.  
3 Q Is angina more serious -- in your opinion, is  
4 it more serious than the discomfort one would normally  
5 associate with the discomfort of being incarcerated?  
6 MR. MCDONOUGH: Objection; calls for  
7 speculation.  
8 THE WITNESS: That's a very individual thing.  
9 It depends on the individual. It depends on the  
10 individual.  
11 BY MR. CALABRO  
12 Q What does it depend on?  
13 A I would say that during the time a person is  
14 having angina, whether a person's incarcerated or not,  
15 there is nothing more serious. This is a problem. The  
16 person feels it, and they want to get rid of it right  
17 away. And then once it's gone, then if they are  
18 incarcerated, they still suffer the travails of  
19 incarceration.  
20 Q If one of your patients was suffering from  
21 recurring angina, would it be important to treat him?  
22 A I think you asked me that before, and the  
23 answer is yes.  
24 Q Could the failure to treat the angina result  
25 in further prolonged pain?

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1 A Yes.  
2 Q Would the condition of recurring angina  
3 pectoris affect the life -- significantly affect the  
4 life of somebody who had it?  
5 A Recurring angina pectoris itself would not  
6 affect the life. It's the underlying cause of the  
7 angina that might affect the life expectancy of the  
8 individual. And that cause can be atherosclerotic  
9 coronary artery occlusive disease or it could be  
10 coronary artery spasm.  
11 Q Is it often the case that patients with  
12 coronary artery disease, like Mr. Williams, will have  
13 angina at rest?  
14 A "Angina at rest" means unstable angina, and  
15 that's the most serious type of angina. That's called  
16 unstable, and that could lead to myocardial infarction  
17 or sudden death. That has to be taken more seriously  
18 than recurring exercise-induced angina.  
19 Q Is it fair to say that myocardial ischemic  
20 pain at rest is more likely to result from an acute  
21 reduction in coronary blood flow than an increase in  
22 oxygen demand?  
23 A Say that again.  
24 Q Sure. Is it fair to say that myocardial  
25 ischemic pain at rest more likely results from an acute

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1 reduction in coronary blood flow -- so some sort of  
2 blockage or something -- rather than an increase in  
3 myocardial oxygen demand?  
4 A It's a combination. It is a combination. One  
5 can't say one over the other. The reason there is  
6 angina in the first place is because of the oxygen  
7 demand of the heart muscle and that demand is being  
8 impaired by the narrow coronary arteries, resulting in  
9 obstruction.  
10 Q Presumably, though, if you were at rest, your  
11 oxygen demand hadn't changed from the time before the  
12 pain until the time that you were having the pain, which  
13 would lead to the conclusion that it was more likely  
14 some sort of blockage that was causing the pain?  
15 MR. MCDONOUGH: Objection; incomplete  
16 hypothetical.  
17 THE WITNESS: Yes, but what is "rest"? A  
18 person can ostensibly be at rest and have a bad dream.  
19 I've seen that in patients cause myocardial infarctions.  
20 A person cannot like the way his spouse or his  
21 cell mate combs their hair. It makes them figuratively  
22 "climb a wall." That will cause emotional distress such  
23 that it will cause angina and the person would look like  
24 they are at rest.  
25 They may get bad news from the outside; that

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1 will cause angina. Emotional stress will cause angina.  
2 They may smoke a cigarette. Tobacco will cause a  
3 certain amount of coronary artery spasm in a person who  
4 already has an atherosclerotic occlusion that may cause  
5 angina.  
6 So a person could be at rest, lying in bed and  
7 decide to have one last smoke before going to sleep.  
8 Bingo; there is angina. So there's a lot of factors  
9 there.  
10 BY MR. CALABRO  
11 Q With your review of the record and especially  
12 Mr. Williams' deposition testimony, what facts point you  
13 to conclude -- or let's start again.  
14 With your review of the record, including the  
15 medical documentation and Mr. Williams' deposition  
16 testimony, what factors do you think would lead to the  
17 conclusion that Mr. Williams was not at rest when this  
18 angina began on September 6th, 2003?  
19 MR. MCDONOUGH: Objection; calls for  
20 speculation, vague and ambiguous.  
21 THE WITNESS: I don't have any factors. I  
22 don't have any factors to tell me whether he was or was  
23 not at rest. A person can look like they are at rest  
24 but not be at rest. Or maybe he was doing something. I  
25 have not idea.

