

In the Matter Of:
HAZLEHURST vs
HAYS, M.D., ET AL.

WILLIAM STEPP, M.D.

August 31, 2020

riverside
R E P O R T I N G

22 North Second Street/Suite 303, Memphis, TN, 38103 (901) 527-1100

IN THE CIRCUIT COURT OF MADISON COUNTY, TENNESSEE
FOR THE TWENTY-SIXTH JUDICIAL DISTRICT AT JACKSON

WILLIAM YATES HAZLEHURST, by and)
through his Conservator ROLF G.S.)
HAZLEHURST,)
)
Plaintiff,)
)
VS.) DOCKET NO. C-19-38
) DIVISION II
E. CARLTON HAYS, M.D., and) JURY DEMANDED
THE JACKSON CLINIC PROFESSIONAL)
ASSOCIATION,)
)
Defendants.)

DEPOSITION

OF

WILLIAM STEPP, M.D.

AUGUST 31, 2020

** TAKEN VIA ZOOM VIDEOCONFERENCE **

SAMANTHA E. COHEN, RPR, CRR, LCR(TN)(MS)
RIVERSIDE REPORTING
Memphis, Tennessee
(901) 527-1100

The deposition of WILLIAM STEPP, M.D. is taken via Zoom videoconference on behalf of the Plaintiff, on this the 31st day of August, 2020, pursuant to notice and consent of counsel, beginning at approximately 9:00 a.m.

This deposition is taken pursuant to the terms and provisions of the Tennessee Rules of Civil Procedure.

All forms and formalities, excluding the signature of the witness, are waived and objections alone as to matters of competency, relevancy and materiality of the testimony are reserved, to be presented and disposed of at or before the hearing. Objections as to the form of the question must be made at the taking of the deposition.

A P P E A R A N C E S

** ALL PARTIES APPEARED VIA ZOOM VIDEOCONFERENCE **

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VIDEOGRAPHER: RANDY LAWSON, Law Media Productions

ALSO PRESENT: ROLF HAZLEHURST

PATRICIA CHEN

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1 P R O C E E D I N G S

2 * * * * *

3 THE VIDEOGRAPHER: This is the video
4 deposition of Dr. William Stepp. This is
5 August 31, 2020. We are on the record at 8:00 --
6 excuse me, at 9:36. Counsel, would each of you
7 state your appearances for the record which will
8 then be followed by the swearing in of the witness
9 by the court reporter.

10 MR. RILEY: I am David Riley on behalf
11 of Yates Hazlehurst.

12 MR. SIRI: Aaron Siri on behalf of Yates
13 Hazlehurst.

14 MR. SANDERS: Craig Sanders on behalf of
15 Dr. Carlton Hays and The Jackson Clinic.

16 WILLIAM STEPP, M.D.,
17 Having been first duly sworn, was examined
18 and testified as follows:

19 EXAMINATION

20 BY MR. SIRI:

21 Q Good morning, Dr. Stepp.

22 A Good morning.

23 Q Can you please state your full name for the
24 record?

- 1 A It's William Price Stepp, Jr.
- 2 Q Have you been deposed before?
- 3 A Yes, I have.
- 4 Q Okay. How many times have you been deposed?
- 5 A This will be the third time.
- 6 Q Okay. Okay. So two other times apart from
7 today; correct?
- 8 A That's correct.
- 9 Q Okay. Can you tell me about the other two
10 depositions, what those were about, context and so
11 forth?
- 12 A One was -- I was asked by an attorney to give
13 an opinion on a case of meningitis and I was
14 giving a deposition on that. To be honest, I
15 can't remember if it was for the defense or the
16 plaintiff. And the other time was a lawsuit
17 against myself.
- 18 Q You were the defendant in the second lawsuit?
- 19 A Yes.
- 20 Q And what was the issue?
- 21 A It was a hyperbilirubinemia case with
22 kernicterus.
- 23 Q And what was the claim being made?
- 24 A That myself and the other doctor involved

1 were not following the standard of care and we
2 caused the child to have a problem.

3 Q And what was the outcome of that case?

4 A Settlement.

5 Q Okay. When did that case occur?

6 A It was initiated in 1996, I believe.

7 Q Were you the treating physician?

8 A I was one of them.

9 Q Okay. And when they said you violated the
10 standard -- they claimed that you violated the
11 standard of care, in what way were they claiming
12 you violated the standard of care?

13 A I saw the baby initially in the nursery when
14 there was no jaundice present. The baby was
15 discharged by another physician. They came back
16 to me later, the baby was quite jaundiced, and I
17 treated with phototherapy and they claimed that I
18 should have used exchange transfusion instead.

19 Q What happened to the child?

20 A Gradually it appeared there was some
21 neurological deficit and it was felt that that was
22 due to kernicterus, which is brain damage due to
23 high bilirubin.

24 Q I'm -- so -- and when did the case settle

1 approximately?

2 A I think it was 2004 or '05, right around
3 there.

4 Q Do you recall what court it was pending in?

5 A No, I do not.

6 Q Did you have to -- did you ever have to go to
7 court for it, for that case?

8 A No.

9 Q Were you deposed in that case?

10 A Yes.

11 Q Yeah, I apologize. I meant how many times
12 were you deposed in that case?

13 A Oh, once.

14 Q Okay. And then you said you were an expert
15 on meningitis, in a case regarding meningitis;
16 correct?

17 A That's correct. I was asked to give an
18 opinion.

19 Q And how long ago did that -- when did you --
20 were you deposed in that case?

21 A It was probably between 1990 and 2000. I
22 don't remember specifically.

23 Q Okay. And what did that case involve? More
24 specifically, what was the claim in that case?

1 A That the treating physician had improperly or
2 failed to diagnose meningitis and the child
3 suffered as a result.

4 Q And were you testifying regarding the
5 standard of care in that case?

6 A Yes.

7 Q Now that you've answered two or three more
8 questions about it, do you recall whether you were
9 testifying for the defense or the plaintiff?

10 A To be honest, I really do not remember.

11 Q Okay. Do you recall -- where were you
12 deposed for that case? Do you remember where?

13 A In a meeting room -- in a meeting room at
14 The Jackson Clinic.

15 Q And were you deposed more than once in that
16 case?

17 A No, just the one time.

18 Q Do you remember either the name of the
19 plaintiff or the defendant in that case?

20 A No.

21 Q Do you remember the name of the attorney that
22 hired you?

23 A No.

24 Q Do you remember any details about that case

1 beyond what we've already discussed?

2 A I remember that it was a bacterial meningitis
3 and specifically due to pneumococcus.

4 Q Do you remember the child's name?

5 A No.

6 Q Do you have any of the documents related to
7 that case still in your possession?

8 A No.

9 Q Did you write an actual report in that case?

10 A Nothing written.

11 Q You just showed up to testify?

12 A At the deposition.

13 Q Did you have an engagement letter with the
14 attorneys that governed how they would pay you?

15 A On that particular case?

16 Q Yes.

17 A No.

18 Q All right. I'm going to go through a few
19 rules with you, Dr. Stepp, regarding the
20 deposition. Okay. You've done it twice, but it
21 sounds like it's been a little bit of time.

22 A It has been.

23 Q So I'll review them for your benefit and the
24 benefit of the record. The court reporter has

1 placed you under oath. That's the same as a court
2 of law. You're testifying under penalty of
3 perjury. Do you understand what I mean when I say
4 perjury?

5 A Yes.

6 Q Now, the court reporter is making a record by
7 typing up everything that you say; okay? The
8 court reporter can't record nods, so nodding, you
9 know, yes or no while obviously we're on a Zoom
10 and we can see each other, I understand what it
11 means, the record won't reflect that. Understood?

12 A Yes.

13 Q The other thing too is that when we see each
14 other, you know, incantations such as uh-huh might
15 have meaning when we hear them, but they don't --
16 they're not meaningful on paper. It's not clear
17 whether that means yes or no, so I ask that when
18 you respond to not use uh-huhs and things of that
19 nature; okay?

20 A Okay.

21 Q Okay. If you don't understand a question,
22 let me know; all right?

23 A Yes.

24 Q The other thing too is that you might very

1 well be able to predict the question I'm about to
2 ask. Even though you're almost 100 percent
3 certain you know what I'm going to ask, I'd kindly
4 ask that you wait until I finish the question
5 before you respond. This way there's a complete
6 record; okay?

7 A Okay.

8 Q All right. Another thing too is that if you
9 don't know the answer to something, you can say I
10 don't know, that's fine. And also, you know,
11 you're not being asked to speculate. However, you
12 know, if you have a partial or memory of something
13 or remember only a portion, then you should so
14 state; okay?

15 A Okay.

16 Q I'm going to ask you a question that's not
17 implying that -- doesn't intend to imply anything.
18 It's just a standard question that we ask. Are
19 you taking any medications or under the influence
20 of any other substances that might affect your
21 ability to testify today?

22 A No.

23 Q Okay. How did you prepare for this
24 deposition?

1 A Mr. Sanders provided me with some materials
2 and I read them.

3 Q Okay. What materials did he provide you
4 with?

5 A Depositions of witnesses that have already,
6 you know, given their testimony.

7 Q Okay.

8 A And he's given me a few excerpts from two
9 different editions of the Red Book.

10 Q So which deposition transcripts did you have?

11 A It's easier if I just read them. Is that
12 okay?

13 Q That's fine.

14 A I have the complaint that was filed in 2010;
15 the complaint filed in 2019; plaintiff's expert
16 disclosure of Dr. Zimmerman; plaintiff's second
17 supplemental answers to defendant's first set of
18 interrogatories; plaintiff's expert disclosure of
19 Ramon Ramos, Dr. Ramos; plaintiff's expert
20 disclosure of Dr. Mumper; defendants' expert
21 disclosures; defendants' supplemental expert
22 disclosures; medical records from The Jackson
23 Clinic; medical records from Vanderbilt University
24 Medical Center; Dr. Hays' deposition; Rolf

1 Hazlehurst's deposition; Angela Hazlehurst's
2 deposition; LuAnn Upchurch's deposition; the
3 deposition of Dr. Riikola; deposition of
4 Dr. Ramos. I think that's it.

5 Q Okay. If there were any other materials,
6 would they be somewhere other than what you just
7 looked through?

8 A The only other thing I can remember looking
9 at is I pulled up the VIS sheet for MMR, the
10 current one, on the Internet.

11 Q When did you do that?

12 A A few days ago.

13 Q And why did you do that?

14 A I -- just to look at it. I mean, there was
15 no special reason.

16 Q Did somebody prompt you to pull up the VIS
17 for the MMR?

18 A No.

19 Q Okay. Was that in the context of reviewing
20 any other materials?

21 A It was while I was reading the other
22 material, yeah. I just took a moment, pulled it
23 up, looked at it, and then went on.

24 Q Okay. Did you pull up anything else and look

1 at it as you were reading the deposition
2 materials?

3 A No.

4 Q Okay. And when you say you pulled up the VIS
5 for the MMR, do you mean the current VIS?

6 A The current one.

7 Q There's also a copy of that in your office, I
8 presume; correct?

9 A I don't have an office anymore.

10 Q Ahh. Now, AAP, you said that you were
11 provided some expert material from the AAP. Did
12 you mean the AAP Red Book?

13 A Yes, sir.

14 Q Okay. And from what year was that Red Book?

15 A It was one from 2000, and the other is -- I'm
16 not sure. It's probably on here, but it's not the
17 whole book, so it's just Xerox copies, and -- but
18 it's a later edition than 2000. I don't know the
19 year.

20 Q Can you hold it up in front of you?

21 A I have it in my hand.

22 Q Okay. If you look at the bottom of the page,
23 do you see a number, a year?

24 A There's several pages. So far I'm not seeing

1 that.

2 Q Can you hold up to the screen the first page
3 of what you're looking at?

4 A It's not very helpful, I realize.

5 Q Yeah.

6 A Do you want the second page?

7 Q Sure. Okay. When were you provided these
8 two editions of the excerpts of the Red Book?

9 A It was several weeks ago.

10 Q Okay. And you were provided those separately
11 from the rest of the materials that you were asked
12 to review?

13 A No. I got them at the same time.

14 Q Okay. Got it. What instructions were you
15 provided upon receiving these materials, including
16 the AAP Red Book excerpts?

17 A Well, I think the instructions, or certainly
18 implied instructions, were that I should read them
19 so I'm better able to form an opinion.

20 Q An opinion with regard to --

21 A This case.

22 Q As well as the standard of care applicable to
23 the case?

24 A Yes.

1 Q Would you say that your opinions regarding
2 the standard of care in this case were formed in
3 the last few weeks?

4 A Well, I've been aware of this case for a long
5 time, as Dr. Hays is one of my partners, or was
6 one of my partners, but reviewing the case
7 recently and in reading the depositions and
8 looking at the medical record has helped more
9 cement my thoughts for me.

10 Q And so the opinion that you had prior to
11 reviewing these materials has been cemented,
12 you're meaning that it hasn't changed after
13 reviewing the materials?

14 A In the sense that I think Dr. Hays performed
15 his duties within the standard of care, no, it
16 hadn't changed.

17 Q Okay. Well, we'll come back to that later in
18 the deposition. Is there something that has
19 changed in terms of the way you -- what it is you
20 thought about this case after reviewing these
21 materials that was different than when you
22 previously assumed?

23 A Nothing different.

24 Q Did you have any discussions with anybody

1 prior to today to prepare for this deposition?

2 A Mr. Sanders.

3 Q Okay. And when did you meet to do -- to talk
4 with Mr. Sanders?

5 A Twice within the last couple weeks.

6 Q Okay. And how did you meet? Via Zoom or in
7 person?

8 A In person.

9 Q Okay. And how long was each meeting?

10 A Well, the first one was a little over two
11 hours and the second one was a little less than
12 two hours.

13 Q Okay. And I presume you discussed the
14 testimony you were going to be providing today?

15 A He wanted to know what -- what my opinions
16 were --

17 Q Uh-huh.

18 A -- so in a sense, yes.

19 Q And did you also learn additional information
20 about this lawsuit during those meetings?

21 A Most of the additional information has been
22 from reading the material he provided because
23 it's -- it's detail that I didn't know before.

24 Q Okay. Did you -- during those discussions,

1 did you discuss Amoxicillin?

2 A Yes.

3 Q Did you discuss standard of care?

4 A Yes.

5 Q Okay. Do you believe that the testimony
6 you're going to provide today was influenced by
7 those discussions?

8 MR. SANDERS: Object to the form of the
9 question. You can answer, Doctor, if you have an
10 answer.

11 A Not from the discussion with Mr. Sanders, no,
12 but from the material he provided.

13 Q (By Mr. Siri) Other than Mr. Sanders, did
14 you have a discussion with anybody else --

15 A No.

16 Q -- about -- anybody else relating to the
17 deposition you were going to take today?

18 A No.

19 Q Okay. When is the last time you had any
20 discussion with anybody regarding this case in any
21 way that was other than Mr. -- with Mr. Sanders?

22 A Well, since I was asked to review the case,
23 nobody.

24 Q Okay.

1 A And as some people know, I'm, you know,
2 participating, but they don't know anything about
3 it. Now, way back, because this started when
4 Yates Hazlehurst was born, I'm a partner of
5 Dr. Hays, and so some of us discussed the fact
6 that this had been going on.

7 Q And you --

8 A And that's a long time and before I knew I
9 was going to be involved.

10 Q Okay. So just to make sure that I
11 understand. So you said since you were -- became
12 involved, I guess, as an expert in this case, you
13 have not had any discussions about this case with
14 anybody other than Mr. Sanders. Is that correct?

15 A That's correct.

16 Q Okay. So when were -- just so I'm again
17 clear, when did you, you know, in your mind become
18 an expert in this case?

19 A They first asked me -- it was actually over a
20 year ago.

21 Q Okay.

22 A And actually Mr. Phillips was present when I
23 met with Mr. Sanders then, and I was given some of
24 the material at that time. Then nothing happened

1 in the case for a long time, and I didn't think
2 about it or talk about it until recently when I
3 found out I was going to give this deposition, and
4 that's when I met twice with Mr. Sanders in the
5 last couple weeks.

6 Q Okay. So would it be accurate to state that
7 for the past year you've spoken to nobody else
8 about this case in any manner other than
9 Mr. Sanders?

10 A That would be fair, yes.

11 Q Okay. Would it be accurate?

12 A Accurate.

13 Q Is that yes?

14 A Yes.

15 Q Okay. So but in the past you said that you
16 have had discussions with other individuals about
17 this case, you know, and it sounds like it might
18 have even been a bit more temporally removed from
19 today. Who were those discussions with?

20 A It's long enough ago where I don't remember
21 specifically, but we had several partners there at
22 The Jackson Clinic in the pediatric department,
23 and it could have been any or all of them. I
24 would suspect it was not Dr. Anderson, doc -- not

1 Dr. Shelby-Kennedy, not Dr. Hays for sure, more
2 likely possibly Dr. Owens or Dr. Woods, but again,
3 a long time ago, don't remember.

4 Q Okay. But it wouldn't have been with
5 Dr. Hays?

6 A No.

7 Q Okay. So then how did you know about the
8 case if it wasn't -- oh, because the clinic was
9 also a defendant; right?

10 A Correct.

11 Q But you never had a discussion with Dr. Hays
12 about the case?

13 A I have no recollection of ever talking to
14 Dr. Hays about the case.

15 Q Is there a reason you wouldn't have spoken to
16 Dr. Hays about the case?

17 A Well, after I was asked to participate, I
18 knew I should not do that, and before that, I just
19 felt like, you know, he didn't need to hear about
20 it from me for -- so just being sensitive to his
21 feelings, and but again, after I became involved,
22 I knew I was not -- I was not supposed to do that,
23 so I did not.

24 Q Okay. And then -- and but before you became

1 an expert, you didn't want to talk to Dr. -- you
2 didn't talk -- bring up it up with Dr. Hays
3 because you thought it might be a sore spot with
4 him?

5 A Yes.

6 Q Did anybody else --

7 A Did anybody else what?

8 (Audio disruption.)

9 MR. SIRI: Does anybody else hear that
10 noise or is it just me?

11 THE WITNESS: I do.

12 MR. RILEY: Oh, I hear it.

13 Q (By Mr. Siri) Okay. Dr. Stepp, do you hear
14 a noise?

15 A I hear a noise. It sounds like it's in the
16 background.

17 Q Okay. Well, let's keep going. Do you -- are
18 you aware of anybody who did speak with Dr. Hays
19 about this case?

20 A No.

21 Q When is the last time you had a conversation
22 with Dr. Hays about anything?

23 A Earlier this year.

24 Q Okay. And what was it about?

1 A Dr. Hays is my son and my daughter's doctor,
2 and my son had a checkup with Dr. Hays, and we
3 mentioned what we needed to talk about as it
4 relates to his care of my son, and then other than
5 that, it was just about the weather or something.
6 I don't remember. It was just casual
7 conversation.

8 Q How -- how old are your son and daughter?

9 A My daughter is 34 and my son is 32.

10 Q Okay. Were you with them in the office when
11 they saw Dr. Hays or is the conversation you had
12 separately with Dr. Hays about your son and
13 daughter?

14 A About my daughter, she lives in Memphis, and
15 she will come -- she drives to Jackson to see
16 Dr. Hays, and I do not attend when she is there.
17 And she doesn't come very often. As far as my
18 son's checkup earlier this year, I went with him
19 to the visit, but I sat in the waiting room until
20 he was finished and then asked him what he thought
21 about a few medical issues that pertained to my
22 son's health.

23 Q And then with regard to your daughter, was
24 that discussion over the phone?

1 A Oh, I didn't talk to him about his visit --
2 where he had a visit with my daughter. She had an
3 issue she wanted to discuss and I wasn't involved
4 at all.

5 Q So have you had a discussion with Dr. Hays
6 relating to your daughter in the past year?

7 A No.

8 Q Okay. So the discussion that you had with
9 Dr. Hays in the past year that you recall was when
10 you talked with him about your son after waiting
11 in the waiting room while your son was getting a
12 medical checkup?

13 A I don't understand the question.

14 Q No problem. You went in with your son for a
15 medical visit that he had with Dr. Hays; correct?

16 A Correct.

17 Q You waited in the waiting room; right?

18 A Yes.

19 Q After the -- Dr. Hays met with your son, you
20 then spoke with Dr. Hays; yes?

21 A Yes.

22 Q Okay. That -- did that conversation occur in
23 the waiting room?

24 A No, back in his office --

- 1 Q Okay.
- 2 A -- down the hall.
- 3 Q How long was that conversation?
- 4 A A few minutes.
- 5 Q Okay. And --
- 6 A Less than five.
- 7 Q And besides -- and did it pertain to anything
- 8 other than your son's medical situation or the
- 9 weather?
- 10 A No.
- 11 Q Okay. Was there any other conversation
- 12 you've had with Dr. Hays in the past year other
- 13 than that one?
- 14 A I do not remember one.
- 15 Q Is it possible you've had one and don't
- 16 recall?
- 17 A Not likely. The only time I see him is if I
- 18 go to the clinic and visit, and you -- he's
- 19 usually busy and I'm talking to some of the other
- 20 pediatricians, so I don't remember talking to him
- 21 other than that time in the last year.
- 22 Q And why would you -- how often have you been
- 23 to The Jackson Clinic in the past year?
- 24 A Well, of course, I go there for my own

1 health, and needless to say I don't see the
2 pediatricians, but to go and just visit my former
3 colleagues, this calendar year probably just once,
4 and once the coronavirus pandemic came, I've not
5 done that.

6 Q Is that something you've done over the years,
7 gone back and visited The Jackson Clinic to see
8 your colleagues?

9 A Yes. It's usually if I have an appointment
10 there for myself and then afterwards I'll drop up
11 and say hi.

12 Q Uh-huh. So, you know, over the last ten
13 years, excluding this year, how many times a year
14 would you say on average you've gone down to
15 The Jackson Clinic?

16 A Are you talking about visiting the
17 pediatricians or for my own personal healthcare?

18 Q Both.

19 A Well, I probably have an office visit three
20 or four times a year for myself, and in the last
21 ten years to go visit and just talk to my former
22 pediatric colleagues probably four, maybe five.
23 Less than once a year.

24 Q You mean four or five when you add the

1 meeting to meet -- see your colleagues, two of the
2 visits you have for yourself, your checkup? Let
3 me strike that. So you would go down about four
4 times a year for a checkup yourself; correct?

5 A To various different doctors, yes.

6 Q Okay. And then separate from that, you would
7 go down approximately four or five times a year
8 just to -- as a former colleague to visit with
9 your former pediatric partners and colleagues?

10 A That would certainly be approximately
11 correct.

12 Q Okay. So about ten times a year you'd visit
13 The Jackson Clinic over the last ten years every
14 year?

15 A Well, there's times when I would see a doctor
16 for myself and then visit with the pediatricians
17 on that one occasion, so they were not necessarily
18 separate.

19 Q Were these routine visits that you would be
20 going down for when you'd go four times a year?

21 A For the most part. I've been lucky enough to
22 be fairly healthy. But, for example, I've had
23 some kidney stones so I go see the urologist. I
24 get my eyes checked every year so I see the

1 ophthalmologist. My general healthcare is taken
2 care of by one of the internal medicine doctors,
3 and I have one or two visits a year there. I had
4 surgery recently, so I had to get approval by the
5 cardiology department, so I had a cardiology visit
6 for myself. They're located in a different campus
7 than Dr. Hays is, so --

8 Q Now --

9 A -- I would not have visited on that occasion.

10 Q And how many pediatricians are in The Jackson
11 Clinic's pediatric practice, on average during --
12 you know, over the last ten years?

13 A Seven or eight.

14 Q Seven or eight? And when you went down there
15 to go and, you know, pay a social visit to the --
16 to the doctors in the pediatrician division, I --
17 would you talk to, you know, whoever happened to
18 be there just collegially?

19 A Yes, because I don't want to interrupt their
20 work for the day.

21 Q Absolutely. And so over the years, you've
22 had, I assume, a number of conversations with --
23 with Dr. Hays during those visits?

24 A Not very many.

1 Q Okay.

2 A Not -- that's not what I would usually see.

3 Q Okay.

4 A Other than to say hi as I passed by in the
5 hall.

6 Q Are there more doctors that you're more
7 friendly with in the pediatric department?

8 A That's -- that would be correct.

9 Q Who is that?

10 A Dr. Woods and Dr. Owens and Dr. Pedigo,
11 although she's no longer there.

12 Q Now, going back beyond 2010, so -- you know
13 what, let's come back to that. You worked at
14 The Jackson Clinic; correct?

15 A That is correct.

16 Q Okay. From when to when did you work at
17 The Jackson Clinic?

18 A I was in the pediatric department, it -- I
19 mean the pediatric group in Jackson between 1980
20 and 1982, and 1982 we had discussions with
21 The Jackson Clinic administration and we decided
22 to merge, and so in 1982 would be my start date
23 with The Jackson Clinic.

24 Q What was your position when you started?

1 A General pediatrician.

2 Q And how long did you hold that position at
3 The Jackson Clinic?

4 A Until the end of 2013.

5 Q Okay. Were you a partner in The Jackson
6 Clinic?

7 A Yes.

8 Q And in terms of how the clinic was
9 structured, what did being a partner mean in terms
10 of ownership?

11 A In terms of ownership, you owned stock in the
12 professional association, and then in addition,
13 and this has changed, it's not that way now, but
14 in addition, you had the opportunity to buy into
15 the limited partnership that owned the property.

16 Q Okay. And did you own shares in the general
17 partnership?

18 A Pardon?

19 Q Did you own shares in the general
20 partnership?

21 A Yes.

22 Q Okay. And did you own shares in the limited
23 partnership?

24 A Yes.

1 Q Okay. Until -- do you still own those shares
2 in the general and limited partnership?

3 A No.

4 Q Okay. Do you still own shares in either the
5 general or limited partnership?

6 A No, neither.

7 Q Okay. And when did you stop owning those
8 shares?

9 A It was approximately 2011.

10 Q Okay. And in 2011 you stopped owning both
11 the general and the limited shares that you had in
12 The Jackson Clinic?

13 A Yes.

14 Q Okay. And what changed in 2011 such that you
15 no longer -- that you no longer owned shares in --
16 the general or limited shares in The Jackson --
17 for The Jackson Clinic?

18 A The Jackson Clinic required the physicians
19 that were owners in those two things to produce
20 enough income so that they continued to qualify
21 that -- for that. However, I was planning to
22 retire in a few years and intentionally reduced my
23 workload, and I hit the criteria for having to
24 sell, so that's what happened.

1 Q And -- and who bought your shares?

2 A The Jackson Clinic.

3 Q Okay. From the period of 1980 to 2013, was
4 the remuneration that you received from
5 The Jackson Clinic -- Jackson Clinic the primary
6 source of your income?

7 A Yes.

8 Q During -- between 1980 and 2013, was the
9 remuneration that you received from The Jackson
10 Clinic your only source of income?