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1 BY MR. CALABRO  
2 Q If the testimony in this case were that  
3 Mr. Williams was standing at his cell, all indications  
4 he was very calm tone of voice and he asked to see a  
5 medical technician because of his angina pain, would  
6 that lead one to the conclusion in most cases that he  
7 was at rest?  
8 A It would certainly --  
9 MR. MCDONOUGH: Objection; calls for  
10 speculation.  
11 THE WITNESS: It would certainly lead one to  
12 conclude that he was inactive from the physical  
13 standpoint. How inactive he was from the emotional  
14 standpoint, I wouldn't know.  
15 BY MR. CALABRO  
16 Q Is the severity of pain with rest angina  
17 similar to the severity of pain of exertional angina?  
18 A It can be, or they can be quite equivalent.  
19 Q Is the more often the case that the discomfort  
20 associated with unstable angina, rest angina, is more  
21 severe than the pain associated with exertional angina?  
22 A No. But it's more dangerous, if this turns  
23 out to be true angina. That means, with little -- that  
24 means with little or no provocation he gets ischemia,  
25 causing angina.

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1 Q Is it more likely that the duration of the  
2 angina with respect to unstable angina would be longer  
3 than the duration of the angina that was exertional  
4 angina?  
5 MR. MCDONOUGH: Objection; vague and  
6 ambiguous.  
7 THE WITNESS: It may or may not be. If a  
8 person has exertional angina and stops exerting and  
9 takes the nitroglycerin, the pain may go away  
10 immediately. By the same token, this may happen with a  
11 person with rest angina.  
12 BY MR. CALABRO  
13 Q If the pain lasts longer than 20 minutes, is  
14 it more likely the case that that individual is  
15 suffering from unstable angina than exertional angina?  
16 A No. If a patient has angina at rest or what  
17 appears to be relative inactivity, that's unstable  
18 angina. I mean, a person is sitting or standing or  
19 watching television or smoking a cigarette and they have  
20 angina with minimal physical effort, that's unstable  
21 angina.  
22 Q Is it your opinion in this case that  
23 Mr. Williams was suffering from unstable angina on  
24 September 6th, 2003?  
25 A It looks like he was. It looks like he could

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1 have been. It looks like that had to be ruled out. It  
2 has never been completely ruled out.  
3 But what you haven't asked me are, What are  
4 the factors opposing unstable angina in this?  
5 Q What specific facts do you know of in this  
6 case that would rule out unstable angina?  
7 A Well, the only real thing that would rule it  
8 out is by taking him to the cardiac catheterization  
9 laboratory and doing an angiogram. But there are other  
10 things that are noteworthy in the record.  
11 The noteworthy things is that, for the most  
12 part, his blood pressures are entirely normal. For the  
13 most part, his cholesterol levels are entirely normal.  
14 His bad cholesterol, his low density lipoproteins, are  
15 normal. His good cholesterol, his high density  
16 lipoproteins, are normal. His triglycerides are normal.  
17 It's rather unusual for a person with severe  
18 coronary artery disease to have that condition in the  
19 face of these very potent risk factors. He's not a  
20 diabetic. People with -- who are diabetics and have  
21 high cholesterol and have high triglycerides and high  
22 levels of low density lipoproteins, these are the people  
23 who usually have unstable angina. He didn't have that.  
24 And that's why one can't completely exclude  
25 the possibility of illicit drug use. I'm not saying

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1 that that's what he has. No. 1 is still coronary artery  
2 disease. That has to be the No. 1 diagnosis.  
3 He, on the other hand, has risk factors. He  
4 has a positive family history, and he has the male  
5 gender. He has the aging process, and he's a smoker.  
6 Those are all positive risk factors. So he's not  
7 without risk factors for the development of coronary  
8 artery disease.  
9 So what I'm saying is, in fact, I'm agreeing  
10 with all of your inferences. He has the possibility, if  
11 not the probability, of real severe coronary artery  
12 disease. He has a possibility, if not the probability,  
13 of real, true, ongoing unstable angina.  
14 Any physician who treats him has to think  
15 that, Here's a man who is at risk every time he has a  
16 chest pain with minimal or no excursion because this  
17 represents unstable angina.  
18 And carrying this one step further, a proper  
19 treatment, then, would be to put him in a hospital and  
20 do an angiogram on him and know for certain whether his  
21 arteries are clean or arteries are plugged up and then  
22 treat them accordingly.  
23 Treatment with nitroglycerin is just like  
24 scratching an itch. It will make the symptom go away  
25 temporarily, but it won't do anything to modify the

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1 underlying disease process.  
2 Q Mr. Williams had testified in his deposition  
3 that he took two or three nitroglycerin on  
4 September 6th, 2003, and that the pain continued to  
5 increase.  
6 A Well, then I would believe him.  
7 Q Is that more or less likely -- does that  
8 counsel towards a diagnosis of anginal pain or unstable  
9 anginal pain, that isolated factor?  
10 A Unstable angina.  
11 Q That Mr. Williams' pain lasted upwards of 45  
12 minutes to an hour, as an isolated factor, does that  
13 counsel more towards unstable angina or exertional  
14 angina?  
15 A Well, if this was angina pain, then it would  
16 certainly be severe angina pain. Don't forget, he's had  
17 other reasons for chest pain. No. 1, he's had a gastric  
18 ulcer, which can cause chest pain; and No. 2, he's had  
19 an infection in his stomach, called Helicobacter  
20 infection, which produced that ulcer.  
21 And that combination of Helicobacter infection  
22 and gastric ulcer -- and I think somebody in there said  
23 gastroesophageal regurgitation -- GERD, capital G,  
24 capital E, capital R, capital D -- that can cause chest  
25 pain.

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1 So whether this 45 minutes was in part or in  
2 whole angina or whether it was in part or in whole upper  
3 gastrointestinal, I don't know. But you're absolutely  
4 right in your inferences. The thing that will kill you  
5 is not the ulcer; the thing that will kill you is the  
6 heart. So one has to bend over backwards to rule out a  
7 heart condition.  
8 It's highly unusual -- highly unusual for a  
9 man to have chest pain for 45 minutes and have no change  
10 in the electrocardiogram and have no change in enzymes.  
11 Very unusual.  
12 Q Did you observe any readings of enzymes in  
13 this from September 6th, 2003?  
14 A I didn't see any. I didn't see any taken.  
15 Q Is there any indication from September 6,  
16 2003, of the ulcer that you were talking about earlier?  
17 A Well, no, not at that time; but there was in  
18 the past. And ulcers can be insidious and chronic.  
19 Q My question was, Are there any indication on  
20 September 6th, 2003, of this ulcer?  
21 A How would one know? No. Nobody did an  
22 endoscopy, stick a tube down there and take a look.  
23 Q So the answer is no?  
24 A The answer is no. But one would certainly,  
25 once you've ruled out a myocardial infarction, while the

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1 patient was in the hospital you would look for other  
2 areas that would cause chest pain and do these specific  
3 studies.  
4 Q But as an isolated factor, that Mr. Williams'  
5 pain lasted longer than 20 minutes, does that counsel  
6 more towards unstable angina or exertional angina?  
7 A Well, unstable angina can be any length of  
8 time. It could be two minutes if it came at rest.  
9 Q My question is, Since it lasted longer than 20  
10 minutes, is that more characteristic of unstable angina  
11 or exertional angina?  
12 MR. MCDONOUGH: Objection; states facts not  
13 yet in evidence.  
14 THE WITNESS: Neither one. Both could last  
15 long, if the condition is severe enough.  
16 BY MR. CALABRO  
17 Q That Mr. Williams appeared to be at rest when  
18 his pain began, does that counsel more towards unstable  
19 angina or exertional?  
20 A Yes, unstable angina is made by three factors:  
21 No. 1, new onset angina, which is not him. He's had it  
22 for years. No. 2, unstable -- crescendo angina from the  
23 standpoint of the fact that, as days go on, it gets  
24 worse and worse and worse. And No. 3, angina at rest,  
25 irrespective of how long it is. Any one of those three

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1 will constitute the diagnosis of unstable angina.  
2 Q I want to show you an exhibit -- well, I'll  
3 just ask you, I guess. Is it the case that, if someone  
4 is suspected of suffering from unstable angina, that  
5 they should not have an exercise stress test?  
6 A If you don't know it's unstable angina, you  
7 might be forced into doing a treadmill test. If a  
8 person has had a known myocardial infarction, you can  
9 still do a treadmill test.  
10 Treadmill tests are the safest things in the  
11 world to do because you're doing them in a laboratory  
12 where there is a defibrillator and emergency medicines  
13 and everything else that you need to offset any of the  
14 bad things that will happen with unstable angina.  
15 But often, when you have a person with an  
16 abnormal electrocardiogram showing an old myocardial  
17 infarction and a person has what sounds like unstable  
18 angina, you don't need a treadmill test. You don't need  
19 a nuclear test or stress echo. You put them in the  
20 hospital, and you do an angiogram. That would be the  
21 most expeditious thing to do.  
22 Q And we may have --  
23 A If it turns out that there is nothing there,  
24 so be it. Then you've got to go back to the drawing  
25 board and say to yourself, Well, what else will cause