11 A Well, going back one second, 1980 I was with
12 the Jackson Pediatrician Clinic.

13 Q Yeah, but --

14 A And it was 1982 that we merged with
15 The Jackson Clinic.

16 Q But other than -- let me rephrase the
17 question.

18 A But I have -- would have bank accounts that
19 would generate interest, other investments that
20 might give dividends, but other than -- other than
21 that, no, it was The Jackson Clinic.

22 Q And since leaving The Jackson Clinic in 2013
23 in your role as a general pediatrician, have you
24 received any form of remuneration or compensation

1 or any type of financial benefit since 2013 from
2 The Jackson Clinic?

3 A Only one. There is a committee that I am on
4 at The Jackson Clinic, and I'm on it not as a
5 physician, but as a Medicare patient. It's a
6 Medicare accountable care organization and they
7 have to have a Medicare patient on that committee,
8 and I'm that one, and they do give me a small
9 check for attending four meetings a year. And
10 other than that, I have no association with
11 The Jackson Clinic at all.

12 Q And how long have you held that position --
13 let me strike -- back up. What's the name of that
14 committee at The Jackson Clinic that you've been
15 sitting on --

16 A I believe it is called Jackson Integrated
17 Medical Society.

18 Q And it's part of The Jackson Clinic; correct?

19 A That's correct.

20 Q Okay. And for how long have you sat on that
21 committee?

22 A I believe I started in 2014.

23 Q And have you continuously been on that
24 committee since 2014?

- 1 A Yes, I have.
- 2 Q Do you currently sit on that committee?
- 3 A Yes.
- 4 Q You said it was called the Jackson
5 Integrated -- what was the full name?
- 6 A I hope I'm correct on this, but I believe
7 it's the Jackson Integrated Medical Society, JIMS.
- 8 Q Got it. All right. So from 2014 until the
9 present, you've been a member of the Jackson
10 Integrated Medical Society, which is part of
11 The Jackson Clinic; correct?
- 12 A I'm on -- I sit on that committee, yes.
- 13 Q Okay. And how much remuneration do you
14 receive a year for sitting on that committee?
- 15 A \$1,200.
- 16 Q Okay. And you're currently still on that
17 committee; correct?
- 18 A Yes, I am.
- 19 Q Okay. Other than the -- the amount paid to
20 you for being a member of that committee, is there
21 any other benefit that you receive from
22 The Jackson Clinic since 2013?
- 23 A None.
- 24 Q Okay. Any pension?

1 A I don't -- I do not receive a pension. We
2 had a profit sharing plan.

3 MR. SANDERS: Hang on one second, if I
4 could. I've been kicked off for the last ten
5 minutes or so.

6 MR. SIRI: Oh.

7 MR. SANDERS: Have y'all kept -- have
8 y'all been going?

9 THE WITNESS: Yes.

10 MR. SIRI: Yeah, yeah.

11 MR. SANDERS: Randy, could you not tell
12 that I got kicked off?

13 THE VIDEOGRAPHER: No, I did not.

14 MR. SANDERS: Is there any way to tell
15 that in the future if it happens again?

16 THE VIDEOGRAPHER: Yeah, I'll put a flag
17 on your account.

18 MR. SANDERS: All right. If I do get
19 kicked off, can --

20 THE VIDEOGRAPHER: Yeah, I --

21 MR. SANDERS: -- can you -- can you let
22 everybody know so they don't keep going?

23 THE VIDEOGRAPHER: Okay.

24 MR. SIRI: And then, of course, if we

1 know you get kicked off, we'll, of course,
2 Mr. Sanders, stop in the future.

3 MR. SANDERS: Thank you.

4 MR. RILEY: And, Craig, might I suggest
5 that if something like that happens again and
6 you're aware of it, just send me a -- send me a
7 text or --

8 MR. SIRI: Yeah.

9 MR. RILEY: -- I have my phone near me
10 so I can -- call me or text me.

11 MR. SANDERS: Okay.

12 THE VIDEOGRAPHER: I show you in twice,
13 so -- and in the waiting room, so if we lose you
14 again, I'll alert everyone as well.

15 MR. SANDERS: All right. Thank you.

16 THE VIDEOGRAPHER: You bet.

17 MR. SIRI: Okay.

18 MR. SANDERS: Hey, Aaron, do you mind if
19 the court reporter reads to me what happened since
20 I've been out before we --

21 MR. SIRI: Yeah, I -- I was just --
22 yeah, I wasn't going to do -- I was actually going
23 to summarize for you. I don't think -- that's
24 fine. And I can just tell you that, I mean, we've

1 just been going over Dr. Stepp's history with
2 The Jackson Clinic. That's -- that's been --
3 we're still there.

4 MR. SANDERS: Okay. Samantha, can you
5 read for me -- the last that I heard was when
6 Dr. Stepp was talking about that he was a patient
7 of The Jackson Clinic and will visit his
8 colleagues every so often, you know, if he goes up
9 there. How far back is that, Samantha?

10 THE COURT REPORTER: It's going to take
11 me just a second to find it.

12 MR. SANDERS: Sure.

13 THE COURT REPORTER: Do you want to go
14 off the record or do you want me to just --

15 MR. SANDERS: Yeah, that's the --

16 THE VIDEOGRAPHER: Okay. We are off the
17 record at 10:18.

18 (Whereupon, a portion of
19 the record was read back
20 by the court reporter.)

21 THE VIDEOGRAPHER: We are now back on
22 the record at 10:27.

23 MR. SIRI: So we just took a quick break
24 so that the questions and answers -- the questions

1 that I asked and the answers that Dr. Stepp
2 provided while Mr. Sanders was unable to access
3 Zoom were just read back to him by the court
4 reporter and -- and with that, Mr. Sanders, are we
5 ready to continue?

6 MR. SANDERS: Yes. Thank you for
7 letting me hear that.

8 MR. SIRI: No problem, of course.

9 Q (By Mr. Siri) Okay. So Dr. Stepp, now, you
10 said that in 2011, you had to sell your ownership
11 in The Jackson Clinic because you were not
12 producing enough income to meet the requirement
13 for making a partner; correct?

14 A That is correct.

15 Q Okay. And what is it that you were doing
16 less of -- strike that. How is the income
17 requirement determined?

18 A Work is measured by RVUs, and there's a
19 median RVU for pediatricians across the nation,
20 and The Jackson Clinic board of directors decided
21 that you needed to be at or above that median in
22 order to get full reimbursement, and when my
23 workload was reduced, my RVU generation was
24 reduced, and I fell below their lower limit.

1 Q And what does -- what does RVU stand for?

2 A I should know this. Relative value units.

3 Q And how are RVUs calculated, meaning what
4 generates RVUs?

5 A They're -- for each activity that a doctor
6 may participate in, there is a set number of RVUs
7 assigned to that procedure or activity. For
8 example, for a surgeon that does an appendectomy,
9 there may be a certain number of RVUs assigned to
10 that procedure, and once he does an appendectomy,
11 he gets credit for that number of RVUs. For an
12 office visit, there's a number of RVUs assigned,
13 and this is a national number, not a Jackson
14 Clinic number, and so the clinic keeps track of
15 how many circumcisions I did, how many office
16 visits I did, or anything else I may have done,
17 and they add them up and that's your RVU total for
18 the year.

19 Q What percentage of the office visits that you
20 had by your patients approximately would you say
21 over the years were well-child visits?

22 A It's -- it's hard to say. 20 percent maybe.
23 Could be slightly larger.

24 Q Okay. You're uncertain?

1 A I'm uncertain. I've never given that a
2 thought before.

3 Q Okay. And what would the -- and what would
4 the visits that weren't well-child visits
5 typically be for?

6 A Sick-child visits.

7 Q Okay. So, for example, how many well-child
8 visits would there typically be in the first year
9 of life?

10 A Six, I believe, if I'm counting correctly.

11 Q Okay. And in the second year of life?

12 A Two.

13 Q And then in the years after that?

14 A Once per year.

15 Q Okay. And how often would a typical child
16 come in for a sick office visit?

17 A Of course, that's extremely age dependent.

18 The older children aren't sick near as much,
19 particularly after they've entered the first

20 grade. They don't have near so many illnesses.

21 It depends on whether they're in daycare or not,

22 if they're a smaller child or a toddler or an

23 infant. Obviously it depends on the time of the

24 year. We have a lot more sick visits in the

1 winter than the summer. Summer tends to be more
2 injury-related visits. I guess those are still
3 sick visits, so they're not infections, like, flu,
4 colds, ear infections, strep throat as much in the
5 summer. It depends on how old they are, and it's
6 really hard to say. Some of them are healthier
7 than others.

8 Q Okay. Do you think that there were more than
9 three times as many sick-child visits than
10 well-child visits on average per child in your
11 practice?

12 A Probably.

13 Q Okay. And administering vaccines, I
14 presume -- or ordering vaccines, I assume, would
15 generate RVUs; correct?

16 A The vaccine itself does not. I think the act
17 of giving a shot may give a little bit, but it was
18 pretty minimal. I don't remember the RVU, but we
19 didn't get credit for the actual vaccine in the
20 vial.

21 Q But you would get paid for the administration
22 of each vaccine?

23 A I'm sure The Jackson Clinic would because
24 there's an administrative fee, but I just do not

1 remember whether the physician got that credit or
2 it just went to the clinic in general.

3 Q Was there an RVU for a sick-child visit?

4 A Yes.

5 Q And was there an RVU for a well-child visit?

6 A Yes.

7 Q Okay. And was that RVU increased -- was
8 there more RVU if the child also was administered
9 vaccines during the well-child visit?

10 A It -- that did not change the RVU for the --
11 for a well-child visit, whether they got vaccines
12 or not. The RVU would be the same.

13 Q Meaning the RVU for the well-child visit
14 itself would be the same?

15 A Yes.

16 Q All right. But they're separately -- if
17 the -- if there were vaccines administered, there
18 would be a -- another RVU for the administration
19 of vaccines; correct?

20 A That's correct. I just do not remember
21 whether that RVU was credited to the physician or
22 to the clinic as a whole.

23 Q Okay. So the RVU that was for the well-child
24 visit itself, would that be credited to the clinic

1 or to the doctor?

2 A That's to the doctor.

3 Q Okay. And if there was a visit for a sick
4 child, would that be credited to the doctor or to
5 the clinic?

6 A That is to the doctor.

7 Q Okay. So and why would you suspect that the
8 RVU for the administration of a vaccine might be
9 credited to the clinic and not the doctor?

10 A Because the -- there was no activity that the
11 doctor participated in that he should deserve to
12 get that. And again, I do not remember whether
13 that went to the doctor or the clinic.

14 Q You just don't know?

15 A I just don't know. I probably knew at one
16 time.

17 Q Okay. Does the doctor, the one who orders
18 the vaccines to be administered?

19 A Yes.

20 Q All right. And it's the doctor who would
21 discuss the risks and benefits of vaccination with
22 the parents; correct?

23 A That is correct.

24 Q During a well-child visit, the nurse, for

1 example, would typically weigh the baby; correct?

2 A Correct.

3 Q Okay. And so part of the well-child visit
4 would be performed by a nurse or some other
5 assistant in the office; right?

6 A That's correct.

7 Q Okay. But the full credit for the well-child
8 visit would go to the doctor for the -- strike
9 that. The full credit for the RVU for the
10 well-child visit would go to the doctor; correct?

11 A That is correct.

12 Q Okay. In terms of ordering immunizations, it
13 would be the doctor that ordered it; correct?

14 A Correct.

15 Q It would be the doctor that would obtain
16 informed consent from the parent or guardian of
17 the child before vaccines are administered;
18 correct?

19 A Correct.

20 Q But it would be a nurse that would actually
21 administer them; correct?

22 A That is correct.

23 Q And in your clinic, it would be the nurse
24 that would provide the VIS before administering

1 the vaccine; correct?

2 A That's correct.

3 Q Okay. But the VIS -- but the -- strike that.
4 But you're not sure whether the doctor gets credit
5 for the RVUs from that -- for the ordering of the
6 immunizations; correct?

7 A For the physical act of the injection, and
8 that's correct, I do not remember who got credit
9 for that.

10 Q Would the doctor get credit for the act of
11 ordering immunizations?

12 A There is no RVU for that at all.

13 Q Okay. RVUs are there related to
14 administering vaccines from, you know, beginning
15 to end, anything and everything involved with
16 administering vaccines in a pediatric -- in your
17 pediatric office, in The Jackson Clinic pediatric
18 office?

19 A There's a -- there's a charge for the vaccine
20 itself. There's a charge for the act of
21 performing the injection or that is -- and there's
22 an RVU to the doctor for doing what would amount
23 to the history, physical, discussion with the
24 parent, the whole thing that involves a checkup,

1 and that would be it. You know, there -- there's
2 no RVU for the lab work if there -- any was done.

3 Q So there would be an RVU for the vaccines
4 itself?

5 A There's a --

6 Q I --

7 A Vaccines themselves are not an activity of
8 work, and so there's a code for that that's used
9 in the billing process, but the vial of vaccine,
10 there's no -- there's no work there. It's a
11 commodity and there's a charge, but there's no
12 RVU.

13 Q So what -- when you say RVU, does -- does
14 that -- would that be equivalent to an ICD-9 or
15 ICD-10 code?

16 A No. Those are diagnostic codes.

17 Q Okay.

18 A This is a work RVU, a management of physician
19 work.

20 Q Okay. And this is a standardized -- this is
21 something that's standardized across the country
22 in pediatric offices?

23 A All offices.

24 Q All offices?

1 A Yeah, surgeons, everybody.

2 Q Is there a -- you know, if you wanted to look
3 up what the RVU was for a procedure, where would
4 you have done that?

5 A I would -- I would probably have to ask
6 somebody in the billing department at The Jackson
7 Clinic. There's some we knew just because you do
8 them all the time and you knew what it was, and I
9 know there's got to be some reference somewhere,
10 probably on the Internet, where you could look it
11 up. The work RVU component for the physician is
12 part of a bigger RVU because -- and I'm really
13 trying to remember something I hadn't thought of
14 in years, there's a total RVU and it's made up of
15 the work RVU and two others that I'm having
16 trouble to remembering, but those -- the only work
17 RVU goes to the doctor. The other ones may go to
18 the clinic, or if it's hospital related go to the
19 hospital, but it's just a national system for
20 everybody, neurosurgeons, pediatricians,
21 dermatologists, et cetera, to use that RVU system.
22 And there's a regional factor that -- factored in
23 on some of that so that -- New York may have a
24 different coefficient for part of it than

1 Tennessee or California or wherever.

2 Q Is there any synonyms to the term RVU that
3 you're familiar with?

4 A Synonym? Not that I can think of.

5 Q Was the RVU for a sick-child visit more or
6 less than the RVU for a well-child visit?

7 A Sick visits are divided into five categories,
8 so level 1, level 2, level 3, level 4, level 5. A
9 level 5 visit would be a very extensive visit, and
10 that would get the maximum RVU. A level 1 visit
11 would be basically a nurse visit, and it had a
12 minimal RVU associated with it, and so level 2 had
13 more than level 1, level 3 had more than level 2,
14 and so forth. So if you had to come in and get
15 your blood pressure taken and recorded and the
16 nurse saw you and you did not see the doctor at
17 all, that might be a level 1 visit. If it was
18 something just horrendous and you spent hours
19 and -- you know, dealing with whatever the problem
20 was, that might be a level 5 visit, so they were
21 not all the same.

22 Q Were there different levels for well-child
23 visits?

24 A No, there was different age group-related,

1 but other than -- for a given age group, it was
2 all the same.

3 Q And so the RVU that was provided for a
4 well-child visit, would that be more or less than
5 a level 3 RVU for a sick-child visit?

6 A They likely were slightly different, but they
7 were probably close. I'm going to -- I hate to
8 guess because I don't remember this, but probably
9 it was just a little more than a level 3.

10 Q The well-child visit would be a little more
11 than a level 3 sick-child visit?

12 A I believe that's correct. I --

13 Q Were most sick-child visits level 1 or
14 level 2?

15 A No. Most of them were 2, 3, or 4. Again,
16 the level 1, you wouldn't even need to see the
17 doctor.

18 Q Uh-huh. So in 2011, your RVUs fell below the
19 threshold that was the national average for
20 pediatricians, and for that reason, you had to
21 sell your shares in The Jackson Clinic back to
22 The Jackson Clinic?

23 A That's correct, and that put me on a
24 different pay formula.

1 Q And what specifically caused the reduction in
2 your RVUs?

3 A I -- I did it on purpose.

4 Q Right.

5 A It was my decision. I didn't want to work as
6 much. I knew what the consequences were going to
7 be in terms of pay, and I just chose to do it.

8 Q Did you work less hours?

9 A Yes.

10 Q Okay. But during the hours you did work,
11 were you seeing -- you know, were you working in
12 the same manner as you had done prior to 2011?

13 A Yes.

14 Q So in 2011, was it that -- can you describe
15 how your hours were reduced? Was it that you, you
16 know, didn't work certain days anymore, did you
17 still work five days and you --

18 A No, I --

19 Q Please.

20 A I took an extra day off and I quit working
21 weekends.

22 Q So in 2011, you started working four days a
23 week and no weekends; correct?

24 A Three days a week and no weekends.

1 Q Okay.

2 A The weekends went away in 2010.

3 Q When did the policy regarding minimal RVUs to
4 remain in the partnership come into effect?

5 A I'm going to have to take a guess, but
6 probably 2008 or '09. It had been a discussion
7 with the board of directors for some time, and
8 actually I was on the board of directors at that
9 time --

10 Q Uh-huh.

11 A -- so a year or two before it happened for
12 me.

13 Q What prompted that change in policy?

14 A It was a financial decision by The Jackson
15 Clinic board at the recommendation of the
16 administrator. They didn't feel like they could
17 afford to pay that much and they weren't wanting
18 to encourage more work, so part of it was
19 financial, part of it was to incentivize the
20 doctors to work hard.

21 Q And so prior to that change in policy, what
22 incentives were provided to get pediatricians to
23 work -- to increase their RVUs?

24 A Well, the more you work, the more you get

1 paid.

2 Q Okay.

3 A Simple as that.

4 Q So prior to 2000 -- to the policy change in
5 2008, '09 -- strike that. So prior to the policy
6 change regarding minimal RVUs to remain a partner,
7 the compensation was -- for each pediatrician was
8 determined by their total RVUs for the year?

9 A Correct.

10 Q Okay. So a pediatrician in The Jackson
11 Clinic in the period 1999 to 2002 that had higher
12 RVUs for the year would make more money than if --
13 than a pediatrician that had lower RVUs. Is that
14 correct?

15 A That's correct, and that would be correct for
16 all the physicians in The Jackson Clinic.

17 Q Okay. Did that policy change when the
18 minimal amount of RVUs for being a partner policy
19 was adopted?

20 A I -- I didn't understand.

21 Q Yeah, let -- let me strike it. The -- so has
22 it always been the case that compensation for
23 doctors in The Jackson Clinic would change based
24 on the total amount of RVUs produced by that

1 individual doctor for the year?

2 A That's basically true. The pay formula that
3 the clinic used, which was applicable to all the
4 physicians, would change every couple years. So
5 the -- in my time there, it changed multiple
6 times, so when we started in 1982, we were on a
7 totally different pay formula than when I finished
8 in 2013.

9 Q Okay. If a child came in -- if a child --
10 strike that. So if a child was being seen by the
11 office for a well-child visit, there would be an
12 RVU code for the well-child visit; correct?

13 A That is correct.

14 Q And if the child also during the well-child
15 visit ended up being also diagnosed with having
16 some kind of sickness and was, let's say,
17 prescribed antibiotics, in addition to an RVU for
18 the well-child visit, there would also be an RVU
19 code that would be charged for a sick-child visit
20 as well; correct?

21 A That would be at the discretion of the
22 physician, but there was a provision that allowed
23 you to do that.

24 Q Okay. And that -- has the ability to do

1 that -- has -- that's always existed at
2 The Jackson Clinic for the entire duration that
3 you were a pediatrician there?

4 A When I started with The Jackson Clinic in
5 1982, the concept of RVUs had not taken place, so
6 not then.

7 Q Okay. So when did it start?

8 A And I couldn't tell you when we started using
9 that, but since the RVUs came into existence,
10 whenever that was, yes, you could charge the
11 well-child visit and then add a modifier to the
12 code, which would be, like, dash and then a
13 numeral, so that the payee, the insurance company
14 or whoever would know what was going on, and
15 you -- but it didn't happen automatically in the
16 billing department. It was at the discretion of
17 the doctor.

18 Q And the R -- the total RVU for that visit
19 would increase if there was that additional
20 notation by the doctor that in addition to being a
21 well-child visit there was also treatment for some
22 illness; correct?

23 A That is correct.

24 Q Okay. Was the ability to charge an RVU for

1 the well-child visit and for the portion of the
2 visit relating to the child being sick in
3 existence during the period of 1991 to 2002?

4 A 1991 to 2002?

5 Q 1999.

6 A 1999? I do not remember.

7 Q What is your memory of when RVUs were first
8 introduced into The Jackson Clinic?

9 A We started using them when the rest of the
10 country started, and I really would have to
11 completely speculate to come up with an answer.

12 I --

13 Q Okay.

14 A I just don't know.

15 Q But from the very beginning when RVUs first
16 became available in The Jackson Clinic, through
17 your -- is it your memory that you could charge an
18 additional fee if a child came in for a well-child
19 visit and was also treated for an illness?

20 A Correct.

21 Q Okay. That would include, for example,
22 prescribing penicillin; correct?

23 A It would be for the evaluation and work done
24 to make the diagnosis, which then would lead to

1 the prescription, but there's no RVU for writing a
2 prescription.

3 Q Was there any additional revenue at all that
4 would come to the clinic, either the clinic or the
5 doctor if a doctor did or -- if a doctor wrote a
6 prescription for an antibiotic?

7 A Well, presume -- well, presumably you've done
8 something to make you want to do that, which is
9 typically the child comes in, is examined, a
10 decision is made, and you write the prescription.
11 There might be an instance where you knew the
12 patient and there was a phone call and you -- and
13 you felt comfortable writing that prescription
14 based on the phone call, in which case there is no
15 RVU at all. We didn't charge for phone calls.

16 Q But if the child was brought into the office,
17 there would be a charge for seeing the child
18 before writing a prescription to evaluate the
19 child to determine whether there should be a
20 prescription written; correct?

21 A Correct.

22 Q All right. Has Dr. Hays ever been at your
23 home?

24 A Our department has a Christmas party every

1 year. One year it was held at my home and I have
2 no recollection whether he attended that year or
3 not, but if that was it, that would be the only
4 time.

5 Q Are there any social functions that you
6 attended that Dr. Hays attended outside of the
7 office?

8 A The yearly Christmas party for the pediatric
9 department and that's it.

10 Q Okay. Have you ever met with Dr. Hays
11 outside of the office other than potentially at
12 the yearly Christmas party?

13 A I can think of no time where I met with him
14 outside the office other than a Christmas party.

15 Q Okay. Is your wife friendly with Dr. Hays'
16 wife?

17 A It depends on what you mean by friendly. If
18 we're there together, they know each other's name
19 and will say hi, but other than that, they never
20 see each other.

21 Q Do they ever speak --

22 A No.

23 Q -- on --

24 A I'm sorry. I apologize.

1 Q No, no problem. Are -- are any of your
2 children friends with any of Dr. Hays' children?

3 A No.

4 Q I assume nothing personal is meant by that.
5 Strike --

6 A Pardon me?

7 Q Strike the question. It was my bad attempt
8 at levity. Okay. How were the nurses trained in
9 pediatrics at The Jackson Clinic?

10 A Of course, they've had some education before
11 they're being hired because they're usually either
12 medical assistants or LPNs, and so they've gone to
13 school. And once they're at The Jackson Clinic,
14 the -- specifically the pediatric department,
15 they're trained by the pediatric nursing
16 supervisor and to some extent by the other nurses
17 that have been there a while and have experience.

18 Q Okay. Can you please explain the difference
19 between a -- you know, a medical assistant, an
20 LPN, or a nurse?

21 A I think that we use the term nurse in the
22 office as sort of a generic term to mean the
23 people that help the doctors, see patients,
24 bringing them in, weighing them, giving them

1 shots, et cetera. Probably people that are
2 registered nurses are -- may not really approve of
3 that way to use the word nurse, but for our
4 purposes, it's the physician's primary assistant
5 in the office, usually an LPN or a medical
6 assistant. Anything -- the education level of the
7 LPN is greater than the medical assistant, so we
8 don't have too many of them helping us, and we do
9 not have RNs in the pediatric department, RNs
10 being registered nurse.

11 Q What does LPN stand for?

12 A Licensed practical nurse. And I think
13 there's several levels, like a level 1 and a
14 level 2.

15 Q A pediatric nurse supervisor, would that ever
16 be a medical assistant?

17 A Could be. I believe ours has an EMT degree.

18 Q Who was the pediatric nurse supervisor during
19 the period 2000 to 2001?

20 A Patricia French.

21 Q And during the period of 2000 to 2001, were
22 there any LPNs in the -- in the pediatric practice
23 at Jackson Clinic?

24 A Yes.

1 Q And who were they?

2 A Becky Austin is the only one I know of.

3 Q Okay. And were there -- during the period of
4 2000 to 2001, were there any medical assistants in
5 The Jackson Clinic, the pediatric clinic?

6 A All the -- all the other nurses, I believe,
7 were MAs, medical assistants.

8 Q And how many were there approximately in
9 pediatric practice?

10 A Well, it would be the same number as there
11 are doctors, and the number of doctors, of course,
12 varies as people come and go.

13 Q Each doctor had either one MA or one LPN
14 assigned to them?

15 A In the pediatric department, yes.

16 Q Okay. And the pedi -- and the pediatric
17 nurse supervisor who you just mentioned before,
18 was she an MA or an LPN?

19 A I believe she's an EMT.

20 Q Oh, okay. That's who you were referring to.
21 What was her name again?

22 A Patricia French.

23 Q So were the -- were the MAs and the LPNs
24 trained in the same way when they arrived to --

1 when they started to work at the -- in the
2 pediatric division of Jackson Clinic?

3 A Yes.

4 Q Okay. What type of training did they
5 receive?

6 A Since I did not participate, I just have to
7 assume some of this, but they needed to know how
8 to get patients from the waiting room, they needed
9 to know how to take vital signs, which would
10 include weight, height, head circumference, and
11 they needed to know the other vital signs if that
12 was also requested by the physician. They needed
13 to know how to administer vaccinations or other
14 shots because occasionally you might need to give
15 an antibiotic injection. They're not trained to
16 draw blood, although a few of them do that, have
17 to do that, because we had a laboratory that did
18 the venipunctures and whatnot. They were
19 certainly trained to give out the VIS sheets.
20 They were trained to give out the other handouts.
21 And since I didn't participate in their training,
22 that's it as far as I can think of right now.

23 Q But you believe that they were trained to
24 provide VISs to a parent or guardian prior to

1 providing immunizations because that would have
2 been the standard of care; correct?

3 A That is correct.

4 Q And that would have been the standard of care
5 applicable in 2000, 2001; correct?

6 A That is correct.

7 Q Okay. And -- and it would -- and you would
8 give a VIS for each particular vaccine to the
9 parent or guardian?

10 A Yes, yes.

11 Q And you would do so, of course, even if you
12 gave the same vaccine multiple times, you would
13 give it before each office -- each -- before each
14 administration of even the same vaccine; correct?

15 A That's correct. They received it each and
16 every time.

17 Q Okay. Who provided the training that you --
18 who provided the MAs and the LPNs the training
19 that you just described?

20 A That would primarily be the responsibility of
21 Patricia French, the nursing supervisor.

22 Q Okay. Were there any written materials
23 provided to the LPNs or the nurses in the --
24 excuse me, the MAs or LPNs as part of their

1 training?

2 A I believe they were given written materials
3 on how to give shots. I'm not sure about anything
4 else.

5 Q Okay. Would those materials have been
6 prepared by the CDC?

7 A I don't know.

8 Q Okay. What was the length of time that
9 the -- that the MAs or LPNs would have received
10 training -- and LPNs would have received training
11 before becoming assistants to a pediatrician?

12 A I don't know.

13 Q Okay. Were you involved in training any of
14 the LPNs or MAs?

15 A No.

16 Q Okay. And just -- I think we talked about
17 this already, but to confirm, do the LPNs have any
18 different responsibilities than the MAs in the
19 pediatrician division at Jackson Clinic?

20 A No. Same responsibility.

21 Q Did Dr. Hays have a -- an assistant assigned
22 to him in 2000 and 2001?

23 A Yes.

24 Q Okay. Who was that?

1 A My understanding, it was LuAnn Upchurch at
2 the time.

3 Q Okay. Are you familiar with LuAnn Upchurch?

4 A Yes.

5 Q Okay. How so?

6 A Well, they just worked the next hall over and
7 she was there, so I knew who worked for everybody.

8 Q Did she ever work for you?

9 A No.

10 Q Okay.

11 A Well, I'd -- it's conceivable that on a
12 weekend on call, you would not necessarily work
13 with your own nurse, you would -- there was a
14 schedule for them to take the weekends, just like
15 it was for us, and so I can't tell you that she
16 never helped me on an odd time like that, but
17 during the course of Monday through Friday, no.

18 Q Okay. Do you have any -- do you have any
19 specific recollection of LuAnn Upchurch working
20 for you directly during --

21 A No. No.

22 Q Did you interview her before she was hired?

23 A No.

24 Q What is your understanding of what experience

1 she had in working with pediatrics before starting
2 to work as a medical assistant to Dr. Hays?

3 A I don't know.

4 Q Okay. Do you know anything about how she was
5 trained?

6 A Only in terms of what we've discussed
7 earlier. She had to go through the same thing
8 everybody else did, but other than that, I don't
9 know.

10 Q Did you have any role in training LuAnn
11 Upchurch?

12 A No.

13 Q Do you know who was responsible for training
14 LuAnn Upchurch?

15 A Patricia French.

16 Q Did Jackson Clinic have a written policy
17 about providing informed consent to the parents of
18 a child when vaccinating a child?

19 A Not that I know of.

20 Q Okay. Did Jackson Clinic have a written
21 policy about providing VISs to parents?

22 A Not that I know of.

23 Q Approximately how many pediatricians were
24 working for The Jackson Clinic in 2001?

1 A I would think eight or nine.

2 Q Okay. And what specific training did
3 The Jackson Clinic provide to new pediatricians
4 that joined the pediatric practice, The Jackson
5 Clinic?

6 A If we had a -- if we hired a new
7 pediatrician, they really wouldn't have any
8 additional training. I mean, they need to learn
9 where things are and what the service sheet looked
10 like and just simple logistics like that, but as
11 far as academic pediatrician training, nothing.
12 They were already trained.

13 Q When you say where things are, you mean,
14 like, physically in the cabinets of the office?

15 A Yes. Like, where is the bathroom, where's
16 the lab, et cetera.

17 Q Okay. And the sheet that you mentioned, what
18 was that again?

19 A It's a service sheet.

20 Q And what's that?

21 A Every patient that comes in would have a
22 service sheet. It's a sheet that has on it the
23 variety of office visits that might occur, well
24 check, level 1, 2, 3, 4, 5s. It will -- it will

1 have a sampling of typical diagnoses, and of
2 course that's going to be specialty dependent, so
3 the surgeons would have one set of diagnoses
4 there, so it would be easy to come up with the
5 ICD-9 code. And for practical purposes, we used
6 it to order things on, so if I was going to give a
7 flu shot, then I'd check flu shot and make it
8 available to the nurse. She knows to give a flu
9 shot. If I check hemoglobin, they know they need
10 to get the lab to come and draw blood. So we use
11 it for that, and then once we're finished with it,
12 it goes to the billing department where they can
13 see that we did this, that, and the other, and add
14 up to make the charges.

15 Q Okay. So that sheet once filled out would be
16 used to then -- for the billing department to
17 determine what ICD-9 codes to charge; correct?

18 A Of course, the ICD-9 codes are the diagnosis
19 codes.

20 Q Right.

21 A So, for example, there's a code for various
22 types of pneumonia and you're not making the
23 charge off that. You're making the charge off the
24 type of office visit, well check, level 3,

1 et cetera.

2 Q Okay. But you'd use the sheet to determine
3 what ICD-9 codes to charge; correct?

4 A My understanding is that the payors needed a
5 diagnosis code in order to make the payment to the
6 clinic or to any doctor.

7 Q Okay.

8 A And so if you charged a level 3 office visit,
9 they'd at least want to see what you diagnosed
10 that day, so if you charged a level 5 and the
11 diagnosis was one pimple, they probably would
12 object, as you can imagine.

13 Q Uh-huh.

14 A So you had to have the ICD-9 code, but that
15 wasn't the charge.

16 Q So -- right. And then in terms of -- would
17 the sheet be used to determine the BVUs for that
18 office visit?

19 A The RVUs?

20 Q RVUs, thank you.

21 A Yes, yes.

22 Q Okay.

23 A Because you're going to circle or check or
24 however you're going to make the determination,

1 circle a level 3 visit, for example, and when they
2 see that, the RVU is a standard number no matter
3 who you are, surgeon, EMT, dermatology, et cetera.

4 Q Were you involved in the decision to hire
5 Dr. Carlton Hays?

6 A Yes.

7 Q Okay. Did you interview Dr. Hays before he
8 was hired?

9 A Yes. We all did.

10 Q Okay. Tell me about the interview that you
11 had with him.

12 A This is a long time ago, so I don't remember
13 any detail. But what we would typically do is he
14 would come to the office, he would meet everybody,
15 we would show him around. Each of us would sit
16 down and talk to him, and this is the same for
17 Dr. Hays or any other doctor. Most of the time
18 these people have come from out of town, so
19 they're going to stay at a hotel. We would have
20 dinner with them at night in a restaurant or
21 somebody's home, perhaps, and then the next day
22 they would probably come talk to us again and then
23 that would be the interview.

24 Q Approximately how many people did Dr. Hays

1 interview with in this process of being hired at
2 The Jackson Clinic?

3 A Outside the pediatric department, I would at
4 least theorize that he talked to the clinic
5 administrator, he probably talked to our medical
6 directors, we have two. He may or may not talk to
7 anybody else. Now, of course, Dr. Hays does
8 pediatrics and internal medicine, so I'm sure he
9 talked to the internal medicine doctors as well.

10 Q Okay. So how many people would you say that
11 is approximately total that Dr. Hays would have
12 interviewed with prior to being hired by
13 The Jackson Clinic?

14 A I'd -- I would -- I'd guess at least 15.

15 Q Okay. Did anybody raise any concerns
16 regarding Dr. Hays before he was hired?

17 A No.

18 Q If there were any concerns raised by any of
19 the approximately 15 doctors at The Jackson Clinic
20 that had interviewed him prior to him being hired,
21 would you have been aware of those concerns?

22 A I think it highly likely that I would be,
23 because chances are, if there's much concern, he
24 wouldn't have gotten hired.

1 Q Uh-huh. You're familiar with the standard of
2 care for a pediatrician or a medical doctor in
3 administering childhood vaccines in Jackson,
4 Madison County, Tennessee in the period 1999 to
5 2002; correct?

6 A That is correct.

7 Q Okay. And during the rest of this
8 deposition, whenever I say -- use the term
9 standard of care or ask any questions relating to
10 that standard, I will be referring to the standard
11 of care applicable in Jackson, Madison County,
12 Tennessee in the period 1999 to 2002; okay?

13 A That is okay.

14 Q Okay. Any questions about that?

15 A No.

16 Q Okay. And when I use the term parent as used
17 in this deposition, I'll also -- it will also mean
18 guardian; okay?

19 A Okay.

20 Q Okay. Any questions about that?

21 A No.

22 Q Okay. Now, the standard of care is that
23 before having a vaccine administered to a baby or
24 toddler, the doctor should evaluate whether there

1 are any contraindications or precautions to
2 administering the vaccines; correct?

3 A Correct.

4 Q Okay. And how do you determine whether the
5 baby or toddler has a contraindication or
6 precaution to a vaccine?

7 A You talk to the parents, you examine the
8 child, basically the history and physical, if you
9 will, and those things should come out --

10 Q Uh-huh. So the --

11 A -- and be aware of them.

12 Q So in determining whether or not there's a
13 contraindication or precaution, the standard of
14 care is prior to administering the vaccine to
15 elicit information from the parents that would
16 permit the pediatrician to be able to make that
17 determination of whether there's a
18 contraindication or precaution; correct?

19 A Correct.

20 Q Okay. And I assume as part of that,
21 inquiring about any reactions the child might have
22 had to a prior vaccine is part of the standard of
23 care as well; correct?

24 A Correct.

1 Q Okay. Now, during the -- during that
2 discussion, did the stand -- the standard of care
3 would also be to convey the benefits and the risks
4 of the vaccine that are going to be administered
5 to the parents' child; correct?

6 A Correct.

7 Q Okay. And -- and if after evaluating the
8 information obtained from the parent you determine
9 that there was a precaution or contraindication to
10 vaccinating the child, the standard of care would
11 be to advise the parent that there is a
12 contraindication or precaution potentially to a
13 vaccine to be administered; correct?

14 A Correct.

15 Q Okay. Now, when there's a -- when there is a
16 contraindication present, the CDC and AAP guidance
17 is to not vaccinate the child; correct?

18 A Correct.

19 Q And -- and when there is a contraindication,
20 the standard of care is to not vaccinate the
21 child; correct?

22 A If there is a contraindication, the standard
23 would be not to vaccinate.

24 Q Okay. And if there was a condition, which

1 was a precaution to vaccination, right, which were
2 present, the standard of care is to conduct a
3 careful assessment of the individual child before
4 determining whether the benefits of the vaccine
5 outweigh the risks; correct?

6 A Correct.

7 Q Okay. And the case of an ill child, all
8 right, the standard of care is that a parent has
9 the right to know that a risk/benefit analysis is
10 being made before informed consent can be given;
11 correct? Strike that. I -- I made that -- let me
12 ask it in a simpler manner. In the case of an ill
13 child, a parent has the right to know that a
14 risk/benefit analysis is being made before
15 informed consent can be given; correct?

16 A Seems reasonable.

17 Q Is that a yes?

18 A Okay, I'll go with a yes.

19 Q Okay. In order for the parents to give
20 effective informed consent, the parents have a
21 right to know that some children should not be
22 vaccinated, and specifically that moderately ill
23 children should generally not be vaccinated;
24 correct?

1 MR. SANDERS: Object to the form of the
2 question. You can answer, Doctor.

3 A Well, you know, if you have a well child and
4 none of those are applicable, I don't know that
5 you would bring that up to say that a severely ill
6 child shouldn't be vaccinated when their child is
7 not ill and should be vaccinated, so the -- the
8 typical parent that -- where it's appropriate to
9 vaccinate, they don't need to know that maybe you
10 shouldn't give the MMR to somebody with ITP. They
11 don't need to know that.

12 Q (By Mr. Siri) But if the child is moderately
13 ill, all right --

14 A Then that subject would come up and that
15 would be discussed.

16 Q All right. So to give a -- if a child were
17 moderately ill, to give effective informed
18 consent, the doctor would need to discuss --
19 should discuss with the parents that --

20 MR. RILEY: Mr. Siri, I'm so sorry to
21 cut you off. I believe we've lost Mr. Sanders.

22 THE VIDEOGRAPHER: Yes, sure enough,
23 David. He's off again.

24 MR. SIRI: Oh, okay.

1 MR. RILEY: I'm sorry. It just looks
2 like it happened about two questions ago --

3 MR. SIRI: Okay.

4 MR. RILEY: But we might want to just go
5 off --

6 THE VIDEOGRAPHER: We'll go off the
7 record then. We are off the record at 11:21.

8 (Brief recess.)

9 THE VIDEOGRAPHER: We are now back on
10 the record at 11:35.

11 MR. SIRI: Just to place it on the
12 record, Mr. Sanders unfortunately was -- had his
13 connection to Zoom lost again for just a few
14 questions. The court reporter, Ms. Cohen, just
15 read those back to Mr. Sanders. Mr. Sanders, are
16 we ready to continue?

17 MR. SANDERS: Yes, thank you.

18 Q (By Mr. Siri) Now, Dr. Stepp, sometimes it's
19 a judgment call, correct, with regard to -- strike
20 that. Dr. Stepp, sometimes it's a judgment call
21 regarding whether a child is too ill to receive
22 additional vaccines; correct?

23 A Correct.

24 Q Okay. And in the instance where a doctor

1 needs to exercise their judgment to determine
2 whether or not a child is too ill to receive
3 additional vaccines, the standard of care would be
4 to discuss that decision with the parents prior to
5 vaccinating the child; correct?

6 A Correct.

7 Q And we used the term VIS in this deposition.
8 You know what that term stands for?

9 A The --

10 Q I -- oh, please.

11 A Vaccine information --

12 Q Information.

13 A -- something.

14 Q Right. It stands for vaccine information
15 statement; correct?

16 A Yeah, statement.

17 Q Statement. You've used the term VIS in your
18 practice over the years?

19 A Sure.

20 Q Okay. Is the term vaccine information
21 statement, is VIS, would you consider that
22 synonymous with the term vaccination information
23 material or VIM?

24 A I would think so, yes.

1 Q Okay.

2 A I've never used VIM, but that's okay.

3 Q Okay. Now, if the parents had any questions
4 regarding the vaccines to be administered to their
5 child, the standard of care is that the
6 pediatrician would answer those questions before
7 the vaccines are administered; correct?

8 A Correct.

9 Q Okay. Answering the parents' questions is
10 also required in order to obtain informed consent;
11 correct?

12 A Correct.

13 Q Most VISs contain a section which explains
14 that some children should not receive vaccination
15 when moderately ill; correct?

16 A I believe that's what it says.

17 Q Okay.

18 A Or it says it's a precaution.

19 Q If there was a moderately ill child, how
20 would you determine whether to give a vaccine?

21 A Really it's a case-by-case issue depending on
22 how -- what the diagnosis is, how moderately ill
23 he is, how the parents feel about it. It might
24 even have to do with where they live in terms of

1 being able to come back and get the vaccine at a
2 later date. So quite a few variables there to
3 consider.

4 MR. SIRI: Ms. Cohen, can you read that
5 answer back to me, please?

6 (Whereupon, the question
7 was read by the court
8 reporter.)

9 Q (By Mr. Siri) Now -- now, VISs also advise
10 parents to tell their doctors certain information
11 that would be relevant in deciding whether a child
12 should be vaccinated; correct?

13 A Are you saying that's written on the VIS
14 sheet?

15 Q Yeah, strike -- strike the question. Now, do
16 you agree that physicians should be familiar with
17 the information in the package insert for
18 vaccines?

19 A Not necessarily.

20 Q Okay. Why is that?

21 A I don't think any of us read those.

22 Q Okay. Each packet -- each -- each vaccine
23 that's administered to a child, it comes in a
24 little box from the manufacturer; correct?

- 1 A That's correct.
- 2 Q And in each one of those boxes is a piece of
3 paper; correct?
- 4 A Correct.
- 5 Q And that piece of paper is referred to as the
6 package insert; correct?
- 7 A That's correct.
- 8 Q It's written by the manufacturer of the
9 vaccine; correct?
- 10 A Correct.
- 11 Q It provides information that the manufacturer
12 believes is relevant to the vaccine?
- 13 A I'm sure it is.
- 14 Q Okay. And why is it you think that
15 information from the manufacturer regarding a
16 vaccine is -- is not important for parent -- for
17 the pediatrician to read?
- 18 A I think the same information is available
19 elsewhere in a more relevant fashion for
20 pediatricians or physicians as opposed to what the
21 drug company is deciding.
- 22 Q And where is that information contained
23 elsewhere?
- 24 A The primary source -- I'm getting an echo in

1 this thing. I don't know -- in my computer. The
2 primary source that pediatricians use is the
3 American Academy of Pediatrics Red Book.

4 Q And was that the source that would have been
5 used in 2000 and 2001 at The Jackson Clinic by
6 pediatricians?

7 A Yes.

8 Q Okay. Is there any other source that
9 pediatricians in The Jackson Clinic would have
10 referred to in 2000 to 2001 in -- in dispensing
11 their pediatric care?

12 A If they chose to, the Center for Disease
13 Control provides that information.

14 Q Okay. When you say the Center -- the CDC
15 provides that information, are you referring to
16 the information on -- in the package insert for
17 each vaccine?

18 A No. I think if we were looking to see what
19 the CDC had to say, we would go to the cdc.gov and
20 look at it on the Internet.

21 Q Okay. When you were a practicing
22 pediatrician during the period 2000 to 2001, did
23 you go to the CDC website to ever obtain
24 information regarding your -- providing

1 pediatrician care?

2 A Yes. Not about vaccines, but other things.

3 Q Okay. By the year 2000, 2001, since you had
4 already been practicing for, you know, a good
5 number of years, did you already know by heart
6 which vaccines should be administered to children
7 based on the CDC schedule?

8 A Once again, we looked to the Red Book for all
9 that information, but yes, I pretty well had it
10 memorized.

11 Q Okay. So you -- you looked to the Red Book
12 to determine which vaccines to administer to
13 babies and toddlers in 2000, 2001 when you
14 practiced at The Jackson Clinic?

15 A That's correct.

16 Q Okay. And -- and in terms of
17 contraindications and precautions, did you look to
18 the CDC and the AAP with regards to what
19 contraindications and -- you know -- strike the
20 question. So do you know Dr. Kathryn Edwards?

21 A No.

22 Q Have you ever heard that name before?

23 A Not that I can remember. Is she involved in
24 this case? I don't know her.

- 1 Q Okay. Do you know Dr. Rachel Mace?
- 2 A No.
- 3 Q Have you ever heard her name before?
- 4 A Yes.
- 5 Q Okay. In what context have you heard it?
- 6 A Mr. Sanders spoke of her deposition.
- 7 Q And what did he tell you about her
- 8 deposition?
- 9 A That it was long.
- 10 Q Well, he would say that, wouldn't he? Okay.
- 11 And any substance of the deposition itself, are
- 12 you aware of anything that transpired during that
- 13 deposition?
- 14 A Only generalities about questions of standard
- 15 of care. I think she already knew who Dr. Hays
- 16 was from her experience at Vanderbilt since he was
- 17 trained there, but details, really not.
- 18 Q Okay. So and what is it about the standard
- 19 of care in Dr. Mace's deposition did you learn?
- 20 A Nothing.
- 21 Q Okay. Is there anything else substantive
- 22 regarding Dr. Mace's deposition that you're aware
- 23 of sitting here today?
- 24 A No.

1 Q Okay. Other than hearing Dr. Rachel Mace's
2 name from Mr. Sanders, were you aware in any way
3 about -- did you know -- strike the question.
4 Other than learning about Dr. Mace from
5 Mr. Sanders, did you know who Dr. Mace was in any
6 way prior to being told that name from
7 Mr. Sanders?

8 A I had never heard of her.

9 Q Okay. After Mr. Sanders told you about
10 Dr. Rachel Mace, did that jog your memory at all
11 about any knowledge you would have -- have had --
12 had about with regard to Dr. Mace?

13 A I'd never heard of her before.

14 Q Okay. Can you please describe your academic
15 and professional background?

16 A I went to medical school at the University of
17 Tennessee in Memphis. I did pediatric training at
18 City of Memphis Hospitals and the Le Bonheur
19 Children's Hospitals. That's a three-year
20 residency. Did you want back before medical
21 school?

22 Q Oh, no, just -- just your relevant medical
23 training, Doctor.

24 A Okay.

1 Q Did you --

2 A Yeah.

3 Q Yeah. Okay. And can you -- after medical
4 school, where did you go to work?

5 A I -- well, after medical school, my first
6 work was residency, and that was three years at
7 Le Bonheur in Memphis.

8 Q Okay. And during your residency, did you
9 have a focus?

10 A General pediatrics.

11 Q Okay. And you did that for all three years
12 of your residency?

13 A Three years, yes.

14 Q Okay. So after your three years of residency
15 regarding general pediatrics, what did you then
16 do?

17 A For one year I worked in Memphis at a
18 pediatric group, and then I moved to Jackson,
19 Tennessee, so I finished my residency in '76, so
20 that would have been the summer of '77 I moved to
21 Jackson. My first position in Jackson was with
22 the University of Tennessee faculty. I was in the
23 department of pediatrics and in the department of
24 family medicine. Family medicine department

1 activities were training the family practice
2 residents there because they have a program here
3 in Jackson, training them in pediatrics, and my
4 responsibility in the pediatric department was to
5 set up a neonatal intensive care unit at the
6 Jackson-Madison County General Hospital.

7 Q How long did you do that for?

8 A Until the end of 1979, so two and a half
9 years. After that, I joined the Jackson Pediatric
10 Clinic with three other general pediatricians, and
11 then as we mentioned before, that clinic then
12 merged with The Jackson Clinic in 1982.

13 Q Okay. What was the name of the clinic that
14 you worked at in Memphis for that one year after
15 your residency?

16 A Mason, Stepp & Threlkeld Pediatrics.

17 Q And you practiced as a pediatrician in
18 that -- in that --

19 A Yes.

20 Q -- pediatric practice?

21 A Yes. I was the fourth pediatrician. That
22 practice eventually changed its name to
23 Pediatrics East, which it is now, but that was
24 after I was gone.

1 Q Okay. So in total, you have well over
2 34 years of practice as a pediatrician; correct?

3 A Yeah, and since my residency was exclusively
4 pediatrics except for two months, I felt like I
5 was a pediatrician during that time as well.

6 Q So would --

7 A So yes.

8 Q If we add those three years, we're over 37
9 years of pediatric practice; correct?

10 A That's correct.

11 Q And if we add the two and a half years at the
12 hospital relating to where you -- were you also
13 engaging pediatrics during that period as well?

14 A Are you talking about when I was on the
15 faculty at the University of Tennessee?

16 Q Yep.

17 A Yes. It was in pediatrics, the -- I would
18 certainly consider it -- neonatal work to be
19 pediatrics, newborns, and exclusively I was
20 teaching pediatrics to the residents. Now, I did
21 not have a practice of my own, but it was
22 constantly pediatric issues.

23 Q Have you consulted or received any money from
24 any pharmaceutical company?

1 A I'm not sure how to answer that. The answer
2 is no, with the exception that while I was at
3 The Jackson Clinic, I was the head of The Jackson
4 Clinic research department, and so we would
5 undertake clinical studies from drug companies
6 because they had a new drug they wanted to get on
7 the market, and we would follow their protocols,
8 and so that -- I did get reimbursement, but the
9 reimbursement was through the clinic's pay
10 formula, so the pharmacy -- or the -- I mean, the
11 pharmaceutical company would pay the clinic and
12 then the clinic would in turn pay me through the
13 pay form, but it was for doing work for them, not
14 for anything else.

15 Q Right. And how many of these clinical trials
16 did you participate in where you received
17 remuneration from a pharmaceutical company?

18 A I -- it's -- obviously I didn't keep count in
19 terms of trying to keep track of the total, but I
20 would say 12 to 15.

21 Q Okay. And for what duration of time
22 typically for each of these clinical trials
23 provide services for the pharmaceutical company
24 regarding the clinical trial?

1 A I'm not sure I understand.

2 Q Yeah, that's because I didn't ask it very
3 clearly. Let me try that again. So for each of
4 these clinical trials where you were working,
5 were -- strike that. For each of these clinical
6 trials where you were providing services
7 remunerated by the pharmaceutical company, how
8 long were the services that you rendered for each
9 clinical trial?

10 A Well, it would be different for every trial.
11 Some trials went on a long time, some were very
12 brief, some wanted just a few patients, some
13 wanted a large number of patients.

14 Q Would you say that typically they lasted at
15 least a few months?

16 A Yes.

17 Q Okay. Some of them for years?

18 A Maybe not years.

19 Q Okay.

20 A But maybe close to a year.

21 Q Okay. And your role in a clinical trial
22 would be administering a, I presume, drug or
23 vaccine that was being evaluated for potential
24 licensure?

1 A That's correct.

2 Q Okay. In any of these clinic -- were -- did
3 any of these clinical trials involve a yet
4 unlicensed vaccine?

5 A Yes.

6 Q Okay. Out of the 12 to 15 clinical trials,
7 how many would you estimate involved an unlicensed
8 vaccine?

9 A We started to enroll in an influenza vaccine
10 trial, but it never came to fruition. We
11 participated in the Prevnar 13 trial when they
12 were moving from Prevnar 7 to Prevnar 13. I can't
13 think of any other vaccine trials. We wanted to
14 do some but never got them.

15 Q Understood. So Prevnar 13 was the only
16 clinical trial that you participated in that
17 involved a vaccine; right?

18 A That's all I remember at this moment.

19 Q Okay. The rest of them were drugs for
20 pediatric use?

21 A Correct.

22 Q And how much compensation did you receive for
23 your participation in each of these clinical
24 trials? Strike -- let me ask that a little more

1 clearly. How much compensation -- strike --
2 strike the last question. How much compensation
3 did you receive from the pharmaceutical company
4 conducting the trial for each of these clinical
5 trials?

6 A Well, I did 12 or 15 of them, and for each
7 and every one of them, I don't remember them in
8 that way. You know, I might have gotten 5 or
9 10 percent of my total income from those trials,
10 but to say the dollar figure for the Prevnar
11 trial, for example, I -- I just don't know.

12 Q Okay. Understood. So in -- do you recall
13 approximately from what year to what years while
14 you were working at The Jackson Clinic you were
15 receiving this remuneration for participating in
16 clinical trials?