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1 this abnormality in the electrocardiogram showing an old  
2 inferior wall infarction? How much illicit medicines is  
3 being shipped into this guy?  
4 Q I wanted to talk about another opinion you  
5 express in this report. You say Mr. Williams needed  
6 acute medical intervention or evaluation on August 3rd,  
7 2003, and September 6th, 2003.  
8 A Yes. And before that and after that.  
9 Q And you said:  
10 "One to one and one-half hours after the  
11 onset of symptoms or after requesting to be  
12 seen is a reasonably short period of time to  
13 be seen."  
14 A Yes.  
15 Q What did you mean by that?  
16 A What I mean by that is, if you catch a person  
17 in the throws of an acute myocardial infarction before  
18 three hours have elapsed from the onset of the chest  
19 pain and you intervene by means of thrombolytic  
20 intravenous medication or by means of sticking in a  
21 catheter and opening up a blocked artery, you'll either  
22 abort a myocardial infarction or markedly diminish a  
23 myocardial infarction.  
24 An hour to an hour and a half is not long at  
25 all. In fact, we have given instructions at St. Mary's

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1 and University of California that, when patients call up  
2 with chest pain and they are known cardiac patients, we  
3 want to get them into the cath lab in 90 minutes.  
4 That's our goal: 90 minutes.  
5 Q But if Mr. Williams is only minutes away from  
6 seeing a medical professional, you think it's reasonable  
7 for him to have to wait for 45 minutes to an hour before  
8 he goes to see that medical professional, given his past  
9 history?  
10 A If he's right next door to a medical  
11 professional, perhaps not, no. Try to get him in as  
12 quickly as possible. In this particular case, however,  
13 the time laps of 45 minutes or an hour or an hour and a  
14 quarter or an hour and a half certainly didn't do any  
15 harm to him.  
16 Q You noted also that, when he was seen, he was  
17 treated promptly with oxygen and nitroglycerin and his  
18 pain disappeared.  
19 A Yes.  
20 Q Is it your opinion that this treatment was  
21 what made his pain disappear?  
22 A It sounds that way.  
23 Q Isn't it the logical extension of that that,  
24 if he had been treated earlier, he would have had less  
25 pain?

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1 A Probably.  
2 Q Probably or -- isn't that the logical  
3 conclusion to that?  
4 A It sounds that way.  
5 Q So if Mr. Williams had had this treatment  
6 earlier, he would have had less pain than he  
7 experienced?  
8 A I think that's what I just got through saying.  
9 He probably would have had less pain than he  
10 experienced. But in the long run, no damage.  
11 Q Other than the pain he experienced?  
12 A Other than the pain.  
13 Q I'm going to show you a page from the book  
14 called Hurst's "The Heart" that we talked about earlier.  
15 MR. MCDONOUGH: Are you going to mark this as  
16 an exhibit.  
17 MR. CALABRO: Yes.  
18 Well, actually, no, I'm not going to.  
19 Q On page 1215 of "The Heart," the exhibit that  
20 I just handed to you --  
21 A Okay.  
22 Q -- there's a heading called "Acute Coronary  
23 Syndromes."  
24 A Right.  
25 Q And you would agree with me that acute

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1 coronary syndromes would be unstable angina?  
2 A Acute coronary syndrome can be unstable  
3 angina; yes, sir.  
4 Q About halfway into that paragraph it says.  
5 An ECG should be able to be obtained and  
6 accurately interpreted within 10 minutes.  
7 Maybe we should back up so we get some  
8 context. If we read the paragraph it says:  
9 ACS is actually a unifying term  
10 representing a common end result, acute  
11 myocardial ischemia. Acute ischemia is  
12 usually, but not always, caused by  
13 atherosclerotic coronary artery disease and  
14 is associated with an increased risk of  
15 cardiac death and myonecrosis. It  
16 encompasses acute MI and unstable angina.  
17 The importance of recognizing a cardiac  
18 patient with ACS concerns both triage and  
19 management. Those deemed to have an ACS in  
20 the emergency department should be triaged  
21 immediately to an area with continuous  
22 electrocardiogram monitoring and  
23 defibrillation capability. An ECG should be  
24 able to be obtained and accurately  
25 interpreted within ten minutes.