17 A Well, again, I was the director of the
18 research department, so there was a small payment
19 just for being the director, even if I did no
20 trials.

21 Q Okay.

22 A And another doctor had been the director
23 previously, and I'm thinking it was probably
24 something like 2008 or -- give or take when he

1 left and I took over.

2 Q Okay. Did you participate in any of these
3 clinical trials prior to 2008?

4 A No, because the whole project had not been
5 going on very long, and I -- we didn't have any
6 trials for me prior to that.

7 Q So after 2008, 5 to 10 percent of your income
8 came from participating in these clinical trials?

9 A That's a guess, but yes.

10 Q Okay. And that ended presumably in 2013?

11 A It dramatically slowed down about 2011 or so.
12 I didn't have many trials after that. It was just
13 a matter of that there weren't very many pediatric
14 trials to do, and we had other trials for other
15 departments, for example, OB-GYN may have one, but
16 there weren't very many pediatric trials available
17 for me to participate in the last couple of years
18 I was there.

19 Q So for the period 2008 to 2011,
20 approximately, you know, what would be the amount
21 of remuneration you received from pharmaceutical
22 companies each year for participating in these
23 clinical trials?

24 A There was one --

1 Q And a range -- please.

2 A Pardon?

3 Q I was going to say a range is fine. Please.

4 A Okay. A range would be from a low of maybe
5 \$2,000 in a year up to -- there was one in -- one
6 year that was a lot bigger than the rest of them,
7 but all the other years other than that one big
8 year, it was probably in the range of 2 to
9 \$15,000. There was one big study that we had a
10 lot of participation in, and it was about 40 or
11 50,000.

12 Q That you received?

13 A Yes.

14 Q Okay. Do you remember what -- was that the
15 Prevnar 13 study?

16 A No.

17 Q Okay. Was that a -- was that a pediatric
18 medicine?

19 A Yes.

20 Q Okay. What was the medicine?

21 A I'm trying to remember the drug company. I
22 think it was Shire. They wanted to have a Ritalin
23 product that was administered through a patch,
24 that it would be applied to the skin. So it was a

1 methylphenidate patch for the treatment of
2 attention deficit disorder.

3 Q Got it. So it would be a patch to administer
4 Ritalin through a patch?

5 A Through a patch on the skin, yes.

6 Q Yeah. How many -- how many children from
7 your -- from The Jackson Clinic participated in
8 the Prevnar 13 trial approximately?

9 A Of course, we -- we would take people that
10 weren't patients of the clinic, so there were a
11 few that way.

12 Q Uh-huh.

13 A A good guess is we had 20 to 25.

14 Q Okay. Now, how -- how many vaccines would
15 you estimate during the course of your career have
16 you ordered to be administered or maybe directly
17 administered into infants, toddlers, or children?

18 A Of course, I never did it myself. I ordered
19 it and a nurse did it, but it's thousands. I
20 don't know.

21 Q Okay. Would --

22 A Tens of thousands.

23 Q Have you ever injected a vaccine directly
24 into a child?

1 A No.

2 Q So over the course of your career, you would
3 estimate that you ordered the injection of tens of
4 thousands of vaccine into children?

5 A Over almost 40 years, yeah, I would. Yes, I
6 would.

7 Q And during that period of time of ordering
8 the administration of those pharmaceutical
9 products, I presume you became knowledgeable about
10 those pharmaceutical products; correct?

11 A Knowledgeable in the clinical sense, yes.
12 Not knowledgeable in the chemistry sense of it.

13 Q Parents would trust you -- strike that.
14 Okay. You -- have you had -- have you reviewed
15 Yates' vaccination record from the -- from
16 The Jackson Clinic?

17 A Yes.

18 Q Okay. I guess I should have first asked, do
19 you know the name of the child at issue in this
20 case?

21 A Yes, sir. Yates Hazlehurst.

22 Q Okay. Thank you. And -- okay. Now, when
23 you say you reviewed Yates' vaccination record,
24 does that include reviewing the vaccination record

1 that had handwritten notations on it?

2 A Yes.

3 Q Okay. I'm going to pull it up on the screen
4 so that we can take a look at it together.

5 MR. SIRI: Okay. Okay. I'm going to
6 mark this as Plaintiff's Exhibit 1.

7 (Whereupon, Exhibit No. 1
8 was marked to the
9 testimony of the
10 witness.)

11 Q (By Mr. Siri) Now, Dr. Stepp, have you seen
12 this record before?

13 A Yes.

14 Q Okay. Was it common in Jackson -- do you see
15 that there's a sticker on the top left corner of
16 the vaccine record?

17 A Yes.

18 Q Okay. And that -- that was a sticker that
19 was placed over the preprinted form; correct?

20 A That's correct.

21 Q Okay. Was it typical in The Jackson Clinic
22 to place the sticker in that location on the
23 vaccine record?

24 A I think it would be, yes.

1 Q Is that what your practice was, Dr. Stepp?

2 A Those stickers came off the service sheet
3 that we've discussed previously, and you just peel
4 them off, and a nurse would apply that to the
5 blank area where the patient's name is and
6 therefore she would not have to handwrite it in
7 there. Plus it's easier to read.

8 Q Right.

9 A And so I believe indeed all the nurses did
10 that.

11 Q So if -- if we took a random sampling of
12 these -- of let's just say 500 of these vaccine
13 forms from the year 2000 at The Jackson Clinic for
14 500 random children in your -- in your practice at
15 that time, would we find that the sticker was
16 typically placed on the top left corner as it --
17 as it -- as it was placed on Yates' vaccine
18 record?

19 A I believe we would.

20 Q Okay. And, Dr. Stepp, you've already --
21 please take a look at the column that says vaccine
22 information material publication date.

23 A I see it, yes.

24 Q Okay. Did you come here today prepared to

1 address the information included or not included
2 in that column?

3 A I did.

4 Q Okay. And how did -- how were you
5 prepared -- how did -- how were you prepared to
6 address the information in that column?

7 A That's LuAnn Upchurch's initials, so she's
8 the one that put it there. In the top of each
9 vaccine, so for DPT and Hib, et cetera, she's put
10 given at the top, and it would appear to me that
11 for expediency and to keep her from writing it
12 again, although given is not a big word, she's put
13 some ditto marks, meaning the exact same thing in
14 the -- in the column down from the original given.
15 In the same way where it says Connaught for the
16 IPV, which is a longer word, she's got some ditto
17 marks and then she put C-o-n-n rather than
18 spelling it all the way out, and so I think she
19 just wrote it that way for expediency, and in her
20 mind, I would think, she has documented that the
21 vaccine information materials were given.

22 Q Did you discuss the content of the column
23 vaccine information material publication date with
24 anybody prior to today's deposition?

1 A The only possible person would be
2 Mr. Sanders. We discussed the issue of
3 distributing vaccine information sheets prior to
4 administering the vaccine, but no one else.

5 Q Okay. And I assume you already had a
6 discussion regarding the -- the word given to the
7 right in the -- in the row for administering
8 Pevnar on June 6, 2000?

9 A Yes. She's put -- she didn't write out
10 given, but for expediency, she just put those
11 little quotation marks or ditto marks.

12 Q Do you see the row June 6, 2000 for
13 administering Pevnar?

14 A Yes.

15 Q That would have been the first Pevnar dose
16 administered to Yates; correct?

17 A I see a DPT -- oh, I see, yeah, she's written
18 in Pevnar, yes.

19 Q Yeah. And so in 2000 and 2001 during that
20 time period, you had vaccine information
21 statements available for each vaccine in your
22 office; correct?

23 A Incorrect. Sometimes the vaccine information
24 sheet hadn't been finalized because it has to go

1 through quite an ordeal to get finalized by a
2 whole lot of people, and I cannot tell you all of
3 the names, so before we would have the official
4 vaccine information sheets, we would have --
5 either have and -- what they called an interim
6 vaccine information sheet, something that had been
7 less rigorously approved but still okay, and that
8 would have been the case for the Pevnar. We
9 would have had some type of interim sheet. So
10 although that sheet hadn't had its final approval
11 on that date, we had a more -- rather than a VIS,
12 some more general vaccine information material,
13 either a V -- either an interim VIS or some
14 printed material to give, and Ms. Upchurch
15 probably didn't know the difference between an
16 interim VIS and a real approved VIS, so she put
17 given, she probably didn't know the difference,
18 but we did have material to hand out even though
19 we didn't have the finalized copy.

20 Q Do you specifically recall having an interim
21 VIS for Pevnar --

22 A Yes.

23 Q -- at your office --

24 A Yes.

1 Q -- in 2000 --

2 A Yes, I don't -- I'm sorry. Yes, I remember
3 us doing that, but I don't remember whether it was
4 an interim VIS or some other material.

5 Q Okay. Do you recall having an interim VIS or
6 some other substitute material for a VIS for any
7 other vaccine prior to the availability of a VIS
8 for that vaccine?

9 A Not offhand.

10 Q Okay. Do you recall anything about the -- in
11 either the interim VIS or the alternative material
12 to a VIS for Prevnar that your office, The Jackson
13 Clinic, would have had in 2000?

14 A In a specific way, no. It's 20 years ago. I
15 just don't remember.

16 Q If there were a copy of that material, where
17 would it be located?

18 A It's unlikely that it could be located. It
19 probably doesn't exist anymore. I have no idea
20 where to go to get that.

21 Q And if that information -- now, the interim
22 VIS or the other material, is -- as -- that would
23 have been created as a substitute to the Prevnar
24 VIS, who would have created the interim VIS or

1 that substitute material?

2 A Without knowing specifically, my -- the
3 likelihood is it came from the CDC because it was
4 the CDC that said it was okay to give interim VIS
5 sheets prior to a finalized copy. We did not
6 produce it ourselves.

7 Q Okay. And then when we take a look over
8 there, we see that on April 7, 2000, there were
9 three vaccines administered; correct?

10 A Correct.

11 Q And the word given was put in the vaccine
12 information material publication date column
13 across each one of those rows; correct?

14 A Correct.

15 Q Okay. So then on June 6, there were another
16 three vaccines administered; correct?

17 A Correct.

18 Q And in that instance, there were the ellipses
19 provided in each of those rows in the vaccine
20 information material publication date column;
21 correct?

22 A Correct.

23 Q Okay. Now, on August 16, 2000, the -- there
24 were -- there were three vaccines administered --

1 four vaccines administered on that date; correct?

2 A Correct.

3 Q Now, LuAnn Upchurch provided an ellipses in
4 the row for Prevnar that was administered on that
5 day, in the -- she provided an ellipses, excuse
6 me, in the vaccine information material for the
7 row for the Prevnar administered on August 16,
8 2000; correct?

9 A Correct.

10 Q Okay. Now, a hepatitis B vaccine was also
11 administered on that day; correct?

12 A Correct.

13 Q But the box for vaccine information material
14 publication date was left blank; right?

15 A It is blank.

16 Q Would that indicate to you that the HepB
17 vaccine -- the VIS for the HepB vaccine was not
18 provided to Yates' parents on that day?

19 A No.

20 Q Okay. Why not?

21 A She gave VIS sheets for other vaccines on
22 that day, and there's no reason for her to pick
23 those and then eliminate the hepatitis B vaccine
24 information sheet, and so I think it's just a

1 documentation oversight and that she likely gave
2 them.

3 Q But you can't know for certain; correct?

4 A Well, I -- I was not there to see her do it.

5 Q Now, on November 22, 2000, LuAnn Upchurch
6 provided Yates additional vaccines; correct?

7 A Which date again?

8 Q November 22, 2000.

9 A Yes, correct.

10 Q And on that date, she again -- she filled out
11 another row for a second HepB vaccine she provided
12 to Yates; correct?

13 A Correct.

14 Q And she would have filled in the date that
15 vaccine was administered; right?

16 A November the 22nd, yes.

17 Q She has left his -- the age that Yates was on
18 that date; right?

19 A By month.

20 Q She would -- she wrote out the site that the
21 vaccine was administered?

22 A Yes.

23 Q She wrote the vaccine manufacturer's
24 initials?

1 A Correct.

2 Q She carefully documented, I presume, the lot
3 number for the vaccine that was administered?

4 A Correct.

5 Q Okay. But then she again left the box for
6 whether vaccine information material publication
7 date was provided blank; correct?

8 A It's blank.

9 Q It's blank. And so this was the second
10 opportunity for her to fill in that a VIS was
11 provided for the HepB vaccine; correct?

12 A Correct.

13 Q And she did not do that; right?

14 A She did not.

15 Q Is it possible that she hadn't provided the
16 HepB VIS for some reason and left it blank?

17 A Can you repeat that, please?

18 Q Sure. Is it possible that LuAnn Upchurch
19 left that -- the HepB -- strike that. Is it
20 possible that LuAnn Upchurch purposefully did not
21 write given or an ellipses to indicate that she
22 provided a VIS for the HepB vaccine to Yates'
23 parents?

24 A I doubt she omitted that purposefully.

1 Q So you believe that on November 22, 2000, she
2 mistakenly forgot potentially to indicate she gave
3 a VIS for HepB to Yates' parents?

4 A I was not there to watch her. I don't know
5 why she left that blank. So I don't think she
6 purposefully left it blank in the sense that she
7 knowingly did not give the VIS sheet and therefore
8 she could not honestly fill it in. The most
9 likely scenario that I can only guess at is that
10 she just made a documentation error.

11 Q If we -- if you were to take a look at -- if
12 you were to take a look at a random sampling of a
13 hundred vaccine sheets, such as this one from
14 The Jackson Clinic for the year 2 -- in the year
15 2000, in the vaccine information material
16 publication date column that was filled out by
17 LuAnn Upchurch, would others also provide given
18 only on the first row for each vaccine and then
19 ellipses for the next row and then blank after
20 that?

21 A Not knowing -- well, certainly, my
22 presumption would be that you would find a lot of
23 them like that.

24 Q But you don't know?

1 A Well, I do not know.

2 Q Do you think that there's -- strike that.

3 Are you aware that Mr. Hazlehurst went down to

4 The Jackson Clinic and asked Dr. Hays for a copy

5 of this vaccine record?

6 A Are you referring to the time where he had

7 filed the lawsuit?

8 Q No. Five days prior to filing in court to

9 obtain a copy of this by compulsion of law, are

10 you aware that Dr. -- that Mr. Hazlehurst was in

11 The Jackson Clinic in a room with Dr. Hays while

12 Dr. Hays was holding a copy of this vaccine record

13 and Mr. Hazlehurst was demanding -- requesting

14 that Dr. Hays make a copy for him of this vaccine

15 record?

16 A I heard that he was there. I didn't hear the

17 specifics of what he wanted, other than the

18 medical record, so I had heard that that event had

19 occurred, yes.

20 Q Okay. If a parent asked you for a copy of

21 their child's vaccine record and you had it in

22 your hand, would you make a copy of it for them?

23 A Yes.

24 Q Is there any reason why you believe Dr. Hays

1 wouldn't have made a copy of this record if he was
2 holding it in his hand and Dr. -- and
3 Mr. Hazlehurst was asking for a copy of it?

4 A I do not know what his thinking was at the
5 time.

6 Q Okay. Are you --

7 A So I don't know.

8 Q Are you aware that in the -- the -- that day,
9 as well as the next few days, Mr. Hazlehurst made
10 a number of requests to get a copy of this vaccine
11 record from Dr. Hays and The Jackson Clinic?

12 A I don't know the number, but I knew that he
13 had wanted the record, yes.

14 Q And you're also aware that Mr. Hazlehurst was
15 only finally able to obtain a copy of this record
16 when he got a Court Order requiring The Jackson
17 Clinic to turn it over; correct?

18 A I do know that he got a Court Order. My
19 understanding, and this is just my understanding,
20 because again, I was not involved, is that
21 The Jackson Clinic could not produce it in the
22 timely manner that he was hoping for. I think
23 they would have produced it because they've always
24 produced it for people that have wanted their

1 records in the past. No reason to withhold it for
2 him. But my understanding was it was not able to
3 be obtained as quickly as he wanted it.

4 Q Well, Dr. Hays had a copy in his hand while
5 Mr. Hazlehurst was in the office with him, so why
6 is it that it was not able to be produced during
7 the five-day period that Mr. Hazlehurst was
8 demanding it between first requesting it in the
9 office with Dr. Hays and when Mr. Hazlehurst had
10 to get a Court Order to get a copy of it?

11 MR. SANDERS: Object to the form of the
12 question. You may answer, Doctor, if you have an
13 answer.

14 A I'm not sure if you're referring to this just
15 one page we're looking at now or the entire
16 medical record, but if -- and I don't know why
17 Dr. Hays would have the page we're looking at now
18 with the immunizations on it in his hand and no
19 other piece of information, so I can't tell you
20 why if that was the case that he had just one
21 piece of documentation of vaccines in his hand and
22 he did not do that. I do not know. However, as
23 far as the entire chart goes, you know, we were
24 converting to an electronic medical record, and so

1 that would be easy to click -- to print, and print
2 the electronic version off and he could have the
3 copy.

4 Q (By Mr. Siri) But --

5 A The prior --

6 Q Please, I'm sorry.

7 A The prior record was a -- was a paper record,
8 and we're in the north clinic, and the paper
9 record is kept at the other campus, which is on
10 West Forest Avenue, which is some, I don't know,
11 4 or 5 miles away.

12 Q So --

13 A And you just couldn't get it right away. Not
14 to mention, it's going to have to be Xeroxed.

15 Q So in 2000 --

16 A They --

17 Q Please, I keep -- I apologize I keep cutting
18 you off. Please.

19 A Well, I guess I pause too much, but I -- I've
20 never heard of The Jackson Clinic not giving those
21 records. But it does take some time. There is
22 some procedure that's required. They're not
23 trying to stall anybody. It just takes some time
24 and the record is not physically where Dr. Hays

1 was practicing.

2 Q But in 2002, the records had already been
3 converted into an electronic format; correct?

4 A Correct. Before that even.

5 Q And so if a parent wanted the records, it was
6 really just a matter of clicking print to print
7 out the child's records; correct?

8 A For the electronic component, that's correct.

9 Q Okay. And then in terms of the
10 non-electronic component, such as this vaccine
11 record, you're saying that it was at a location a
12 few miles away from The Jackson Clinic; correct?

13 A Yes. The Jackson Clinic had several
14 locations and the paper record was kept at what we
15 would refer to as the main location.

16 Q All right.

17 A And the north clinic would be a satellite
18 location. And -- so yes, that's where that would
19 be kept, and you'd have to go there to get it.

20 Q Did -- okay. So when Mr. Hazlehurst walked
21 in with a court-appointed officer, I think it
22 would be a sheriff, and the Court Order requiring
23 the paper records to be produced, did they have to
24 go to some far off clinic to get it or was it

1 already in The Jackson Clinic and provided when
2 they came in with that Court Order?

3 A I -- I don't know the answer to that. My --
4 the routine is that the paper record is at the
5 main clinic, and we were at the north clinic. And
6 whether they had already brought the paper record
7 to the north clinic or had not, I just do not know
8 the answer to that.

9 Q You never actually witnessed LuAnn Upchurch
10 fill in the information on this vaccine record
11 that's been marked as Plaintiff's Exhibit 1;
12 correct?

13 A That's correct.

14 Q Okay. You don't know when she filled in the
15 column that says vaccine information material
16 publication date; correct?

17 A I don't know it, no, correct.

18 Q Meaning it -- it could be that she filled it
19 out on the same day that each of the vaccines
20 listed on this vaccine record were given or it's
21 even possible that she filled it out at some later
22 date; correct?

23 A I don't know when she filled it out.

24 Q So it's possible that she filled it out --

1 okay. Strike that. In 2000, 2001, what would you
2 have prescribed to a child with otitis media?

3 A There's not one answer for that. It depends
4 on the circumstances. Certainly if the child
5 hadn't had a lot of recent antibiotic and, of
6 course, certainly if they're not allergic to it,
7 Amoxicillin is a first line drug of choice.

8 Q And how much -- strike that. What dose of
9 Amoxicillin would you have prescribed to a child
10 who had moderate otitis media in 2000, 2001?

11 A The way all of us think about antibiotic
12 dosages is we think of how many milligrams per
13 kilogram body weight per day we're going to give
14 and how we're going to divide it. So a routine
15 dose of Amoxicillin in 2001 would have been in the
16 range of 80 to 90 milligrams per kilogram per day.

17 Q Divided how many times?

18 A For Amoxicillin, twice.

19 Q Okay.

20 A So it would be written BID.

21 Q And presumably for a -- the more mild the
22 otitis media, the less the amount would be
23 prescribed versus the amount prescribed for a
24 severe form of otitis media; correct?

1 A No.

2 Q Okay. So even the most mild case of otitis
3 media you would prescribe 80 milligrams per
4 kilogram per day twice a day?

5 A That is correct, and the reason for that has
6 nothing to do with mild, moderate, or severe. It
7 has to do with the frequency of intermediate
8 resistance to penicillin by pneumococcus, which is
9 one of the more common bacteria to cause ear
10 infection, so to cover that resistance, not the
11 severity, that you choose that dose and then
12 indeed that's recommended in the Red Book.

13 Q And the Red Book from what year?

14 A To my knowledge, every time it's been
15 published.

16 Q So the Red Book --

17 A I --

18 Q Please.

19 A I'm sorry.

20 Q No, no, please.

21 A I wouldn't want to say that going back -- I
22 don't know when they started publishing the
23 Red Book. We've had it for a long time, but any
24 reasonably recent version, let's just say from the

1 mid 1990s onward, because if you -- if there were
2 a Red Book in 1950, the bacterial resistance
3 patterns were entirely different, so the
4 recommendations would've been different, and we
5 didn't even have Amoxicillin in the 1950s, so I
6 don't mean to imply, you know, indefinitely
7 backwards in time, but certainly the recent ones
8 because pneumococcal resistance has been a problem
9 for quite a while.

10 Q So would the amount of Amoxicillin that's
11 recommended by the AAP in a given year for otitis
12 media be considered the standard of care for what
13 dose of Amoxicillin to provide when a child has
14 otitis media?

15 A I don't know that I would look at that as
16 a -- as a standard of care issue because
17 resistance patterns vary from place to place, so
18 resistance in Tennessee may not be the same as it
19 is in California, and you have to know of the
20 resistance patterns. But certainly if you know
21 you have frequent pneumococcal resistance, you
22 give the larger dose, and -- and indeed, anywhere
23 from 80 to 100 milligrams. The good thing about
24 Amoxicillin, it is well-tolerated, and if you gave

1 them 200 milligrams, it wouldn't be a problem.
2 Before roughly the late 1970s, we didn't have
3 Amoxicillin. We had Ampicillin, which was --
4 didn't taste as good and it was more problematic
5 from side effects, for specifically diarrhea, so
6 we got Amoxicillin, I don't remember the year, but
7 it's probably 1978 or -- or 1979, something like
8 that. And Amoxicillin is the bubblegum medicine.
9 It is much more tolerated and we were giving the
10 lower dose when it first came out of 40 milligrams
11 per kilogram per day, but it didn't take long
12 before we all realized that we were not having the
13 cure rate that was adequate, and the Red Book says
14 give them 8 -- I forget what -- it's like 80 or 90
15 per kilogram per day, and that became pretty well
16 the standard dose because we figured everybody has
17 got pneum -- penicillin -- intermediate resistance
18 to penicillin to -- by the pneumococcus, which is
19 a common bacterial etiology of otitis media, so
20 that's a routine dose.

21 Q So the change from 40 milligrams per kilogram
22 per day to 80 milligrams per kilogram per day as
23 the standard happened when the AAP published with
24 regards to recommending that change?

1 A I'm not -- I'm not sure we changed because
2 they published it. We changed in my mind because
3 we could see that first of all a bigger dose was
4 easily tolerated and the cure rate was
5 insufficient. The presumption is bacterial
6 resistance, and it didn't take a proclamation by
7 the AAP to do that. I think everybody just did
8 it, and I think it was of common practice -- it
9 was certainly the practice at The Jackson Clinic,
10 but I think it's a common practice for
11 pediatricians everywhere.

12 Q Across the country?

13 A I -- I can only presume, but it's likely
14 because it's a nationwide problem with resistance,
15 and enough for the AAP to mention that in the Red
16 Book under otitis media.

17 Q And when did the change happen from
18 40 milligrams per kilogram per day to
19 80 milligrams per kilogram per day as the standard
20 treatment for otitis media, if you can --

21 A I can only hazard a guess. The 1980s
22 probably, give or take five years.

23 Q And where did you -- from -- from whom did
24 you first learn that you should be changing from

1 40 milligrams per kilogram per day to
2 80 milligrams per kilogram per day for treating
3 otitis media?

4 A Again, that is so long ago that I'm not sure
5 I can tell you --

6 Q Okay.

7 A -- and be feeling like I'm giving you an
8 honest answer.

9 Q Okay.

10 A Certainly otitis media is one of the more
11 common things we see and that we treat, and the
12 pediatricians that you work with were talking
13 about it all the time.

14 Q So Amoxicillin was a very common antibiotic
15 in the 1980s; correct?

16 A Yes.

17 Q And the '90s?

18 A And still is, yes.

19 Q Still is. And otitis media is one of the
20 most -- one of the more or maybe most common
21 infections that pediatricians have to deal with in
22 their practice including Tennessee and the rest of
23 the country; correct?

24 A Yes.

1 Q Okay. So presumably given that the dosage
2 appeared to double for one of the most common
3 antibiotics used to treat one of the most common
4 infections in the country for children, that
5 change in practice would have been documented
6 someplace; correct?

7 A It very likely was in journal articles or in
8 some kind of article or given at conferences, so
9 it seems likely, but do I remember a publication
10 or a written statement, no.

11 Q But given how common Amoxicillin is and
12 otitis media are, it would be extremely
13 surprising, wouldn't you say, if the standard
14 dosage for Amoxicillin for otitis media changed
15 among pediatricians but wasn't documented
16 someplace in some kind of official publication,
17 journal article, AAP publication, and so forth?

18 A Yeah, it seems reasonable that somewhere it's
19 written down. I just can't point you to where it
20 is.

21 Q Okay. What is the current -- well, as of
22 2013 when you last practiced, what was the
23 standard dose of Amoxicillin for otitis media for
24 children when you were last practicing?

1 A 80 to 90 milligrams per kilogram per day in
2 two divided doses, and to be honest, then rounded
3 off generally, because if you do the arithmetic,
4 it comes out that you needed to give .89
5 teaspoons, you're not going to do that. You're
6 going to give them a teaspoon. Or if it's 1.13
7 that the arithmetic shows that you need to give,
8 you're going to give one teaspoon because the
9 parents are not going to be able to handle those
10 tiny fractions. It's a liquid you can stick --
11 you pour it in hopefully some container that the
12 pharmacy provides so that the family knows and we
13 tell them that we're not talking about a teaspoon
14 being out of their silverware, you know, with the
15 knives and forks, but rather a pharmacy teaspoon,
16 and so we round the dose off. So when we say 80
17 to 90 milligrams per kilogram per day, the dose
18 may end up being a variance of that by a small
19 amount because we tend to round it off. I would
20 give it usually in CCs. That way, like, for
21 example, 6 CCs twice a day I think that Yates was
22 prescribed on a visit that I assume you're
23 discussing in February of '01, a teaspoon BID, and
24 I calculated that, and I think that's about

1 74 milligrams per kilogram per day. The reason
2 they have 400 milligrams in a teaspoon is for
3 convenience. This is a drug frequently given to
4 children that are in the, you know, 10-month to
5 2-year range, and a teaspoon is just easy for the
6 family. And so, look, if you're a 10-kilo child,
7 you can take a teaspoon twice a day. It's an easy
8 way to do it. They didn't want to put
9 10 milligrams of Amoxicillin in a teaspoon or a
10 thousand because then you'd get these odd-size
11 dosages.

12 Q Uh-huh. So if the -- what -- did it -- did
13 you always round down or did they do -- did you
14 ever round up?

15 A I would round up, sure.

16 Q So if it was 1.6, you would -- you would
17 provide for 2 or 1?

18 A 1 and a half.

19 Q 1 and a half. I see. You would always round
20 to the half -- like --

21 A To the nearest half.

22 Q To the nearest half. So if it was 1.9, you
23 would round to --

24 A 2.

1 Q 2. Okay. And if it was 1., you know, 74,
2 you would round to 1.5?

3 A Probably, yeah.

4 Q Okay. What -- did you have a copy of the
5 Physician's Desk Reference in your office at
6 The Jackson Clinic in 2001?

7 A Probably.

8 Q Did you ever refer to the Physician's Desk
9 Reference when treating children when you were a
10 pediatrician at The Jackson Clinic in 2001?

11 A Hardly ever.

12 Q Okay. What resources did you refer to?

13 A Well, there's so many. First of all, the
14 common dosage of antibiotics, you don't need to
15 refer to anything. You know what they are. You
16 do it every day. But that aside, there's
17 certainly the Red Book. There's textbooks of
18 pediatrics, although they have a hard time staying
19 up to date. You can buy textbooks of pediatric
20 drug dosages, so it just -- it's a big thick book
21 with nothing but drugs in it and it tells you the
22 dose, and they're frequently edited and
23 republished so that you can stay up to date. And
24 most of us if we had a question would refer to a

1 book that is specifically for pediatric drugs. We
2 wouldn't refer to the PDR. There's nothing --
3 there's no reason to even look in it.

4 Q And the -- can you recall the name of any
5 textbooks that you used when you were a
6 pediatrician?

7 A Textbooks?

8 Q You said that you would refer to textbooks in
9 pediatrics, you know, that would provide --

10 A Well, I forget the name of it, but I had one
11 that was -- I believe it was simply Pediatric Drug
12 Dosage.

13 Q Okay.

14 A They're -- I mean, there's so many.

15 Q Do you remember the color of the book,
16 Pediatric Drug Dosage?

17 A I think it was white with yellow and red and
18 green lettering.

19 Q Do you remember anything else about that
20 book?

21 A Well, it was exclusively about drugs, so it
22 was a paperback.

23 Q Okay. Other than the Red Book, the Pediatric
24 Drug Dosage textbook, which you believe is the

1 title, you remember, were there any other books
2 specifically that you remember that you had in
3 your office in 2001 that you might have referred
4 to in the treatment of children?

5 A Well, I had a bookcase full, so that's going
6 to be hard to sit here and tell you the name of
7 all of them, but most everybody has got a Nelson's
8 Textbook of Pediatrics. I had a Pediatric
9 Physical Diagnosis Color Atlas, I had a pediatric
10 dermatology textbook, I had a neonatology
11 textbook, we had the Red Book. I --

12 Q And --

13 A I had a pediatric neurology textbook. I
14 mean, I --

15 Q Let me ask you this. Let me ask you this.
16 Okay. It sounds like you have a lot of books,
17 which is great. What -- what other pediatric
18 reference books did you have on your shelves that
19 would have provided information about potential
20 dosing of drugs for children other than the ones
21 you've already listed?

22 A I had -- and it -- some of these you just
23 rarely looked at. When I was in training, I had a
24 Harriet Lane. Harriet Lane is a small little

1 textbook that fits in your pocket. Residents have
2 big white coats with great big pockets, so you
3 have a stethoscope in there as well as whatever
4 else, and the Harriet Lane manual is something
5 particularly younger pediatricians, I don't know
6 if they do currently or not, but when I was
7 training, we referred to, and I never got a new
8 edition, but I kept that, so I had that, and I
9 would look up things in that, but rarely drug
10 dosages.

11 Q Okay. And so, you know, pediatricians in
12 The Jackson Clinic in 2001 would have been
13 unlikely to refer to the Harriet Lane manual for
14 what dosage of a -- for example, Amoxicillin to
15 provide to children?

16 A Correct. It's not likely we would look at
17 that. And once again, most of these dosages you
18 have memorized. You don't have to look anywhere.

19 Q Where would Dr. Hays have learned the dosage
20 of Amoxicillin to provide for otitis media?

21 A He trained at Vanderbilt University, so I
22 presume there.

23 Q Okay. And he would have brought that
24 knowledge, you're saying, with him to The Jackson

1 Clinic?

2 A Correct.

3 Q Okay. And it's not something -- you're
4 saying the dosage of Amoxicillin that he would be
5 prescribing would not be some -- would that be
6 something that he would discuss with any of the
7 other pediatricians in The Jackson Clinic?

8 A Not likely.

9 Q Okay. Would the different doctors within
10 The Jackson Clinic who were pediatricians have --
11 would there be, you know, opportunity where a
12 child would come in, see a different doctor, and
13 the doctor would be able to -- you know, would see
14 the medical record and the amount of Amoxicillin
15 that a different pediatrician in the practice was
16 providing?

17 A That certainly could happen, yes.

18 Q Okay. And, you know, if -- if an amount of
19 Amoxicillin was being provided by one pediatrician
20 that differed from what the other -- a different
21 pediatrician would prescribe, do you think they
22 would discuss that?

23 A No.

24 Q They would each just accept what the other

1 one was prescribing even if it differed than what
2 they understood was the amount to be prescribe --
3 of the amount of Amoxicillin to be prescribed for
4 otitis media?

5 A I never knew of it to be a discrepancy that
6 was anything other than insignificant, so I don't
7 think it ever occurred.

8 Q So if the medical records were reviewed for
9 children in The Jackson Clinic during the period
10 of 2000 and 2001, who had otitis media, would
11 you -- do you believe it would consistently show
12 that those children were prescribed 80 milliliters
13 per kilogram per day twice a day of Amoxicillin?

14 A 80 milligrams per kilogram per day, yes.

15 Q Okay. Thank you. Because it's your
16 understanding that that is what all the
17 pediatricians understood in 2000 and 2001 was the
18 amount of Amoxicillin to prescribe for otitis
19 media for a child; correct?

20 A Can you say that again? I -- I want to make
21 sure I understood.

22 Q Sure. Sure. Is it your understanding that
23 all the pediatricians in The Jackson Clinic in
24 2000 and 2001 understood that the amount of

1 Amoxicillin to provide for otitis media, whether
2 it was mild, moderate, or severe, was
3 80 milligrams per kilogram per day?

4 A I would think that would be correct.

5 Q Okay. Are you familiar with the normal
6 hemoglobin range in a 9-month-old baby?

7 A Yes.

8 Q What would that be?

9 A Shouldn't be under 10 and a half, not likely
10 to be over 12.

11 Q Okay. So a normal range would be 10 and a
12 half to 12?

13 A That would be a good range, yes.

14 Q Okay. And what would you be concerned about
15 if it was over 12 or under 10 and a half?

16 A It would depend on the over. It would depend
17 on how much over. If it was 12.3, I wouldn't
18 think anything about it. In levels higher than
19 that, short of situations like severe dehydration,
20 which would concentrate the blood and make the
21 hemoglobin high, I can't think of seeing a child
22 with high -- a 9-month-old with a high hemoglobin.
23 This diagnosis just doesn't often occur. Low
24 brings in a whole list of diagnoses that are

1 associated with anemia because you're basically
2 diagnosing anemia, and way and above the most
3 likely thing is iron deficiency, but there are
4 certainly a huge list of other possibilities.

5 Q So that would be for the -- if it was below
6 the standard range that you provided, and if it
7 was the standard range, what do you think it could
8 potentially be indicative of?

9 A Dehydration would be the most likely thing.
10 And just to be complete, we're excluding newborns
11 from this?

12 Q Yes.

13 A They have a high hemoglobin because of
14 intrauterine life.

15 Q Okay.

16 A Adults have things like polycythemia vera
17 where they have a real high hematocrit or a
18 hemoglobin, but children just don't have much
19 that's going to do that. They would have to have
20 been recently transfused and maybe gotten too
21 much, and dehydration, as we mentioned, can
22 make -- can hemoconcentrate the blood.

23 Rehydration, of course, would immediately lower
24 the hemoglobin or the hematocrit right back down

1 to where it should be. There are just not many
2 diagnoses for a hemoglobin of 15 or 16 or
3 something like that.

4 Q And so if a child did have a hemoglobin level
5 above the 12 range, as you've indicated, you would
6 be very concerned, I presume, if a 9-month-old
7 infant had a hemoglobin level that was, you know,
8 above 12, you'd be -- you'd be -- you'd be very
9 concerned; correct?

10 A Well, not if it was 12-point something.

11 Q But --

12 A If it starts getting over 13, again you're
13 going to begin to wonder why. The first thing I
14 think is lab error and then repeat it.

15 Q And if you repeat -- okay. But putting aside
16 a potential lab error, you would ask -- you would
17 ask for it to be repeated because you would be
18 concerned that there was some issue as to why the
19 child had a hemoglobin range -- level that was
20 well above -- that was above 13, for example?

21 A That would make me have to think about what's
22 going on, yes.

23 Q Okay. It would be a -- it would be an
24 outcome that would make you concerned as a

1 pediatrician to conduct further evaluation, either
2 rerun the test or otherwise engage in some kind of
3 evaluation as to what is potentially medically
4 wrong with the child; correct?

5 A Yes. An excessively high hemoglobin would
6 get your attention and you would undertake some
7 kind of evaluation.

8 Q And Dr. Carlton Hays, he would have been the
9 healthcare provider under whose authority Yates
10 was vaccinated; correct?

11 A Correct.

12 Q Dr. Stepp, would you like a break?

13 A I would love one, please.

14 MR. SIRI: Okay. Well, why don't we --
15 why don't we do that. Why don't we take a --

16 MR. SANDERS: May I make a suggestion,
17 Mr. Siri?

18 MR. SIRI: Sure.

19 MR. SANDERS: I know based on our prior
20 depositions last week that we're likely to go late
21 into the afternoon. It's -- it's about to be
22 one o'clock here Central. Would anybody be
23 opposed to taking about a 30-minute break and
24 letting him get a quick sandwich or something like

1 that?

2 MR. RILEY: That sounds fine to me.

3 MR. SIRI: No problem. Absolutely.

4 MR. SANDERS: So if it's 12:52 or --
5 Central time, say 1:25 Central time, would that be
6 fair?

7 MR. SIRI: That sounds -- that sounds
8 great. Is that good for you, Dr. Stepp?

9 THE WITNESS: That is perfect for me.

10 MR. SIRI: Ms. Cohen?

11 THE COURT REPORTER: Perfect. Thank
12 you.

13 MR. SIRI: She's doing the hardest work
14 here. Okay. So 1:25 then. Mr. Lawson?

15 THE VIDEOGRAPHER: Okay. We are off the
16 record at 12:53.

17 (Lunch recess.)

18 THE VIDEOGRAPHER: We are now back on
19 the record at 1:37.

20 Q (By Mr. Siri) Okay. Dr. Stepp, we just took
21 a short lunch break. During that break, did you
22 discuss this deposition with anybody?

23 A No. Excuse me, no, sir, I did not.

24 Q Okay. And one of the ground rules I should

1 have discussed at the beginning, but I'll do it
2 now, and this is because, you know, we're doing
3 depositions in a bit of a different way than we've
4 normally done them which is in person in the room,
5 during the course of the deposition, one of the
6 rules is that you're not supposed to consult with
7 anybody regarding your testimony. Are you aware
8 of that rule?

9 A Yes.

10 Q Okay. And during the course of the
11 deposition thus far, have you received any
12 information or consulted with anybody regarding
13 any of the testimony that you've provided today?

14 A No.

15 Q And will you agree to continue to not consult
16 or take any information from anybody with regards
17 to the testimony you'll be providing today?

18 A I agree.

19 Q Okay. And you have not been prompted or been
20 provided any help during this deposition up to
21 this point; correct?

22 A That's correct.

23 Q Okay. During your time at The Jackson
24 Clinic, you were -- you would have been senior to

1 Dr. Hays; correct?

2 A That's correct.

3 Q Okay. Did Dr. Hays ever ask you for advice?

4 A The chances of that happening are fairly
5 good. I don't have any special memory of such.

6 Q You can't remember a specific instance where
7 that occurred?

8 A I can't remember a specific instance where
9 that occurred. I remember the reverse occurring
10 where I went and asked him, but I don't remember
11 him coming and asking me.

12 Q Okay. What did you ask him about?

13 A I don't remember the details, but it would --
14 it was an occasion of an older teenager with an
15 adult-type of a problem, and of course, he does
16 internal medicine as well as pediatrics, and so
17 since it was an adult-type problem more than a
18 pediatric problem, but nonetheless I'm the one
19 seeing him, I asked him what he thought, and I
20 can't remember what it was about.

21 Q Okay. But had Dr. Hays had any questions,
22 you would have been available to discuss it with
23 him; correct?

24 A Yes.

1 Q Would you say that pediatricians at
2 The Jackson Clinic were encouraged to speak to
3 their colleagues about questions concerning
4 treatment of a patient, including children?

5 A Nobody had to come around and encourage us to
6 do that, but we clearly enjoyed doing that and did
7 it frequently, but the tendency was to discuss
8 cases with the pediatricians that worked on the
9 same hall that you did, and so -- because it was
10 so much easier, you were right there, and you
11 tended not necessarily to go to the next hall
12 down, and Dr. Hays was on the next hall, but -- so
13 everybody talked about cases.

14 Q And who was in the hall with Dr. Hays?

15 A All of the med peds doctors were all on the
16 same hall, so Dr. Jim Payne, Dr. Lisa Anderson
17 were there, and -- on his hall, and for a time
18 there was a fourth med peds, and that was
19 Dr. Hannah Shelby-Kennedy.

20 Q Okay. I now understand why you were --
21 everybody waited for me to start because my video
22 was off. I just realized that. Okay. Now,
23 the -- The Jackson Clinic did financially profit
24 from administering vaccines to children; correct?

1 A I know they upped the charge. Your video
2 just went out for me anyway. They charged more
3 for them than paid for them.

4 Q Okay. And are you aware of how much more
5 they charged for them than they paid for them?

6 A No.

7 Q Do you know what the routine charge for a
8 well-baby visit was during your last years at
9 The Jackson Clinic?

10 A No. Of course, and I don't remember the RVU,
11 and the thing about the RVUs is it's different
12 payors would pay a different amount to the same
13 amount of RVU, so BlueCross® BlueShield® may pay
14 one thing for one RVU, Medicare pay -- may pay a
15 different amount for one RVU and so on and so on,
16 but no, I don't remember what it was.

17 Q Do you remember approximately what a private
18 insurance company would pay for a -- for a
19 well-child -- well-baby visit?

20 A I know that they tended to pay 140 percent of
21 Medicare per RVU because Medicare doesn't pay for
22 well-child visits, but based on the RVU number,
23 they tended to pay about 140 percent, but I don't
24 know how much that is.

1 Q Was there any financial incentive provided
2 either by Medicare or by private health insurance
3 companies where a child -- for a child that was
4 fully vaccinated versus having children that were
5 not fully vaccinated in the practice?

6 A Do you mean was there a financial penalty, so
7 to speak, if a child wasn't fully vaccinated? Is
8 that what you're --

9 Q Yes.

10 A Not that I know of, no.

11 Q Okay. And was there a financial incentive
12 payment provided by any of the payors if there was
13 a higher proportion of children in the practice
14 that were fully vaccinated?

15 A I'm not aware of any incentive pay for that.

16 Q So if The Jackson Clinic was able to achieve
17 close to 100 percent of its pediatric patients
18 being fully vaccinated, you're not aware of any
19 additional payment above the standard payments
20 that would be provided for maintaining that high
21 level of immunization in the practice?

22 A I'm not aware of any extra pay for that. I
23 mean, Tennessee's Medicaid is TennCare, and
24 TennCare would come around and make sure we had a

1 high level of vaccination for TennCare patients,
2 but as far as money, if it -- if it did, I was not
3 aware of it.

4 Q And what would happen if the TennCare came
5 around and the level of vaccination wasn't high?
6 What was the repercussion, if any?

7 A I don't -- I don't know.

8 Q Do you know what level of vaccination they
9 expected when they reviewed the records?

10 A Other than say they expected it to be high.
11 To put a number on it, I don't know that they had
12 a threshold if you fell below that they would
13 start reprimanding you in some way. Obviously
14 they wanted them immunized.

15 Q Did you ever dismiss a child or parent from
16 The Jackson Clinic because they refused a vaccine?

17 A I did not.

18 Q Did other pediatricians in The Jackson Clinic
19 do that?

20 A I don't think they did, so if they did, I'm
21 not aware of it.

22 Q Okay. Was there a policy at The Jackson
23 Clinic concerning how to deal with parents that
24 refused one or more vaccines?

1 A Not a Jackson Clinic policy, no.

2 Q Okay. Did you have many patients -- excuse
3 me. Did you have many parents who refused to
4 vaccinate their children?

5 A There were very few.

6 Q Okay. When parents asked you if vaccines
7 were safe, what would you tell them?

8 A Well, by and large I'd say that they are
9 safe, but nothing is perfect. There are certain
10 circumstances where there could be precautions or
11 contraindications, but by and large, yes, they're
12 safe.

13 Q Okay. And that would be what you would tell
14 them?

15 A Yes.

16 Q Okay. And if they asked you how you know
17 they're safe, what would you tell them?

18 A I would say you would have to look at their
19 track record of the -- of the vaccinations and see
20 that almost every child is vaccinated and problems
21 are very, very small.

22 Q So you're saying you would point to the
23 overall health of children in society? Is that
24 right?

1 A That would be one thing, yes.

2 Q And so, for example, in -- there were far
3 less vaccines in the 1990s as there, for example,
4 are in the 2010s; correct?

5 A Correct.

6 Q Okay. And so what you're saying is to --
7 well, an indicator that vaccines are safe is that
8 during that time period, you would look at the
9 overall health of children in society; correct?

10 A Overall health of the children in society,
11 plus the infrequency of having a major problem
12 with vaccine administration in terms of some kind
13 of adverse event.

14 Q And if they said to you, well, what about
15 long-term chronic health issues, how do we know
16 vaccines don't cause those?

17 A Well, of course, some vaccines can. I have a
18 friend who has a child who has permanent
19 vaccine-related injury, so they can, but those are
20 infrequent and we know what they are, and in --
21 the vaccine schedule has been amended to eliminate
22 that or minimize that.

23 Q What was the injury that your friend's child
24 had?

1 A He was given the oral polio vaccine and
2 developed polio.

3 Q Okay. And you said that we know -- when you
4 said we, I presume you mean the medical
5 profession?

6 A Yes.

7 Q When you said we know what they are. Okay.
8 And so how is it that you know what adverse events
9 vaccines cause and don't cause?

10 A There's a tracking mechanism, and so once
11 it's reported and looked into, then that be --
12 adds to the body of knowledge about vaccines, and
13 if it's a big enough problem, of course, then the
14 people that develop the vaccine schedules will
15 make some amendment like they did with the oral
16 polio vaccine.

17 Q And what is the tracking system called?

18 A I think it's VAERS, is it not?

19 Q And what -- what does that stand for?

20 A I may struggle to tell you every word of it.
21 Vaccine Adverse Event Reporting System. I think
22 it's close.

23 Q Have you ever filed a VAERS report?

24 A No.

1 Q Have you ever had a child that has within
2 a -- that's developed a health condition, you
3 know, within a -- let's say a month of receiving
4 vaccinations?

5 A That's related to the vaccine I assume you
6 mean, and no.

7 Q Okay. So you only report adverse events
8 following vaccination that you believe are related
9 or caused by the vaccine?

10 A Correct.

11 Q And but what you're saying is that VAERS
12 would pick up if there were a new -- if there were
13 an issue that were caused by the vaccine; correct?

14 A I would like to think so.

15 Q Okay. But you and I presume -- and, you
16 know, most pediatricians, they'll only report
17 conditions to VAERS that they believe are already
18 caused by vaccines; correct?

19 A I think that would be correct.

20 Q And how do you know what conditions are
21 caused by vaccines?

22 A I don't know that there's a simple answer to
23 that. Certainly you know that what conditions
24 have in the past been associated, and so if it's

1 something like that. On the other hand, if they
2 get their vaccine and three weeks later they have
3 some minor unrelated medical condition, like if
4 they get poison ivy or have pneumonia or strep
5 throat, we know that's not related.

6 Q And what about, you know, before vaccines
7 were licensed, how were they safety tested?

8 A Clinical trials.

9 Q Yeah. Are -- you know, are they -- can
10 you -- can you describe what those clinical trials
11 typically look like and how well they'll -- are
12 able to assess safety?

13 A You know, clinical trials have to go through
14 Phase 1, Phase 2, and Phase 3 trials. Phase 1
15 trials, they'll give vaccine to a small number of
16 people just to make sure, you know, there's
17 nothing real obvious, and then they'll get a
18 larger cohort, and then in a -- and then an even
19 bigger one in Phase 3 when they're getting ready
20 to put it on the market. You have -- you figure
21 that's what they're doing with the coronavirus as
22 we speak. During those trials, the patient is
23 being seen by some healthcare provider, and again
24 as I mentioned, I participated in some of this,

1 and when they come in for their scheduled visit
2 within the context of the protocol, you pretty
3 much ask them everything that has happened to them
4 and you have to record all those things, whether
5 you -- whether they're related or whether you
6 think they're related or not. So, for example,
7 during the Plevnar study, if they'd had diaper
8 rash and you figure that's probably not related,
9 but nonetheless you would have to record diaper
10 rash, and then when you turned your data over to
11 the -- to the drug company for evaluation, it
12 would be on there.

13 Q And it's the Phase 3 clinical trial that's
14 the one that's large and, you know --

15 A Correct.

16 Q -- long term that would actually assess if
17 they were to rely upon to them, decide whether or
18 not to license the vaccine?

19 A Correct. Of course, the FDA now is involved
20 and it's not the drug companies licensing it
21 themselves, of course, but rather they have to get
22 FDA approval, and the FDA can be pretty tough.

23 Q Okay. So for the vaccines that Yates
24 received, you know, can you describe those Phase 3

1 clinical trials, you know, how long were they, how
2 long did they review safety, and how many
3 participants, you know, what the --

4 A No.

5 Q Do you know anything about them?

6 A Don't know anything about them.

7 Q What would you expect the safety review
8 period to be in those Phase 3 clinical trials
9 prior to licensure?

10 A I don't have any way to ascertain the answer.
11 I mean, fairly long, but not indefinitely long.

12 Q What would you believe the reasonable period
13 of time to review safety after administering those
14 experimental vaccines before they were licensed?

15 MR. SANDERS: Yeah, object to the form
16 of the question. You can answer, Doctor, if you
17 have an answer.

18 A Well, I hate to answer when it's a guess, so
19 I just don't know.

20 Q (By Mr. Siri) Do you think a year sounds at
21 least reasonable enough?

22 MR. SANDERS: Same objection. Go ahead,
23 Doctor, if you have an answer.

24 A Whatever period the FDA requires to get the

1 license, that wouldn't not necessarily stop the
2 review, so if they're licensed this year and
3 something happened the next year, that's what the
4 VAERS is all about, and so it would still be
5 reported. It just wouldn't be part of the data
6 accumulated during the clinical trial.

7 Q (By Mr. Siri) Right. So it would get
8 licensed, but after it was licensed, you're saying
9 pediatricians would then report any adverse events
10 they knew were caused by the vaccine; correct?

11 A Correct.

12 Q Based on the adverse events that have already
13 been established to be caused by the vaccine;
14 correct?

15 A Correct.

16 Q Okay. So in that regard, it seems very
17 important to figure out before they were licensed
18 what adverse events are actually caused by the
19 vaccine; correct?

20 A Sure, yes.

21 Q Okay. So let's pick something that seems
22 ridiculous. For example, would you believe that a
23 vaccine -- do you think the vaccines that Yates
24 received would have been licensed based on only

1 one week of safety review prior to -- in the
2 clinical trials?

3 A No.

4 Q Okay. How about, like, only 60 days, do you
5 think they would have been licensed on the safety
6 that only lasted 60 days?

7 A No.

8 Q I mean, you would expect them, let me guess,
9 they would at least last a year of safety review
10 before -- in the clinical trials before they were
11 licensed to make sure that they were safe?

12 A Possibly. I just don't know what the FDA
13 requirement is or was for -- if you're talking
14 about MMR, I don't -- I don't know.

15 Q Well, as a pediatrician who's administered
16 tens of thousands of these, I assume you'd want
17 to -- you'd want to know that they were -- they
18 were properly studied before they were licensed to
19 make sure they were safe; correct?

20 A Yes.

21 Q I mean, as -- you know, I assume on a
22 personal, moral, ethical level, you'd want to feel
23 good that you're administering pharmaceutical
24 products that have been properly safety tested

1 before they were licensed; correct?

2 A That's correct.

3 Q Especially where after the license the only
4 adverse events that are going to be reported are
5 those that have already been shown to be caused by
6 the -- by the vaccines; correct?

7 A I don't know that those are the only ones.
8 If it was not on the list and some pediatrician or
9 physician thought there was some other adverse
10 event that they deemed likely to be associated but
11 it wasn't on the list, they might report that too.

12 Q But without actually having science to
13 support that, they'd be unlikely to do that;
14 correct?

15 A Well, it's hard to say what they would do.

16 Q Fair enough. We know what -- so -- okay.
17 So, you know, what else about vaccine safety can
18 you tell me that you would be able to tell a
19 parent to assure them that vaccines are safe?

20 A The general pediatrician is seeing sick kids
21 and well kids, and he can't proceed to personally
22 do studies, tests, investigations as to whether
23 they're safe or not, so there's some reliance on
24 others to form a consensus about whether they're

1 safe or not, and because the American Academy of
2 Pediatrics is the one we look to for that very
3 thing, and when they say it's fine, it's passed
4 the FDA, then we trust that there's -- that all
5 things have been looked into and that therefore
6 they are safe.