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1 Isn't that inconsistent with the 45-minute to  
2 an hour delay that you thought was reasonable?  
3 A What I'm interpreting that is within ten  
4 minutes of the time that he hits the emergency room.  
5 You know, obviously, if patients are across town and  
6 they start having the pain, they can't have an  
7 electrocardiogram within ten minutes. That's not  
8 reasonable.  
9 They hit the emergency room. They call the  
10 ECG technician, and the tech comes down with a machine.  
11 It rolls down. They take an electrocardiogram, and then  
12 the technician runs around and finds a doctor who will  
13 interpret it. Ten minutes. That's reasonable.  
14 And I agree with everything else that was said  
15 there.  
16 Q Do you agree that the prompt and accurate  
17 diagnosis of ACS permits the timely initiation of  
18 appropriate therapy for ACS?  
19 A Yes.  
20 Q And so, the sooner that that determination can  
21 be made, the more accurate the treatment would be?  
22 A Sure. Should have been made in the year 2000  
23 or 2001 or 2003 or 2002. He's been having unstable  
24 angina all these years, if his chest pain in total turns  
25 out to be due to the heart.

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1 Q If one of the defendants, the guards in this  
 2 case, had called you and told of Mr. Williams'  
 3 condition, would you have told them to wait for 45  
 4 minutes to an hour before sending him to the medical  
 5 clinic?  
 6 MR. MCDONOUGH: Objection; incomplete  
 7 hypothetical based on facts not yet in evidence.  
 8 THE WITNESS: If I was the doctor in the  
 9 medical clinic and I was told that here is a man who had  
 10 chest pain by one of these officers and I knew that he  
 11 had had an old inferior wall myocardial infarction,  
 12 obviously I would have said, Get him down here as soon  
 13 as possible.  
 14 BY MR. CALABRO  
 15 Q And in such case, waiting 45 minutes probably  
 16 wouldn't have been reasonable?  
 17 A I don't know what the circumstances were in an  
 18 area of incarceration. I can't answer that.  
 19 Q If there is no reason preventing these guards  
 20 from sending Mr. Williams immediately, would it have  
 21 been unreasonable to wait 45 minutes to an hour before  
 22 sending him to the medical clinic?  
 23 MR. MCDONOUGH: Objection; incomplete  
 24 hypothetical.  
 25 THE WITNESS: If there was no reason, then

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 8  
 9 I, WILLIAM S. BREALL, M.D., do hereby declare under  
 10 penalty of perjury that I have read the foregoing  
 11 transcript; that I have made any corrections as appear  
 12 noted, in ink, initialed by me, or attached hereto; that  
 13 my testimony as contained herein, as corrected, is true  
 14 and correct.  
 15 EXECUTED this \_\_\_\_ day of \_\_\_\_\_,  
 16 200\_\_, at \_\_\_\_\_, \_\_\_\_\_.  
 (City) (State)  
 17  
 18  
 19 \_\_\_\_\_  
 WILLIAM S. BREALL, M.D.  
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 22  
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1 perhaps it would be unreasonable. Nonetheless, no  
 2 fault, no blame. It turns out that there was no new  
 3 acute myocardial infarction that could be ascertained  
 4 and whatever condition he has was aborted by means of  
 5 oxygen and nitroglycerin.  
 6 BY MR. CALABRO  
 7 Q But nobody knew that at the time that he was  
 8 complaining of the pains?  
 9 MR. MCDONOUGH: Objection; calls for  
 10 speculation.  
 11 BY MR. CALABRO  
 12 Q Is that right?  
 13 A That's correct.  
 14 MR. CALABRO: Okay. I don't have any further  
 15 questions.  
 16 MR. MCDONOUGH: Okay. I have no questions.  
 17 //  
 18 //

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1  
 2  
 3 I, the undersigned, a Certified Shorthand Reporter  
 4 of the State of California, do hereby certify:  
 5 That the foregoing proceedings were taken before me  
 6 at the time and place herein set forth; that any  
 7 witnesses in the foregoing proceedings, prior to  
 8 testifying, were placed under oath; that a verbatim  
 9 record of the proceedings was made by me using machine  
 10 shorthand which was thereafter transcribed under my  
 11 direction; further, that the foregoing is an accurate  
 12 transcription thereof.  
 13 I further certify that I am neither financially  
 14 interested in the action nor a relative or employee of  
 15 any attorney of any of the parties.  
 16 IN WITNESS WHEREOF, I have this date subscribe my  
 17 name.  
 18  
 19 Dated: \_\_\_\_\_  
 20  
 21 \_\_\_\_\_  
 CLAUDIA A. BETTUCCHI  
 CSR NO: 12214  
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