7 Q So what you're saying is that you rely on the
8 AAP to tell you that vaccines are safe. Is that
9 correct?

10 A Yes.

11 Q You never independently verified by looking
12 at any primary source that vaccines are safe?

13 A I wouldn't have the time or the expertise to
14 be the one to do that, so no.

15 Q All right. Who would have the expertise to
16 do that?

17 A Well, they -- they have to get past the FDA,
18 so that's one, and then the members of the
19 infectious disease committee at the AAP do have
20 the wherewithal to make those evaluations, and the
21 CDC as well.

22 Q And the CDC and the AAP rely on VAERS to make
23 their conclusion about safety for the
24 post-licensure period; correct?

1 A I doubt that that's the only thing, but yes.

2 Q What else do they rely upon?

3 A I -- I don't know. I've never asked them.

4 Q Are you aware of whether or not the AAP
5 receives funding from pharmaceutical companies
6 that sell vaccines?

7 A I don't know where they get their money other
8 than dues, so I don't know.

9 Q Do you know what ACIP is?

10 A Advisory Committee of Immunization Practices
11 at the CDC.

12 Q Okay. And what do they do?

13 A I think they do essentially the same as the
14 infectious disease committee at the AAP in that
15 they advise on immunization practices, as the name
16 suggests.

17 Q And they're the ones that develop the CDC's
18 recommended childhood schedule?

19 A My understanding is that they're the ones.

20 Q And would you assume that the individuals who
21 sit on the ACIP committee do not have conflicts of
22 interest with the pharmaceutical companies who
23 sell vaccines?

24 A I would assume that to be true.

1 Q Okay. Would you also assume that to be true
2 of the infectious disease committee at AAP?

3 A I would assume that to be true.

4 Q Okay. Would you be concerned if you learned
5 that individuals who sit on ACIP while voting to
6 add a vaccine to the CDC's recommended schedule
7 are receiving funding from pharmaceutical
8 companies that sell vaccines?

9 A I would be very surprised.

10 Q Because that would be an incredible conflict
11 of interest, wouldn't it?

12 A I would think so, yes.

13 MR. SANDERS: Object to the form of the
14 question.

15 Q (By Mr. Siri) And the same, I assume, would
16 be true of individuals sitting on the infectious
17 disease committee at AAP; correct?

18 A Correct.

19 Q You would be extremely surprised to learn
20 that any of them while voting on the AAP's --
21 that -- recommended vaccine schedule receive money
22 from pharmaceutical companies were otherwise
23 involved with pharmaceutical companies that sell
24 vaccines; correct?

1 A Correct.

2 Q Because that would be an incredible conflict
3 of interest; correct?

4 A Correct.

5 Q Are you familiar with what VRBPAC is?

6 A No.

7 Q Okay. Are you familiar -- are you aware that
8 there's a committee within the FDA that votes to
9 recommend whether or not to license -- whether or
10 not the FDA should license vaccines?

11 A Well, I assume they had some kind of
12 mechanism. I didn't know the name of it.

13 Q Would you find it very troubling if the
14 individuals who sat on that committee at the FDA
15 were voting on whether or not to recommend a
16 vaccine while they were either a consultant or
17 receiving funding from pharmaceutical companies
18 that sell vaccines?

19 MR. SANDERS: Object to the form of the
20 question. Go ahead, Doctor.

21 A In the same manner, I would be
22 extraordinarily surprised to find that out.

23 Q (By Mr. Siri) And if that were true, you
24 would be -- you would find that very concerning;

1 correct?

2 A Correct.

3 Q What is the Institute of Medicine?

4 A I only know that it exists. It doesn't
5 involve pediatrics, so I don't know much about it.

6 Q Are you aware of any reports issued by the
7 Institute of Medicine with regards to vaccines or
8 vaccine safety?

9 A No.

10 Q Can you tell me, what are the contrary --
11 well, can you tell me during the period 2000 to
12 2001, what are the contraindications of receiving
13 one or more childhood vaccines?

14 A The first one would be if they've had an
15 immediate anaphylactic allergic reaction to a
16 previous dose of that vaccine.

17 Q Okay.

18 A And there's some others, and I'm probably
19 going to omit some because I'm sitting here
20 without notes, but, for example, you wouldn't give
21 a live virus vaccine to a child who is currently
22 on chemotherapy for leukemia, and you can just --
23 and there's a bunch of examples like that. I
24 think there's an issue with ITP and the MMR,

1 previous intussusception in rotavirus, those are a
2 few examples.

3 Q Any others that you can recall?

4 A I probably would remember it if I was looking
5 at the -- at -- at the book, but right this
6 minute --

7 Q Uh-huh. Yeah. It's been a -- it's been a
8 few years since you've been practicing.

9 A It has.

10 Q When you were practicing, did you know all
11 the contraindications and precautions to
12 vaccination by heart?

13 A Probably not by heart.

14 Q Okay. So you would -- if you thought that
15 one might exist, you would refer to the CDC
16 contraindication and precaution list?

17 A If I thought that I had a patient that needed
18 to be vaccinated and they might have a
19 contraindication, I would go to the Red Book and
20 look it up, and if it said that, then I would act
21 accordingly, which is, of course, not to
22 vaccinate.

23 Q Okay. So if the Red Book provided that in a
24 certain situation you shouldn't vaccinate, you

1 would not have vaccinated the child; correct?

2 A Correct.

3 Q That would be the applicable standard of
4 care; correct?

5 A Correct.

6 Q Do you consider yourself -- strike that. Do
7 you have any training in the area of vaccinology?

8 A No.

9 Q Okay. Do you consider yourself an expert in
10 any regard with regards to vaccinology?

11 A No.

12 Q Okay. Do you have any training with regards
13 to mitochondrial disorder?

14 A No.

15 Q Do you consider yourself an expert in any
16 regard with regard to mitochondrial disorders?

17 A No.

18 Q Do you -- do you conduct any -- have you
19 conducted any science or been involved in
20 researching the causes of autism?

21 A Personally, no.

22 Q Have you been involved in any research with
23 regards to the causes of autism?

24 A No.

1 Q Okay. Have you been involved in any studies
2 regarding vaccines and autism?

3 A No.

4 Q Are you familiar with the underlying
5 pathological differences between children with
6 autism and children who are considered
7 neurotypical?

8 A You mean like brain biopsy?

9 Q I --

10 A No.

11 Q Like -- like difference in, for example,
12 autoantibodies that might be in their blood.

13 A I don't know any reason that they would have
14 autoantibodies in their blood. I haven't been
15 involved in any research about that.

16 Q Have you ever read any articles about that?

17 A No.

18 Q Okay. Are you familiar with any literature
19 that describes differences in underlying
20 physiology of children with autism versus those
21 who are neurotypical?

22 A Over the years, yes, I've seen some things.

23 Q Okay. And what differences have you read in
24 the literature are there physiologically that have

1 been found between children with autism and those
2 that are neurotypical?

3 A I don't remember any that have been
4 completely verified by the scientific community.
5 That is to say there may be some disagreement
6 amongst people.

7 Q Is it -- okay. So give me -- can you please
8 provide me just one example of a physiological
9 difference that some studies say exist between
10 neurotypical and children with autism that you say
11 are not -- for which there isn't agreement in the
12 medical community?

13 A I'm struggling a little bit with what you
14 mean by physiologic difference.

15 Q I mean --

16 A I mean --

17 Q I'm with you.

18 A Their heart beats the same, their lungs are
19 the same, et cetera, et cetera. So I'm not sure
20 exactly what you're referring to. Obviously the
21 gigantic problem with the autistic children is not
22 so much their physiology as it is their behaviors,
23 social interactions, learning, et cetera.

24 Q All right. Sure. There's some kind of

1 neurological pathology that results in autistic
2 children being different than neurotypical
3 children; correct?

4 A Clearly something is going on and it's
5 obviously in the brain.

6 Q And so there is some neurological pathology
7 that would result in a child being autistic;
8 correct?

9 A Just to -- so I'm clear and that I understand
10 what you say, when you say pathology, my thought
11 is that if you did a biopsy and you looked at it
12 under the microscope, you would see some
13 difference in the same way that cancerous lung
14 tissue looks different under the microscope than
15 normal lung tissue, and I don't know that I know
16 where the -- where at autopsy the brains appear
17 different so that likely this is on a cellular or
18 intracellular level instead of gross pathology.

19 Q The controversy -- strike that. Okay. Now,
20 you indicated that your first -- strike that. The
21 first, you know, argument that you put forth for
22 why vaccines are safe is that looking at the
23 overall health of children over time given the
24 vaccines that they had received; correct?

1 A I hope I expressed myself correctly. I think
2 it's the overall safety record that makes it seem
3 safe.

4 Q Uh-huh.

5 A Whether the child is generally healthy or not
6 may or may not be related to vaccines, but it
7 would likely mean that they won't get the diseases
8 that the vaccines are designed to prevent.

9 Q In 1985, how many were vaccine -- how many
10 vaccines were on the CDC childhood schedule?

11 A I don't know the number, and we used the AAP
12 vaccine schedule.

13 Q Okay. And which vaccines were on the AAP
14 schedule in 1985?

15 A It's highly likely that they were exactly the
16 same as the ones on the CDC's because I think
17 those organizations try to correlate well with
18 each other so as to not create a lot of confusion.

19 Q Right. The --

20 A And I --

21 Q Please.

22 A I can't tell you in '85 what the list was.

23 Q And AAP has a non-voting committee at ACIP;
24 correct?

1 A I don't know.

2 Q Okay. Does it sound right that in '85, the
3 recommended schedule included OPV, MMR, and DTP?

4 A That sounds right.

5 Q Okay. Can you recall maybe -- are there any
6 other vaccines that were licensed and recommended
7 at that point that you can potentially recall?

8 A This is 1985; correct?

9 Q Yeah.

10 A We didn't have rotavirus, we didn't have HPV,
11 we didn't have chicken pox, we -- we -- I can't
12 remember when we switched to -- from DTwP to DTaP.
13 That is the whole cell versus the acellular. I
14 don't think we had hepatitis A or B.

15 Q All right.

16 A But to pin it down to a specific year, and I
17 had no reason to try to remember it, I --

18 Q No, and I -- and there wasn't haemophilus
19 influenza vaccine yet; right? There was no Hib
20 vaccine yet?

21 A I think that's correct, yes.

22 Q All right. And so all those other vaccines
23 we -- you just mentioned, those all for the most
24 part came out -- were added to the AAP and the CDC

1 schedule in the '90s; correct?

2 A I don't know the year, but correct, later.

3 Q As well as others that we didn't list; right?

4 A Yes.

5 Q Okay. And pretty much all of them -- do you
6 recall any vaccine that was added to the schedule
7 after the year 2000? It's okay if you don't
8 recall.

9 A It seems like HPV was added after that.
10 Rotavirus was probably after that, but as far
11 as -- I could be overlooking something.

12 Q Yeah. Well, you're not incorrect. The first
13 rotavirus, right, was RotaShield in the '90s, but
14 then it was taken off, but the other rotavirus
15 vaccine -- strike that. So -- okay. Now,
16 according to the CDC, do you know what the
17 chronic -- what percent of children in the
18 United States were considered to have a chronic
19 health condition in the mid '80s?

20 A No.

21 Q Would it surprise you if it's 12 -- that it's
22 been published that 12 percent of children had a
23 chronic health condition in the mid '80s?

24 A I don't know if it would surprise me.

1 Q Are you aware that the most recent data
2 provides that chronic health conditions among
3 children are now somewhere between 40 to
4 50 percent depending on, you know, whether you're
5 looking at the CDC or some other major health
6 authority's statistics?

7 A Seems a little high. It depends on -- it
8 depends a lot on what they decide to include as a
9 chronic health condition.

10 Q Sure. You've got to compare apples to
11 apples; right?

12 A Right.

13 Q You've got --

14 A You know --

15 Q Please.

16 A Oh, I was going to say, you know --

17 Q You have --

18 A -- you have --

19 Q You have the same conditions and they -- and
20 have 12 percent configuration as you do in the
21 later figure; right?

22 A Yeah, and no additional ones, so right.

23 Q Of course. But assuming that they are
24 looking at the same health conditions, do you find

1 it surprising that there has been a three-fold
2 increase, at least, among chronic health condition
3 among children from the mid '80s --

4 A Yes.

5 Q -- until -- okay. Let's just assume that
6 that is the case, and we can go through the
7 studies in a bit. Do you think it's possible that
8 vaccines have been a contributor to that increase
9 in what are mostly immune and neurological
10 disorders that have increased precipitously during
11 that time period?

12 A No.

13 Q Okay. And how would you know that?

14 A This kind of information is not something
15 that one general pediatrician is going to spend
16 his time studying and investigating, so you have
17 to depend on some other source, and I -- and --
18 for example, we keep referring to the C -- to the
19 American Academy of Pediatrics, and for
20 pediatricians, that's going to be the prime
21 source. And so we depend on them to discover
22 those things and tell us about them, but --
23 certainly in my practice, I didn't see any
24 indication that that would be the case.

1 Q Right. Well, isn't it true that most -- many
2 neurological disorders and autoimmune disorders
3 would not be diagnosed until a child is at least a
4 few years old; correct?

5 A No. That applies to autism, but not
6 necessarily anything else. We see a lot of
7 neurologic conditions in the newborn nursery and
8 some others have a later onset.

9 Q What about asthma, what's the average age for
10 diagnosing asthma?

11 A Asthma is a tough one because of the way
12 babies under 12 to 15 months respond in their
13 pulmonary system, and it's also some overlap with
14 respiratory syncytial virus infections, which is
15 referred to as bronchiolitis, and so many of those
16 that -- are going to have some reactive airway in
17 the first year or so of life, but not have it
18 later, have that reactive airway disease because
19 of a viral infection they had early on,
20 specifically RSV.

21 Q All right. But --

22 A Ones that have true asthma usually are 15 --
23 12 to 15 months or older where they have asthma
24 and it's going to continue to be a problem, and

1 yet there's another subset who have other allergic
2 manifestations early on, like, eczema and then
3 later will develop asthma.

4 Q Well, learning disabilities, for example,
5 those aren't diagnosed until typically when
6 children start school; correct?

7 A Some of them are earlier than that, and it
8 depends on the learning disability, but -- but
9 yes, it's hard to diagnose until they start
10 learning.

11 Q Right. Aren't there many conditions that
12 require having some -- you know, the individual
13 you're trying to diagnose and -- needs to be able
14 to speak and explain their neurological reactions,
15 symptoms that they're having?

16 A I'm not sure I understand what you're asking.

17 Q All right.

18 A Children --

19 Q Well --

20 A -- that are small --

21 Q Go ahead. I don't want to interrupt you.
22 Were you going to say something? I'm sorry.

23 A Well, I was going to say, small children
24 aren't the ones that come to us saying what they

1 have. It's the parents that come to us and say.

2 Q All right. And so, you know, a typical 2, 4,
3 6-month-old baby's primary way of expressing
4 themselves is through crying; correct?

5 A No.

6 Q Okay. Tell me.

7 A Well, they may cry, and they do, but the
8 primary way is the way they interact, and this is
9 with the parents, of course, in a social way, so
10 2 months old start smiling and they start -- you
11 know, get them a little older than that and they
12 can start rolling over and they'll reach for
13 things and they'll interact with the mother or the
14 father's face because they recognize it, and they
15 smile and laugh and coo and talk, and you know
16 what I mean by talk, it's not -- baby talk.

17 Q Right.

18 A Not -- not language. And so it's their --
19 the development of their social interaction that
20 they express themselves, and they might cry,
21 certainly if they had an earache they might cry,
22 or if they got their -- just got their
23 vaccinations they might cry or if they were
24 injured or hurt in some way or if they were sick,

1 but -- but the primary important way is the social
2 interaction.

3 Q To determine whether or not getting all of
4 these pharmaceutical products during the first
5 year of life does have an impact long term on the
6 chronic rates of, for example, one in six kids
7 having asthma today and -- and the other neuro --
8 and the neurological disorders that have also gone
9 up -- it's like -- what line of study do you think
10 would need to be conducted to determine whether
11 vaccines cause -- are causing those increases in
12 autoimmune and neurological disorders?

13 A I don't know.

14 Q Do you think that the study that would be
15 necessary would be what science typically does is
16 you compare an exposed group to an unexposed group
17 when evaluating whether a product or a substance
18 causes something?

19 A If one were to decide to undertake that, that
20 would be one way.

21 Q Well, isn't it true that there are large
22 health databases that already exist, for example,
23 insurance companies or HMOs that have lots of
24 children who are completely unvaccinated, for

1 example?

2 A The immunization rates are pretty good, so I
3 don't think they have lots.

4 Q Okay. Are you aware that according to the
5 most recent CDC data, 1.3 percent of all
6 2-year-olds are completely unimmunized in the
7 United States?

8 A I could believe that. I don't know that -- I
9 don't know that data, but I could believe that.

10 Q So if 1.3 percent of all 2-year-olds are
11 completely unvaccinated, wouldn't that amount to a
12 significant number of children in the
13 United States who are completely unvaccinated?

14 A Well, since the population is large, that
15 makes for a large number.

16 Q So wouldn't you expect that our health
17 authorities would compare the health outcomes
18 between those children who have never received any
19 vaccines and those who have received vaccines to
20 see what the difference is?

21 A I wouldn't necessarily expect them to do
22 that. There may be someone who decides they want
23 to do that.

24 Q And why not? Why would you not expect them

1 to conduct that basic study that's done to
2 confirm, you know, scientifically whether any
3 product causes an issue?

4 A The -- if we're talking about should we study
5 the number of vaccines given to vaccinated people
6 and the ones that are unvaccinated and the
7 hypothesis is that the number of antigens
8 presented to the child is somehow injurious,
9 then -- then I don't think we need that study.
10 The number of antigens people process is in the
11 hundreds of thousands, if not millions, and so the
12 number of antigens in the immunizations in the --
13 from birth to kindergarten pales in comparison to
14 that number and the immune system handles it with
15 no problem, so I don't see any reason to even
16 wonder about that.

17 Q All right. So do vaccines only contain
18 antigens in their formulation?

19 A No. You have to have something that you can
20 pull up into the syringe.

21 Q Okay.

22 A So there's undoubtedly water and other things
23 in there.

24 Q So, for example, if all you did was inject

1 pertussis -- the antigens in the pertussis vaccine
2 with nothing else, just the antigens, what do you
3 think would happen? Do you think that the body
4 would generate an immune response to those
5 antigens to those pieces of protein particles?

6 A I think they likely would. I don't think
7 it's possible to do that, but I think in a
8 hypothetical situation of if it was possible and
9 you did that, I think your immune system would
10 respond.

11 Q So you think that if it was just saline and
12 just -- do you know how many antigens are in the
13 DTaP vaccine?

14 A Well, other than what's obvious, that -- I'm
15 not sure there's any other antigens. I know
16 there's other things. They have to put some kind
17 of -- and they may have an adjuvant or a -- or a
18 preservative, and I don't know what's in there, so
19 I don't know.

20 Q Okay. But --

21 A But as far as protein antigens, I don't think
22 there's, you know, cow's milk in there or anything
23 else like that. I mean, what else would they put
24 in there?

1 Q You don't think there's any casein in any
2 vaccine's final formulation, you're saying?

3 A Not -- I don't know. I would be surprised to
4 find that out, but --

5 Q Right, because you would sensitize the child
6 to casein; right?

7 A Yeah, I can't believe it would be in there.

8 Q All right. And they would develop antibodies
9 to casein, so you --

10 A Sure.

11 Q -- remove --

12 A You're immunizing against that, so -- so --
13 but as far as me being an expert in the chemistry
14 of putting together the vaccine in the vial, I
15 don't know that.

16 Q All right. So just -- all right. So I
17 mean -- right. The viruses and bacteria used in
18 vaccines have to be grown in some substrate;
19 correct?

20 A Sure. They have to develop it somewhere.
21 There's a -- yes.

22 Q And that substrate would be removed from the
23 final formulation to avoid the body developing
24 antibodies to those additional biological

1 material; correct?

2 A My supposition would be that the production
3 activity involved in making these vaccines is such
4 that they eliminate as much as they can that they
5 don't want and make sure they have in there what
6 they do want.

7 Q So, for example, if the rubella component of
8 the MMR vaccine were grown on the culture cells
9 strained of aborted fetal tissue, they would
10 remove all human cellular components from the
11 final formulation so that antibodies aren't going
12 to develop to human components that might be in
13 the vaccine, even protein particles that might be
14 in the vaccine; correct?

15 A Well, I don't know what they grow rubella on,
16 or any of the others for that matter, and I have
17 to suppose without knowing because I don't -- I'm
18 not involved with the production process, that
19 they make it as clean and -- and good and safe,
20 et cetera, that -- as they can, so in some kind of
21 a vague way, yeah, I'm sure they try to --

22 Q Would --

23 A -- get rid of what they don't want in there.

24 Q And would you be concerned if, I don't know,

1 for example, there were millions of pieces of
2 human DNA in each dose of MMR that's injected into
3 babies?

4 MR. SANDERS: Object to the form. You
5 can answer, Doctor, if you have an answer.

6 A I have no knowledge of there being human DNA
7 in the MMR vaccine.

8 Q (By Mr. Siri) But if there were, would you
9 be concerned?

10 MR. SANDERS: Same objection. Go ahead,
11 Doctor.

12 A Well, in a -- in an if world, I guess you
13 could have some stuff in there that doesn't sound
14 very appropriate.

15 Q (By Mr. Siri) Would you be concerned,
16 Doctor?

17 A That sounds like it could be a concern if it
18 was true.

19 Q It sounds like something that -- floating
20 around the Internet is -- one of those pieces of
21 propaganda about vaccines that floats around the
22 Internet; correct?

23 A That's what it sounds like.

24 Q Now, the other -- the other thing that could

1 float around the Internet as propaganda is that
2 the vaccines are not safety tested for more than a
3 few days or even a month, you know, not longer
4 than a month before they're a licensed -- you
5 know, that the amount of safety review after
6 inoculation is only for a few weeks in the
7 pre-clinical trials of a lot of licensed vaccines.
8 Have you seen that floated around?

9 A I don't believe I've ever looked at any
10 anti-vaccine propaganda on the Internet, so
11 therefore, I would not have seen that floating
12 around.

13 Q Are there any other -- are there any other
14 false claims about vaccines that you've heard over
15 the years that you, you know, know to be false?

16 A I mean, the answer is yes. I'm just trying
17 to decide which one to say.

18 Q Okay. All right.

19 A I think the most glaring one is the one that
20 concerns this case, that it's alleged that MMR
21 vaccine causes autism, and I think that's false.

22 Q The allegation in this case, Doctor, is that
23 the vaccines that Yates received caused autism,
24 right, not just the MMR; correct?

1 A I think they've tried to pin it on a couple
2 of things. There was the thimerosal issue and
3 pinning it on that, but to my knowledge, the main
4 thing is the MMR vaccine is alleged to cause
5 autism.

6 Q But in this case, the allegation is that the
7 vaccines, which included, as we looked at in his
8 vaccine chart, numerous vaccines cause autism,
9 correct, caused Yates' autism.

10 A If -- if that's the allegation this lawsuit
11 is making, then I accept for whatever you say it
12 is. If that's what you're saying, then yes.

13 Q Because he didn't just receive MMR, right,
14 on -- on February 8, 2001. He received on that
15 date three other vaccines as well; correct?

16 A Correct.

17 Q He received the Prevnar vaccine on that day?

18 A Correct.

19 Q Okay. A Hib vaccine?

20 A I don't have it in front of me, but I trust
21 you're saying what you -- you're reading it right
22 from the thing, so --

23 Q Okay.

24 A I'd have to look at it to know.

1 Q Okay.

2 A But assuming you're reading it right off the
3 sheet, yes.

4 Q Okay. And a HepB vaccine; correct?

5 A Yes.

6 Q All right. So those are just the other three
7 he received on the date that he got MMR; correct?

8 A Correct.

9 Q Okay. And he -- and Yates also received
10 vaccinations at 2, 4, and 6 months of age;
11 correct?

12 A Correct.

13 Q Okay. And those were a number of vaccines
14 none of which were MMR; right?

15 A Correct.

16 Q Okay. How did you reach your conclusion
17 that -- now, when you say the MMR vaccine doesn't
18 cause autism, I assume that you're relying upon
19 what to say -- well, I shouldn't assume. What are
20 you relying upon to say that?

21 A Over the years of being exposed to this issue
22 as is discussed in the literature, the
23 organizations that we look to for advice, and
24 again, the American Academy of Pediatrics have

1 noted that there's multiple studies that have all
2 concluded that there's no relationship between the
3 two, and these have been multiple and from
4 different countries as well.

5 Q Well --

6 A So we trust what they're saying, not to
7 mention there's -- you know, anything that we
8 would have seen ourselves in practice would simply
9 be anecdotal and therefore not valid, but that
10 said, we've never seen it.

11 Q All right. You've never seen what, Doctor?

12 A Oh, I'm sorry, a case where we thought that
13 MMR resulted in autism or any of the other
14 vaccines.

15 Q All right.

16 A But again, that's anecdotal data and it
17 really doesn't figure in to -- even though it
18 would be supporting these other studies, it can't
19 be used, but the other studies have been peer
20 reviewed and published and it allows the
21 scientific community to come to a consensus that
22 there's no relationship.

23 Q And that's how science is conducted, studies,
24 well-designed studies are conducted and then

1 published in peer-reviewed literature?

2 A I believe that describes it, yes.

3 Q And then based on those peer-reviewed

4 studies, the medical community draws conclusions

5 regarding whether something is or isn't causally

6 related to a product; correct?

7 A Correct.

8 Q Okay. In the absence of studies though, I

9 assume the medical community would not draw a

10 conclusion one way or another of whether a product

11 caused an issue; correct?

12 A Well, not necessarily. It depends on what's

13 out alleged caused what, because if it doesn't

14 seem rational to begin with, then they may not be

15 interested in conducting that study. You know, a

16 certain example might be somebody that claimed

17 introducing carrots into the baby's diet before

18 6 months of age causes dyslexia, but there's no

19 reason to study that.

20 Q Is there anybody claiming that introducing

21 carrots into the baby --

22 A No.

23 Q I --

24 A I'm sorry, I didn't mean to interrupt you.

1 No.

2 Q But there are -- but 40 to 50 percent of
3 parents whose children have autism do claim that
4 vaccines, not just MMR vaccines, based on their
5 experience with their children, that vaccines were
6 a causal factor in causing their child's autism.
7 Isn't that true?

8 A That's what they believe, but as far as the
9 science goes, that's anecdotal data and it's not
10 useful to draw scientific conclusions.

11 Q All right. So similarly, you know, when --
12 based on just observation, you're saying -- of
13 children is anecdotal. What you need is a
14 well-designed study; correct?

15 A Yes.

16 Q And what those parents should do is go and
17 look at the science to see has there been a study
18 conducted that shows that vaccines do not cause
19 autism; correct?

20 A That would be a reasonable thing for them to
21 do, yes.

22 Q And they would want to see, presumably they
23 would be able to find studies that show that
24 vaccines do not cause autism?

1 A I think they could very easily find that.

2 Q Have you ever seen a study that showed that
3 vaccines, not just MMR, do not cause autism?

4 A Yes.

5 Q Okay. What's the name of the study?

6 A I don't know.

7 Q When did you see the study approximately?

8 A They've come out over time, and I couldn't
9 tell you because I practiced for 37 years, and if
10 I picked up a journal and there was an article and
11 I say here's another one that shows there's no
12 relationship, I would make no attempt to try to
13 memorize the date of that article, the page
14 number, the name of that article, and so I just
15 don't know. I think it's something that could be
16 obtained, but I can't tell you that off the top of
17 my head.

18 Q But do you -- do you have an approximate
19 sense, three years ago, five years ago, ten years
20 ago?

21 A Well, all of the above multiple times.

22 Q Oh, okay. Involving vaccines other than MMR?

23 A I think most of the attention has been placed
24 on MMR.

1 Q Okay. For example, have you ever seen a
2 study that showed that DTaP doesn't cause autism?

3 A No, but I hadn't really seen any scientific
4 data that would claim that it does. It's not
5 mentioned anywhere. Now, you know, if -- if you
6 are speaking to a group of anti-vaxxers, then you
7 may hear that, but if you're listening to the
8 American Academy of Pediatrics, the CDC, or
9 anything like that, I mean, you'll never hear that
10 allegation.

11 Q How about parents of autistic children, do
12 their -- does their opinion count or are they just
13 lumped in with the anti-vaxxers too?

14 MR. SANDERS: Object to the form of the
15 question. Go ahead, Doctor.

16 A Can you repeat that?

17 Q (By Mr. Siri) Sure. What about the --

18 A I'm -- I want to make sure I understood.

19 Q What about the opinion of parents whose
20 children have autism? Do their opinions count?

21 A Their opinions count in the sense that
22 they're parents of a child with a serious
23 disability and your heart goes out to them, but
24 their opinion doesn't count in terms of some

1 controlled scientific study to show vaccines do
2 this, that, or the other.

3 Q Okay. So they should look at -- they should
4 look at the science, you're saying?

5 A They should look at the science. It's fine
6 to listen to the parents, and I think it's
7 appropriate, and I mentioned that I have a friend
8 who has a child that's been damaged by a vaccine,
9 and I know he spoke out, and he should have been
10 listened to, and he was, but he didn't have the
11 science. He had the emotions of a father.

12 Q Are you aware of any injury from a vaccine
13 that doesn't occur in let's say the 30 days after
14 vaccination that has been carefully studied?

15 A No.

16 Q Okay. Up -- to assess whether it's caused by
17 the vaccine. Is that what you were going to say
18 no to?

19 A Yes. I thought you were finished with the
20 question.

21 Q No problem. Because the assumption is, is
22 that if there's going to be an adverse effect from
23 a vaccine, it would happen relatively quickly;
24 correct?

1 A Yes.

2 Q Okay. Now, when you say anti-vaxxers, can
3 you define what that means?

4 A Well, my understanding is it's the --
5 anti-vaxxers are people who are just what it says,
6 they're against vaccinations.

7 Q Okay. Is it socially unacceptable to be an
8 anti-vaxxer?

9 MR. SANDERS: Object to the form of the
10 question. You can answer, Doctor, if you have an
11 answer.

12 A I don't know that it's socially unacceptable.

13 Q (By Mr. Siri) Do you think that most
14 anti-vaxxers are looked up to or down to by an
15 average person in society?

16 MR. SANDERS: Same objection. Go ahead,
17 Doctor, if you have an answer.

18 A I think the average person in society might
19 think that they are incorrect. Now, looking down
20 on them is a -- is a different kind of
21 interaction.

22 Q (By Mr. Siri) Do you think that there's a
23 whole lot to gain for the parents who choose not
24 to vaccinate their child?

1 A I don't think there's anything to be gained
2 by not vaccinating their child.

3 Q I mean, their child could potentially be
4 kicked out of school; correct?

5 A Well, that's one problem.

6 Q Some parents might choose to not have their
7 children interact with -- play dates, for example,
8 with their children; correct?

9 A That's correct.

10 Q Some doctors might even -- might kick them
11 out of their pediatric practice; correct?

12 A There are doctors that do that.

13 Q Okay. So, you know, and -- and it could, you
14 know -- some folks might socially ostracize a
15 family that chooses not to vaccinate; correct?

16 A Some people would do that.

17 Q Okay. So there's a lot of downsides to not
18 vaccinating; right?

19 A I would think so.

20 Q It must take a powerful personal experience
21 or similar for parents to choose to not vaccinate
22 then, don't you think?

23 A How powerful it is, you'd have to ask them,
24 but it's -- it's a significant decision.

1 Q Probably one that they don't make -- that
2 most folks wouldn't make lightly, I would assume?

3 A I assume they don't make that lightly.

4 Q There's been a lot of discussion, probably
5 can't -- couldn't miss it, about folks who are
6 labeled anti-vaxxers spreading what they call
7 vaccine misinformation. Have you seen all of the
8 scuttlebutt around that?

9 A I've seen some scuttlebutt around that.

10 Q Yeah. Do you believe that vaccine -- do you
11 believe that information about vaccines that's
12 incorrect is dangerous?

13 A Yes.

14 Q And so if one were to share information about
15 a vaccine, it's really to make sure it's accurate;
16 correct?

17 A That sounds like it should be correct, yes.

18 Q And if information is not correct, that
19 person is spreading misinformation about vaccines;
20 right?

21 A Correct.

22 Q The kind of thing that basically folks are
23 saying anti-vaxxers are doing; correct?

24 A Correct.

1 Q All right. Let's go over some of the things
2 that you've told -- told me about vaccines,
3 Doctor. Now, you're familiar with the CDC Pink
4 Book?

5 A No.

6 Q No?

7 A No.

8 Q Okay. Are you aware that the CDC publishes
9 the ingredients of each vaccine?

10 A I'm not surprised.

11 Q Okay. Let me show you something.

12 MR. SIRI: Okay. I'm going to mark this
13 as Plaintiff's 2.

14 (Whereupon, Exhibit No. 2
15 was marked to the
16 testimony of the
17 witness.)

18 Q (By Mr. Siri) Have you ever seen this
19 document before, Dr. Stepp?

20 A No.

21 Q Are you familiar with the Centers for Disease
22 Control and Prevention?

23 A Yes.

24 Q Okay. And have you ever heard of the

1 Epidemiological and Prevention of
2 Vaccine-Preventable Diseases book that they
3 published and they're in the 13th edition?

4 A No.

5 Q Okay. So you're not aware that it's
6 available on the CDC website?

7 A I've been to the CDC website. I have not
8 seen that, but I have not looked for it.

9 Q So this is one of the nice things about Zoom.
10 We can -- I can just pull it up. Pull it up.
11 I've never been able to do this before in a
12 deposition, but here it is. This is the Centers
13 for Disease Control; correct?

14 A Correct.

15 Q This is the Pink Book, this is the -- you
16 know, the colloquial term for their Epidemiology
17 and Prevention of Vaccine-Preventable Diseases
18 handbook, they're in the 13th edition right now,
19 as you can see here, and it provides a lot of
20 information about vaccines. In any event, let's
21 put this away. So if we go down, for example,
22 to -- let's just take a look at the varicella
23 VARIVAX vaccine. That's the vaccine for chicken
24 pox; correct?

- 1 A Correct.
- 2 Q Okay. Can you read the first ingredient,
3 please?
- 4 A MRC-5 human diploid cells.
- 5 Q Including?
- 6 A Oh, sorry. Including DNA and protein.
- 7 Q Okay. Do you know what MRC-5 human diploid
8 cells are?
- 9 A I know in a very basic way what they are.
- 10 Q And what are they?
- 11 A They're human cells that have been propagated
12 to grow -- to serve as a medium in which to grow
13 the virus.
- 14 Q Okay. And the virus -- when you say the
15 virus, you mean the virus used in the vaccine;
16 correct?
- 17 A The vaccine virus, yes.
- 18 Q All right. And in this case, it would be the
19 chicken pox virus; correct?
- 20 A Correct.
- 21 Q Otherwise known as varicella.
- 22 A Correct.
- 23 Q Okay. So they grow chicken pox virus inside
24 of these human diploid cells; correct?

1 A Correct.

2 Q Okay. And where did the MRC-5 human diploid
3 cells originate?

4 A I don't know.

5 Q Okay. Are you aware that it originated from
6 the lung fibroblasts of an aborted fetus, human
7 fetus?

8 A No. Is that where they came from?

9 Q Usually depositions are one way.

10 A Sorry.

11 Q But you can certainly -- the answer is yes,
12 but I'm not testifying here today. You can look
13 that up after the deposition.

14 A Well, thank you. Thank you.

15 Q Now, the MRC-5 human diploid cells, they're
16 cells -- all right. They're cell strains, all
17 right, because -- first they're -- strike that.
18 Now, okay, but you are aware that they're human
19 cells. Now, when you grow a virus in a cell, a
20 human cell, when you're -- one of them -- isn't it
21 true that it's incredibly expensive to -- if you
22 were going to try to isolate just the virus from
23 the human cell and only have that in the final
24 formulation?

- 1 A I don't know.
- 2 Q Okay.
- 3 A I don't do that. I would guess it might be.
- 4 Q Okay. Well, but it is true that at the end
5 of the -- the end product for varicella, its first
6 listed ingredient is the human diploid cells,
7 including the DNA and protein from those cells;
8 correct?
- 9 A Correct.
- 10 Q Okay. And that DNA is human DNA; correct?
- 11 A Yes.
- 12 Q Are you aware that it's purposefully
13 fragmented down to below 500 base pairs per piece?
- 14 A No.
- 15 Q Do you have any knowledge of what snippets of
16 DNA below 500 base pair, what their ability to
17 insert into human DNA is?
- 18 A No.
- 19 Q And, of course, human protein structures that
20 are in the vaccine that then get injected could
21 potentially be taken up by macrophages; correct?
- 22 A I suppose.
- 23 Q I mean, what else would happen to that --
24 protein structures into the vaccine -- in the

1 vaccine that are injected, which is --

2 A They could just be degraded in some way and
3 eliminated.

4 Q Well, the -- the -- those DNA and protein
5 structures are -- all right, they're -- they --
6 the virus has been growing in them; correct?

7 A Okay, yes.

8 Q Okay. So when they're injected -- when the
9 viral material is injected, along with the human
10 protein and DNA material, and the viral material
11 is replicating, right, because it's an attenuated
12 vaccine; correct?

13 A Correct. It's a live attenuated vaccine.

14 Q What you're saying is you're not -- you don't
15 know what happens then to the human cellular
16 material that's in the vaccine?

17 A No, and I don't know how much is in there.

18 Q Well, isn't it true that most of the vaccine
19 is actually the human diploid cellular material
20 protein and DNA because it is -- cells are massive
21 and giant compared to tiny viruses?

22 A They're very large compared to the virus,
23 yes.

24 Q And hence -- well, do you think there's a

1 reason it's the first listed ingredient?

2 A There might be. I don't know.

3 Q Now, you mentioned earlier, for example, that
4 you'd be concerned if there were, let's say, you
5 know, cow's milk in there. Well, what about if
6 there were cow's blood in the -- portions of cow
7 blood in the final formulation of the vaccine?
8 Would that be concerning to you?

9 A It says fetal bovine serum, and serum is only
10 a portion of the blood.

11 Q That's right.

12 A But I know nothing of the chemistry involved
13 in making these vaccines. Somebody does, and
14 somebody that does that feels the need to use that
15 in some way to produce the vaccine, and the
16 mechanism by which they produce it is not
17 something I know anything about.

18 Q Let's look specifically at casein. Do you
19 see here that Infanrix and Kinrix, in fact, in the
20 final formulation include bovine casein?

21 A I see that.

22 Q And these are adjuvant in vaccines; correct?

23 A I don't know.

24 Q Do you see here in the ingredients where it

1 says aluminum hydroxide for Infanrix?

2 A Yes.

3 Q Okay. And it says aluminum hydroxide for
4 Kinrix?

5 A Yes.

6 Q Do you have any reason to doubt that they
7 don't contain aluminum hydroxide?

8 A No.

9 Q Okay. And aluminum hydroxide is the adjuvant
10 that you were referring to earlier; correct?

11 A That's correct.

12 Q Aluminum hydroxide is the -- the antigen in
13 the vaccines that bind to those aluminum
14 particles; correct?

15 A At a basic level, that would be my
16 understanding.

17 Q Because this way they're able to actually
18 sustain an immune response if the aluminum is not
19 biodegradable; correct?

20 A Yes. My understanding is they enhance the
21 immune response.

22 Q So if the aluminum adjuvant also -- is there
23 any reason that it can't bind to casein, another
24 piece of protein biological substance in the

1 vaccine formulation?

2 A I don't know whether it would or whether it
3 would not.

4 Q Fair enough. Do you know what vero cells
5 are, for example?

6 A No.

7 Q You're not aware that they're monk --
8 irregular monkey kidney cells that have extra
9 chromosomes such that would replicate indefinitely
10 like a cancer cell?

11 A I -- I -- before seeing this, I'd never heard
12 of vero cells.

13 Q You're not familiar that that's how starting
14 in 1988 IPOL was produced?

15 A No.

16 Q Do you believe that your patients over the
17 last 30 years assumed that you were knowledgeable
18 regarding the ingredients in the various vaccines
19 that were being injected into their children?

20 A I assume that they knew that the MMR vaccine
21 contained measles, rubeola, and rubella, but I
22 don't think they assumed I knew whether there was
23 phenol red indicator or yeast extract or protamine
24 sulphate, et cetera, et cetera. I don't think

1 they assumed that. I didn't know about it and
2 they didn't know to ask me.

3 Q You were unaware that there was yeast in
4 certain vaccines' final formulation?

5 A I don't know the chemistry of vaccine
6 formulation.

7 Q Okay. Before today, were you aware that
8 there was yeast in certain vaccines' final
9 formulation?

10 A Not that I can remember.

11 Q Okay. Are you aware that there is a
12 precaution and contraindication for yeast
13 sensitivity for certain vaccines?

14 A I think that's part of the propaganda on the
15 Internet that we discussed earlier. I've never
16 seen an admonition against that come from our main
17 source, which is the AAP.

18 Q Okay. Sorry. Let me set here -- my screen
19 is not looking right. Dr. Steep -- Stepp, sorry.

20 MR. SIRI: I'm going to mark this as
21 Plaintiff's 5.

22 (Whereupon, Exhibit No. 5
23 was marked to the
24 testimony of the

1 witness.)

2 Q (By Mr. Siri) This is the CDC website;
3 correct?

4 A Correct.

5 Q And this is the ACIP's contraindication
6 precautions guide?

7 A Yes.

8 Q This is the contraindications and precautions
9 to commonly used vaccines; right?

10 A Yes.

11 Q This column over here is the
12 contraindications?

13 A Correct.

14 Q Okay. So let's scroll down. Do you see that
15 for hepatitis B, okay, that hypersensitivity to
16 yeast is a contraindication?

17 A Yes.

18 Q Okay. But you believe that claims that
19 hypersensitivity to yeast is a contraindication to
20 certain vaccines is one of those conspiracy
21 theories on the Internet?

22 A No.

23 Q That is what you just said a minute ago;
24 correct?

1 A We've gone back and forth. I don't remember
2 saying that.

3 Q Do you believe that the CDC is engaging in
4 conspiracy theories regarding vaccines?

5 A No.

6 Q Could it be that some of the information
7 that's viewed as conspiracy theories on the
8 Internet about vaccines are a fact, just factual
9 information about vaccines?

10 A I think if they were factual that the
11 scientific consensus would have taken that into
12 account already, and I have not seen that happen.

13 Q Okay. Let's -- let's move away from vaccine
14 ingredients. Let's talk about the clinical
15 trials, and let's take a -- now we're on -- now
16 we're -- in the tens of thousands of vaccines that
17 you've administered, you indicated that you are
18 aware that each box that a vaccine is administered
19 in contains a package insert; correct?

20 A That's correct.

21 Q It's basically one big sheet of paper; right?

22 A Correct.

23 Q Okay. And it's broken up into standardized
24 sections; correct?

1 A It's broken up into sections.

2 Q Okay. So that information can be easily
3 found in those package inserts; correct?

4 A If you read the package inserts, you will
5 have access to the information.

6 Q Okay. Fair enough. Now, are you aware what
7 Section 6 in pretty much every package insert
8 provides?

9 A No.

10 Q Okay. Are you aware that it provides the
11 adverse reaction profile for the vaccine?

12 A I -- I don't know since I'm not aware of
13 Section 6.

14 Q Fair enough. And that means you're also not
15 aware that Section 6.1 of probably pretty much all
16 the vaccines you've administered also required
17 under federal law to describe the clinical trial
18 experience that the vaccine was relied upon to
19 gain licensure; correct?

20 A I don't know that. I don't -- I believe you.
21 I don't know what it says.

22 MR. SIRI: So I'm going to mark this as
23 Plaintiff's --

24 MS. CHEN: Exhibit 6.

1 MR. SIRI: Thank you.

2 (Whereupon, Exhibit No. 6
3 was marked to the
4 testimony of the
5 witness.)

6 Q (By Mr. Siri) Dr. Stepp, what is this
7 document?

8 A I don't know.

9 Q I --

10 A Highlights of prescribing information.

11 Q This is the package insert for Engerix-B;
12 correct?

13 A Apparently so.

14 Q You've ordered the administration of
15 hepatitis B to newborn babies on the first day of
16 life; correct?

17 A Correct.

18 Q And you've done so many times; correct?

19 A Correct.

20 Q Okay. What are the hepatitis B products that
21 have been available to do that over the last 30
22 years?

23 A Engerix comes to mind since it's right in
24 front of me. There are other brands. Right this

1 second I can't think of the brand name.

2 Q Are you aware the only other brand is
3 Recombivax HB?

4 A Recombivax rings a bell, so yeah, there's
5 another one, but I don't -- if there's yet another
6 one, I don't know.

7 Q And did you ever once look at the package
8 insert for any of the vaccines that you
9 administered, you ordered administered in all the
10 years that you've been a pediatrician?

11 A I don't use the package insert as a source of
12 information, so if I want to read about that, I
13 would go to the Red Book and see what the AAP says
14 about it.

15 Q Okay. Well, we can take a look at that as
16 well. Well, do you see here Section 6 of the
17 package insert provides for adverse event --
18 excuse me, adverse events -- adverse reactions?

19 A Yes.

20 Q And 6.1 provides for clinical trials
21 experience that are relied upon to license the
22 vaccine?

23 A Yes.

24 Q Okay. Why don't we take a look down at

1 Section 6.1. Now, you can see that there's an
2 introduction that explains the clinical trial, and
3 then they go through the incidents that they
4 found, and they go to the post marketing. Can you
5 take a moment to just read this section from
6 Line 140 to Line 151?

7 A Sure.

8 (Whereupon, the witness
9 is reading the document.)

10 A There's something that's obscuring Lines 148
11 through 151 and I can't see them.

12 MR. RILEY: Mr. Siri, did you hear him?

13 MR. SANDERS: I think we'll have to wait
14 a minute. I think Mr. Siri got up from his desk.
15 He'll have to move his mouse. Mr. Siri, can you
16 move your mouse so that he can read those last
17 three lines?

18 MR. SIRI: Absolutely. Sorry about
19 that.

20 A Thank you.

21 (Whereupon, the witness
22 is reading the document.)

23 A Okay.

24 Q (By Mr. Siri) So here are the FDA approved

1 package insert that was written by the
2 manufacturer for Engerix-B describing the clinical
3 trial experience relied upon to license this
4 product. And how long did they review safety in
5 the clinical trial relied upon to license
6 Engerix-B?

7 A Four days.

8 Q All right. So that's not a conspiracy theory
9 either that the HepB vaccine, for example, was
10 only -- where the safety was only reviewed for
11 four days prior to being licensed; correct?

12 A That's correct.

13 Q Are you aware that the FDA also issues a
14 summary basis of approval for each vaccine that it
15 licenses?

16 A I believe that is correct.

17 Q And that would also describe the -- the
18 period that safety was reviewed; correct?

19 A Presumably so.

20 Q And there would also typically be a
21 peer-reviewed study that would be published
22 describing in more detail the clinical trial
23 relied upon for -- that was conducted for each
24 vaccine; correct?

1 A I don't know if that's correct or not. I
2 don't remember seeing vaccines come out from a
3 drug company and then some researcher somewhere
4 did that study for every time they did that. Now,
5 there's -- the -- the clinical trials involve a
6 study, but an -- but an unrelated study by
7 somebody else about that vaccine, every time that
8 it's approved, I -- I'm not aware that that always
9 happens.

10 Q What I meant is there's a principal
11 investigator typically for each clinical trial;
12 correct?

13 A That's correct.

14 Q And then there are individuals who actually
15 undertake the clinical trial, right, underneath
16 the principal investigator; correct?

17 A You don't mean --

18 Q Like, for instance --

19 A You mean the doctor.

20 Q The doctors, for example. For example --

21 A Yeah.

22 Q -- for some clinical trials, in fact, you
23 were -- for the Prevnar vaccine, you participated
24 in that clinical trial; correct?

1 A I did that myself, yes.

2 Q Right. You did that yourself. And, you
3 know, the -- and then there will be, you know,
4 some of the -- the -- there will be often a -- an
5 article written about the clinical trial
6 describing it in a bit more detail that will be
7 published in the peer-reviewed literature;
8 correct?

9 A I guess there could be.

10 Q Okay. You're just not aware?

11 A I'm just not aware of it. And with -- I'm
12 assuming that you're not talking about the drug
13 company themselves publishing an article in
14 Pediatrics, for example. I don't know that I've
15 seen articles written by drug companies in the
16 medical journals that I would see. I guess they
17 publish something.

18 Q Yeah, well, it's another opportunity to
19 publish, you know, a peer-reviewed study; right?
20 So, for example, here is a peer-reviewed study
21 that described that clinical trial that we just
22 looked at, right, for hepatitis B?

23 A Uh-huh, yes.

24 Q And -- and you can see here it confirms the

1 reactogenicity of the vaccine was assessed on the
2 day of vaccination for three days afterwards using
3 individual checklists completed either by the
4 vaccine or in the case of children by their
5 parents; correct?

6 A Correct.

7 Q I just wanted to ask you if you were aware
8 that -- you know, that the summary for basis of
9 approval from the FDA and the peer-reviewed study
10 also confirmed that, in fact, it only reviewed
11 safety for four days, but you've already
12 established you don't -- you're not aware of
13 either of those. Okay. So that's the first time
14 that you've ever learned that safety of this
15 product that you've been giving to newborns for
16 years was only -- had safety review for four days
17 prior to licensure; correct?

18 A From what you've shown me, that's what it
19 says, and so I don't have any reason to believe
20 anything else. I don't have any other data that
21 says anything different, so --

22 Q Okay. Well, if you're at all unsure, let's
23 take a look also at the summary for basis of
24 approval from the FDA. Okay. Have you ever seen

1 this document before?

2 A No.

3 Q Okay. And this is entitled Summary for Basis
4 for Approval -- of Approval; correct?

5 A Correct.

6 Q And this is for Engerix-B; correct?

7 A Correct.

8 Q Let's scroll down to the clinical studies.
9 Can you please read the yellow portion?

10 A Out loud?

11 Q Sure.

12 A Adverse reactions were solicited using a
13 symptom checklist by recording clinical signs and
14 symptoms reported by all of the vaccinees both
15 immediately post vaccination and for four days
16 thereafter.

17 Q And you now have this marked as an exhibit so
18 you'll have an opportunity to read the entire
19 thing, and you can see if it says anything else,
20 which it does. Okay. So the claim that -- you
21 know, assuming the FDA is correct, the package
22 insert is correct, and the peer-reviewed study are
23 correct, is it also a conspiracy theory to claim
24 that the HepB vaccine given to newborns was

1 licensed based on only a few days of safety review
2 prior to licensure?

3 A In the documents you've shown me, that's what
4 that says.

5 Q Are you aware of any documents that show
6 anything different?

7 A No.

8 Q If you're only assessing safety for four days
9 prior to licensure, before licensure, do you know
10 whether the adverse -- an -- the vaccine can cause
11 an adverse event on day seven?

12 A If you're talking about me alone and you're
13 just looking at what that says, I guess not.

14 Q Well, let me ask you this. And is reviewing
15 safety for four days long enough to assess whether
16 that vaccine did or did not cause autism prior to
17 its licensure?

18 A I'm not in a position to make that judgment,
19 but others apparently have.

20 Q Meaning you -- you don't -- you don't know
21 whether or not the clinical trials relied upon to
22 license the vaccines that Yates received were
23 designed to determine whether or not they caused
24 autism before the products were licensed; correct?

1 A I don't know if the studies were designed to
2 see if Engerix caused autism. I think nobody
3 suspected that it might. There probably was no
4 reason to look for autism after hepatitis B
5 vaccine. I'm not in a position to say whether the
6 study that got that approved was adequate or not
7 regardless of the number of days, but somebody
8 was, and it got approved, and then it got put into
9 the recommended vaccine schedule, and although the
10 CDC showed all those ingredients, nonetheless,
11 their basic statement is vaccines are safe and you
12 should get immunized against hepatitis B.

13 Q We should also be concerned though about the
14 children who could potentially be injured by that
15 product; correct?

16 A You're -- in the general sense that you're
17 concerned about children, yes.

18 Q And that vaccine was made with recombinant
19 technology; correct?

20 A I don't remember from the slide you showed me
21 earlier the ingredients of that vaccine.

22 Q Are you aware that -- are you aware that
23 prior to Engerix-B and Recombivax HB, there had
24 never been a vaccine that was created using

1 recombinant technology?

2 A No.

3 Q Okay. Do you know what recombinant -- do you
4 know what -- when I say recombinant technology to
5 develop a vaccine, do you know what that means?

6 A I probably did at one time, but right this
7 minute, I would have -- I would be hard pressed to
8 explain it.

9 Q Okay. Do you know what a HepB -- the HepB
10 antigens as it were that are created using
11 recombinant technology, do you know what they're
12 grown in?

13 A No.

14 Q Well, they're grown in yeast, which is hence
15 the yeast sensitivity contraindication. All
16 right. Let's move on to Pevnar. So with regards
17 to -- you said you participated in the Pevnar 13
18 clinical trial; right?

19 A That's correct.

20 Q So you -- yeah, sorry. You had an
21 opportunity to review that clinical trial
22 firsthand; correct?

23 A Correct.

24 Q Okay. Now, in that clinical trial, some

1 children received Prevnar 13; correct?

2 A Correct.

3 Q And that was the experimental group; right?

4 A Correct. I'm trying hard to remember the
5 protocol, but certainly, yes, there was a group
6 that got Prevnar 13 and they were looking to draw
7 blood to see how -- what the antibody response
8 was.

9 Q And the -- and the -- what did the control
10 group receive in that clinical trial?

11 A I'm confident they didn't receive nothing.
12 It might have been the Prevnar 7, but I just do
13 not remember the details of that study.

14 Q Right. Well, let's pull it up.

15 MR. SIRI: So we're going to mark this
16 as Plaintiff's --

17 MS. CHEN: Exhibit 7.

18 (Whereupon, Exhibit No. 7
19 was marked to the
20 testimony of the
21 witness.)

22 Q (By Mr. Siri) Okay. And this is
23 Prevnar 13's package insert; correct?

24 A Correct.

1 Q So as we did before, we're going to go
2 down -- sorry, we're going to go down to
3 Section 6.1, to the clinical trials experience.
4 Okay. If you want to take a moment to just read
5 that first sentence.

6 A I will.

7 (Whereupon, the witness
8 is reading the document.)

9 A I have. I assume Prevnar active control is
10 the Prevnar 7 vaccine.

11 Q That's correct. When it was licensed, it was
12 the only Prevnar, so they just called it Prevnar;
13 right?

14 A Right.

15 Q And -- well, yeah. It's also referred to as
16 Prevnar 7. I believe that's what you would
17 have -- what you would have called the prior
18 Prevnar vaccine versus the Prevnar 13 vaccine.

19 A Like you said, before there was a Prevnar 13,
20 we just called it Prevnar.

21 Q Okay.

22 A And then afterwards --

23 Q All right.

24 A -- we put the numbers so it would be clear on

1 what we were talking about.

2 Q Okay. Now, when I say the term serious
3 adverse event, what does that mean to you?

4 A The simplistic answer, it's a serious adverse
5 event. It would be something like something
6 happened that required hospitalizations, or
7 certainly death would be there, but it's something
8 that's very serious.

9 Q Right. It's -- it's the term used in
10 clinical trials typically. You know, it's a
11 defined term that you engage in a certain number
12 of clinical trials, and so there's often a review
13 of serious adverse events in these trials that are
14 longer than just adverse events; correct?

15 A Correct.

16 Q Okay.

17 A They frequently just stop the trial if one
18 was reported.

19 Q Correct. So typically it would mean death,
20 permanent disability, hospitalization, or some
21 other equivalent very serious condition; correct?

22 A That category of event, yes.

23 Q Would that be your understanding of serious
24 adverse event?

1 A Yes.

2 Q Okay. And in your experience within a, you
3 know, typical six-month period of children from
4 birth to 18 years of age, which would also include
5 many periods of time where kids aren't vaccinated,
6 what percentage of kids do you think -- otherwise
7 healthy children would experience a serious
8 adverse event in a six-month period of time?

9 A Can you repeat that to make sure I'm clear?

10 Q Sure. In your, you know, almost 40 years as
11 a pediatrician treating children of all ages,
12 including children, you know, beyond the first
13 year of life when they're getting relatively fewer
14 vaccines, you know, in many years none, my
15 question is, what percentage of children that you
16 treat in your practice in a six-month period who
17 are otherwise previously healthy would
18 typically -- would develop a serious -- would
19 experience a serious adverse event?

20 A During the period that they were not being
21 vaccinated?

22 Q Yes, during the period they were not being
23 vaccinated. Why not?

24 A I would expect zero.

1 Q Okay. And has that been your experience,
2 that close to zero percent of children in your
3 practice had a serious adverse event in most
4 six-month periods of time?

5 A Yes. I don't see children having serious
6 adverse events within a six-month period during
7 the time which -- in which they have not been
8 vaccinated.

9 Q I'd like to show you --

10 MR. SIRI: I'm going to mark this as
11 Plaintiff's --

12 MS. CHEN: Exhibit 8.

13 (Whereupon, Exhibit No. 8
14 was marked to the
15 testimony of the
16 witness.)

17 Q (By Mr. Siri) And this is the FDA's
18 definition of what is a serious adverse event.
19 Just to make sure that we're on the same page, I'd
20 like to give you an opportunity to just read
21 through this.

22 (Whereupon, the witness
23 is reading the document.)

24 A Okay.

1 Q Let me know when you're ready for me to
2 scroll down.

3 A You can scroll down.

4 Q Okay.

5 (Whereupon, the witness
6 is reading the document.)

7 A Okay. I'm finished.

8 Q Okay. So the -- I just want to make sure
9 that the definition of serious adverse event that
10 we discussed earlier that you said you had, is
11 this the same definition of serious adverse event?

12 A Yes, it includes the things that we both
13 discussed a few minutes ago.

14 Q Okay. So here is the serious adverse event
15 profile for the study that compared Prevnar 13 to
16 Prevnar 7. Take a moment to take a look at that.

17 (Whereupon, the witness
18 is reading the document.)

19 A Okay.

20 Q Okay. So now first it explains that most
21 clinical trials for vaccines only reviewed serious
22 adverse events for up to 30 days; correct?

23 A It said 30-day post-vaccination period used
24 in some clinical trials.

1 Q Yes.

2 A Okay.

3 Q Fair enough. In this one though, unlike the
4 other vaccine clinical trials that it's referring
5 to for other vaccines, serious adverse events
6 weren't reviewed for only 30 days, they were
7 reviewed for a six-month period after vaccination;
8 correct?

9 A If that's what it says. I don't see the six
10 months, but yes.

11 Q I apologize.

12 A Oh, it's up there, yeah. Sure.

13 Q Okay. So and then what percentage of the
14 infants and toddlers had a serious adverse event
15 who received Prevnar 13?

16 A 8.2.

17 Q And what percent of children received Prevnar
18 had a serious adverse event in that six-month
19 period?

20 A 7.2.

21 Q Okay. Now, because the experimental group
22 and the subject group had a similar serious
23 adverse event profile, the license was, as a
24 technical matter, deemed safe for licensure by the

1 FDA; correct?

2 A I'm sorry, say that again.

3 Q Sure. In these clinical trials, as long as
4 the experimental group and the control group have
5 similar profiles, they're considered safe and
6 acceptable for licensure; correct?

7 A I'm not involved in the licensure and so
8 it -- I guess that's what they look at.

9 Q Okay. As a matter of just -- I understand
10 that you're not involved in clinical trials, but
11 as -- you know, as a matter of just basic logic,
12 right, in order to say that Prevnar 13 -- that the
13 outcome for Prevnar 13 has an 8.2 percent serious
14 adverse event rate and Prevnar has a 7.2
15 adverse -- Prevnar has a 7.2 percent adverse event
16 rate, presumably Prevnar should have been
17 licensed -- well, the -- presumably would have
18 been licensed based on the clinical trial in which
19 it was compared let's say to a placebo and, in
20 fact, had its safety profile confirmed before it
21 was licensed; correct?

22 A That would be --

23 MR. SANDERS: Object to the form of the
24 question.

1 A That would be presumably correct.

2 Q (By Mr. Siri) Because you'd need to -- in
3 order to say that -- because if you could have --
4 as long as you had confirmed in a clinical trial
5 that Prevnar was, in fact, safe before it was
6 licensed, you could then use it as a control and
7 at least as some degree of confidence that these
8 numbers aren't highly concerning; correct?

9 MR. SANDERS: Object to the form of the
10 question. You can answer, Doctor, if you have an
11 answer.

12 A I don't know how to answer that. I --
13 presumably.

14 Q (By Mr. Siri) Okay. Do you know what the
15 control group received in the clinical trial
16 relied upon to license the Prevnar 7 vaccine?

17 A No. I haven't seen that study. It's
18 possible they just measured antibody levels, but I
19 just don't know anything about that study.

20 Q You've administered the Prevnar 7 vaccine --
21 you've -- you have -- you have prescribed to be
22 injected the Prevnar 7 vaccine numerous times
23 during your time as a pediatrician; correct?

24 A Yes.

1 Q Okay. So here is the Prevnar 7 vaccine's
2 package insert; correct?

3 A Correct.

4 MR. SIRI: And this is going to be
5 marked as Plaintiff's Exhibit --

6 MS. CHEN: 9.

7 (Whereupon, Exhibit No. 9
8 was marked to the
9 testimony of the
10 witness.)

11 Q (By Mr. Siri) So let's scroll down to the
12 clinical trial experience, and you'll have an
13 opportunity, Doctor, to review this before trial
14 because it doesn't sound like you've seen --
15 you've really looked at these before, all right,
16 so you'll have an opportunity to carefully study
17 these before trial. But with that said, let me
18 focus you on -- in on the -- oh, the first time we
19 encounter a -- the term control in one of these
20 studies, it provides a little cross next to the
21 word control; correct?

22 A Yes.

23 Q And what was the vaccine licensed -- what was
24 the vac -- excuse me. What was the control used

1 in the primary clinical trial relied upon to
2 license the Prevnar 7 vaccine?

3 A Meningococcal C.

4 Q And it was an investigational meningococcal C
5 conjugate vaccine; correct?

6 A That's what it says.

7 Q Meaning it was also an experimental vaccine;
8 correct?

9 A That would be my assumption, yes.

10 Q There was no pneumococcal vaccine, which is
11 what Prevnar is, that was licensed for children
12 under 2 when the clinical trials of Prevnar 7 were
13 occurring; correct?

14 A I'm not sure that's correct because I seem
15 like I remember there was an unconjugated vaccine.
16 For children under 2 -- it's polysaccharide
17 vaccine. In children under 2, their immune system
18 doesn't respond to polysaccharide vaccine well.
19 For example, the Pneumovax that adults get is a
20 23-valent polysaccharide vaccine, and I -- I
21 just -- it's been so long, I can't remember
22 whether we used some unconjugated vaccine before
23 that or not, but they did have a polysaccharide
24 non-conjugated vaccine that was in existence. I

1 just don't remember whether we gave it to children
2 or not.

3 Q All right. That's --

4 A Children don't respond to that type vaccine.

5 Q All right. That's a 23-valent vaccine;
6 correct?

7 A Correct.

8 Q And that was licensed before Prevnar 7?

9 A I believe so.

10 Q But it would -- it's only license -- have
11 you -- for children 2 and above. Have you ever
12 given that vaccine to a child under 2 years of
13 age?

14 A I don't think we did that.

15 Q Okay.

16 A It's been so long, I don't remember what our
17 practice was.

18 Q But -- but --

19 A We might give it to someone older than that.

20 Q But even that vaccine wasn't used as a
21 control in this study; correct?

22 A Correct.

23 Q Another experimental vaccine was used as a
24 control; correct?

1 A Apparently it was the investigational
2 meningococcal group C vaccine.

3 Q Okay. It wasn't a placebo; right?

4 A No.

5 Q All right. You'll have an opportunity to
6 look at this, but there was also another smaller
7 study that looked at -- followed for three days
8 that included a control where the control group
9 received comp and Hib vaccines. Do you see that?

10 A What vaccine did -- take it?

11 Q Oh, you -- it's all right here highlighted in
12 yellow.

13 A Okay, yes. I see what it says.

14 Q But there was no placebo control trial for
15 Prevnar 7 upon which it was licensed. As far as
16 you -- as far as the package insert for Prevnar 7.

17 A As far as I can see from what I'm seeing,
18 that's the case.

19 Q I'm scrolling through here so that, you know,
20 you can see the controls. You'll have again, you
21 know -- here's the post-marketing experience.
22 You'll have a chance to review this before trial
23 as well.

24 MR. SANDERS: Mr. Siri, whenever you get

1 a chance to take a short break, we've been going a
2 little over two hours. I just need to go to the
3 rest room. There's no rush, but at some point
4 maybe in the not too distant future.

5 MR. SIRI: Let's take a ten-minute break
6 right now.

7 MR. SANDERS: Okay. Thank you.

8 THE VIDEOGRAPHER: We are off the record
9 at 3:34.

10 (Brief recess.)

11 THE VIDEOGRAPHER: We're now back on the
12 record at 3:51.

13 Q (By Mr. Siri) Okay. Well, my co-counsel,
14 Mr. Riley, has asked me to see if we can abridge
15 the rest of this deposition, and I will attempt to
16 oblige him and everybody else on the call.

17 Dr. Stepp, how many conversations have you had
18 with Carol Rudd with regards to anything -- this
19 case or anything to do with this case?

20 A I do not know Carol Rudd.

21 Q Does that name sound familiar at all?

22 A No.

23 Q Excuse me. Carl Rudd. How many
24 conversations have you had with Carl Rudd with

1 regards to this case or anything to do with this
2 case?

3 A I've had zero conversations with him about
4 this case.

5 Q All right. At any point to -- including
6 today, at any time prior to today?

7 A Never.

8 Q How many licensed polio vaccines, stand-alone
9 polio vaccines are there, have there been in the
10 United States since -- that are injectable since
11 1988?

12 A I don't know the number of brands of IPV.

13 Q Okay. Does the brand IPOL sound familiar?

14 A I think so.

15 Q Are you aware that that's the only brand of
16 stand-alone I -- inactivated polio vaccine that's
17 been available in the United States since 1988?

18 A No.

19 Q Okay. Are you aware that it is very
20 different than the polio vaccine developed by
21 Jonas Salk?

22 A Is the Salk vaccine the OPV?

23 Q No, that would have been the Sabin vaccine.

24 The Salk --

1 A Okay.

2 Q -- vaccine, I --

3 A I get Sabin and Salk mixed up.

4 Q No problem. And so let me ask you again.

5 Are you aware that IPOL is a very different
6 product than the IPV vaccine developed by Jonas
7 Salk?

8 A I would assume so because of the number of
9 years in between.

10 Q Okay.

11 A But I don't know the details of what would
12 make them different, other than if it was an
13 inactivated polio years ago and it still is that
14 the essence of it would be the same, but specific
15 differences I do not know.

16 Q For example, are you aware that the substrate
17 on which it is grown, for example, has changed
18 from the primary monkey kidney cells, which those
19 are kidneys taken out of a monkey while they're
20 alive, to the vero cells that we looked at
21 earlier, which were the monkey cells that are
22 converted -- they're basically -- they live --
23 they're -- they don't -- they don't die, they --
24 they're kind of like cancer cells, they live

1 forever as the substrate on which the IPOL
2 vaccine -- the polio virus that is used in the
3 IPOL vaccine is grown?

4 A I don't know anything about the development
5 or the production of these vaccines in that sense.

6 Q Okay.

7 A No, so I do not know that.

8 Q Okay. But some of the ingredients -- being
9 aware of some of the ingredients, of course, is
10 important to know what contraindications or
11 precautions to these products exist as published
12 by the AAP and CDC; correct?

13 A It's important to know the AAP's list. I
14 don't know if there's any easy way for me to know
15 that any of those contraindications have to do
16 with some monkey cell, nor if it is important for
17 me to know that.

18 Q But for some of the ingredients, for example,
19 yeast are specifically provided on precaution and
20 contraindication lists, and sensitivity to yeast,
21 for example, is included on the precaution and
22 contraindication list published by the CDC and
23 AAP; correct?

24 A Yes.

1 Q Okay. Or for example, sensitivity to some
2 egg components is also listed as a
3 contraindication or precaution to -- for some
4 vaccines that are grown using that material on the
5 AAP and CDC contraindication and precaution list;
6 correct?

7 A I believe they've lessened the one that
8 involves the influenza vaccine. If that were to
9 come up, I'd refer to the Red Book, see what it
10 said, and act accordingly.

11 Q Okay. Are you aware that IPOL was licensed
12 based on a clinical trial that only reviewed
13 safety for 48 hours?

14 A I'm not aware of anything relating to the
15 investigation of IPOL.

16 Q Okay. Are you aware of anything relating to
17 the clinical trials relied upon to license the MMR
18 vaccine?

19 A No.

20 Q And when I say the MMR vaccine, I mean the
21 MMR vaccine that was licensed in 1978 and has been
22 used continuously in the United States since then;
23 okay? Does that change your answer by me giving
24 you that clarification?

1 A No, but I think they changed the MMR at some
2 point in time.

3 Q Why did they change it?

4 A It was so long ago, I don't remember.

5 Q Okay. Are you aware that the current
6 licensed MMR vaccine called MMR2 was licensed in
7 1978 after they changed out the rubella
8 components?

9 A I knew they changed some things. I couldn't
10 have told you the date.

11 Q They changed it out to add the rubella
12 component because it used to be grown on a
13 different substrate and wasn't as efficacious, but
14 then Dr. Stanley Plotkin developed the current
15 rubella vaccine grown on the human diploid cells,
16 in which he spent a lot of time developing, and
17 he, you know -- which was shown to be more
18 efficacious in the clinical trials conducted for
19 that product. Does that ring a bell at all?

20 A No.

21 Q Okay. How many varicella vaccines are
22 there -- have ever been licensed in the
23 United States?

24 A Don't know.

1 Q Okay. How many stand-alone varicella
2 vaccines, chicken pox vaccines are currently
3 licensed in the United States?

4 A My assumption would be one, but I don't know
5 for sure.

6 Q Okay. Have you ever injected neomycin or --
7 or ordered its injection into any of your
8 patients?

9 A Not as a stand-alone. If -- if I discovered
10 that -- by what you're telling me that it's in
11 some of these vaccines, then I -- then I have in
12 that way, but in no other way.

13 Q Are you familiar with the vaccine HibTITER?

14 A Yes.

15 Q Do you know how long safety was reviewed
16 prior to licensing that product?

17 A No.

18 Q Okay. How about the DTaP vaccines that
19 you've administered over time, are you familiar
20 with anything about the clinical trials relied
21 upon to license those vaccines?

22 A No.

23 Q Are you aware that many drugs like -- drugs
24 licensed by the FDA for adults have safety review

1 periods that last multiple years prior -- before
2 they're licensed?

3 A I don't really know anything about studies
4 for drugs for adults.

5 Q Are you familiar with the drug, for example,
6 Enbrel?

7 A I've heard of it.

8 Q It's given to adults typically; correct?

9 A Correct.

10 Q And it's given to sick adults; correct?

11 A Correct.

12 Q Vaccines are typically given to healthy
13 newborns and babies; correct?

14 A For the most part. Adults get vaccines too,
15 but -- but yes, certainly the children get a lot
16 of vaccines.

17 MR. SIRI: Okay. I'm marking this as
18 Plaintiff's Exhibit --

19 MS. CHEN: 10.

20 (Whereupon, Exhibit
21 No. 10 was marked to the
22 testimony of the
23 witness.)

24 Q (By Mr. Siri) And this is a package insert

1 for Enbrel; correct?

2 A Yes.

3 Q Okay. So we'll scroll down to Section 6.1.

4 Can you read the first sentence which describes
5 one of the clinical trials and how long the safety
6 review period was?

7 A The data described below reflect exposure to
8 Enbrel in 2,219 adult patients with rheumatoid
9 arthritis followed for up to 80 months.

10 Q And this is in -- and this is in the adverse
11 reaction section of its package insert describing
12 clinical studies experienced with regard to
13 adverse reactions; correct?

14 A It's under the adverse reactions heading.

15 Q Okay. Don't you think it would have been a
16 good idea to review the safety of products given
17 to babies for a similar duration prior to
18 licensing them and injecting them into millions of
19 babies around this country?

20 A I don't know how Enbrel is given. I assume
21 it's given chronically. I think if you're going
22 to take a medicine every day or once a week, I
23 have no idea how it's administered, but presumably
24 over a longer period of time, that would indicate

1 the need for a longer period of observation
2 because of the continuous taking of the medicine.

3 Q If --

4 A Shots are given one at a time.

5 Q How many doses of DTaP are provided to a
6 child in the first few years of life?

7 A Five, up to going to kindergarten.

8 Q So it's given at 2 months of age; correct?

9 A Yes.

10 Q It's given at 4 months of age; correct?

11 A 4.

12 Q It's given at 6 months of age; correct?

13 A 2, 4, and 6, yes.

14 Q And then it's given at --

15 A About 15.

16 Q Months of age? And then it's given at around
17 4 years of age; correct?

18 A 4 or 5, depending on when they start
19 kindergarten.

20 Q So there's multiple exposures to DTaP vaccine
21 over a four-year period; correct?

22 A Yes.

23 Q That's true for a number of the other
24 vaccines too as well; correct?

- 1 A Yes. They get several of them several times.
- 2 Q Now, are you aware that there has -- oops.
- 3 Now, in this case, as we mentioned earlier, you
- 4 know, Dr. Edwards was -- Kathryn Edwards was
- 5 deposed in this case, you said you've never heard
- 6 of her, but she claims that she's a vaccinologist,
- 7 and have you ever seen -- this is the medical
- 8 textbooks -- the standard medical textbook for
- 9 vaccines called Plotkin's Vaccines?
- 10 A I have not.
- 11 Q You've never seen this before?
- 12 A I have not seen that before.
- 13 Q Do you see that Dr. Kathryn Edwards is one of
- 14 the four --
- 15 A She is indeed one of the four.
- 16 Q And do you see the first listed individual,
- 17 Dr. Stanley Plotkin?
- 18 A I see him.
- 19 Q Do you know who he is?
- 20 A No.
- 21 Q Do you know who Dr. Walter Orenstein is?
- 22 A I've heard the name.
- 23 Q Okay. In what context?
- 24 A It seems like I've heard the name in the

1 context of infectious diseases.

2 Q Do you know who Dr. Paul Offit is?

3 A I know who Dr. Paul Offit is.

4 Q Okay. How do you know who he is?

5 A Because he's also an author.

6 Q Author of what?

7 A Of books that have medical orientation. He's
8 in a pediatric -- I think he's pediatric, a
9 pediatric infectious disease specialist.

10 Q Have you been told that Dr. Edwards and
11 Dr. Mace -- well, before we do that, that --
12 Dr. Mace is a professor of pediatrics at
13 Vanderbilt; correct?

14 A Correct.

15 Q She's been training pediatricians for 30 --
16 or on and off for 30 years there; correct?

17 A That's what I'm told, so --

18 Q Okay. Are you aware that both of them have
19 testified in this case that there isn't a single
20 study to support that any of the vaccines given to
21 children do not cause autism other than MMR?

22 MR. SANDERS: Object to the form of the
23 question. You can answer, Doctor.

24 A No, I didn't read their depositions.

1 Q (By Mr. Siri) Okay. If they testified to
2 that, do you have any reason to doubt that their
3 testimony was accurate?

4 A No, I have no reason to doubt.

5 Q When did the controversy regarding vaccines
6 causing autism first arise?

7 A My understanding is it arose when Andrew
8 Wakefield published an article in the Lancet, but
9 I don't know the date of that publication. I'm
10 sure I've read it. I just don't remember it.

11 Q And what did that study say?

12 A It said that there was an association. I
13 think in essence that's what it said.

14 Q And -- and I presume it was in AAP and
15 similar publications where this notion of this
16 whole controversy started with Andy Wakefield. Is
17 that where you learned -- gain -- you know, you --
18 you came to believe this whole controversy of
19 vaccines and autism started?

20 A That's what I've been led to believe.

21 Q Is this the paper that you're talking about
22 that was published by Andy Wakefield in 1998?

23 A I don't see anything.

24 Q Oh, I apologize. I have to share my screen.

1 Okay. There we go.

2 MR. SIRI: I'm going to mark this as
3 Plaintiff's Exhibit 11?

4 MS. CHEN: 11, yes.

5 MR. SIRI: Thank you.

6 (Whereupon, Exhibit
7 No. 11 was marked to the
8 testimony of the
9 witness.)

10 Q (By Mr. Siri) So when you say Andy
11 Wakefield's report -- study, which has been
12 retracted, you're talking about this one published
13 in 1998; correct? In the Lancet?

14 A I guess that's it. I don't know.

15 Q Well, let's just assume it is, and you can,
16 you know, confirm it later; okay?

17 A The Lancet, yeah.

18 Q Yep. Okay. I mean, was the -- there was
19 only one study regarding MMR that they said
20 related to vaccination and autism that was
21 studied -- published in Lancet by Wakefield that
22 you're aware of; correct?

23 A Correct.

24 Q Okay. Just -- just look at the -- now,

1 you're saying that he concluded in here that there
2 was an association between MMR and autism?

3 A I'm led to believe that's what he said.

4 Q If he didn't say that, what would be -- would
5 you find that surprising?

6 A I don't know that I'd be surprised.

7 Q Okay. Isn't that the roundly-made claim that
8 Dr. Wakefield published a study in the Lancet
9 which claimed an association between MMR and
10 autism and now that has been debunked because this
11 study has been withdrawn -- has been retracted?

12 Excuse me.

13 A I would think that's what most people's
14 understanding is.

15 Q Well, you'll have the chance to read this. I
16 mean, it -- you know, on your own and you can see
17 whether or not he actually says that in here,
18 Doctor, for trial. So -- so what you're saying
19 though is that -- this is the study that gave rise
20 to the whole vaccine autism controversy; correct?

21 A That's what I understand --

22 Q Okay.

23 A -- the case to be.

24 Q What is the National Childhood Vaccine --

1 National -- I don't want to misstate it. The --
2 strike that. Let me just go to something else.
3 You know, let's start there. What is the National
4 Childhood Vaccine Injury Act of 1986?

5 A I think -- I can't answer that the way an
6 attorney would, but it was an act that allowed for
7 compensation to patients or people that are
8 injured by vaccines.

9 Q And it provided that the companies that made
10 vaccines, the pharmaceutical companies, cannot be
11 sued for the injuries caused by the vaccines;
12 correct?

13 A That's my understanding, that if you go
14 through them, you can't sue the -- the company.

15 Q Okay. And in the 1986 Act, all right, which
16 was -- you -- you were around during that period;
17 right? There were parents of children injured by
18 vaccines and they were complaining loudly about
19 the injuries their children -- about their injured
20 children saying that it was the vaccines that
21 caused those injuries; correct?

22 A That sounds correct, yes.

23 Q And -- and it was that public outcry by
24 parents that in part, you know, led to the passage

1 of the National Childhood Injury Act of 1986;
2 correct?

3 A I guess it is. I didn't keep up with it at
4 the time or try to study how it came to be.

5 Q Fair enough.

6 A So --

7 Q Are you --

8 A So I don't really know.

9 Q Are you aware that the 1986 Act based on
10 parental complaints mandated that the Department
11 of Health and Human Services conduct a review of
12 whether or not pertussis-containing vaccine caused
13 certain adverse events?

14 A I don't know what it required in that regard.

15 Q Okay. You're not aware that the 1986 Act,
16 the National Childhood Vaccine Injury Act of 1986
17 mandated that HHS review whether or not
18 pertussis-containing vaccine caused autism?

19 A I'm learning that just now.

20 MR. SIRI: Mark this as Plaintiff's
21 Exhibit 12?

22 MS. CHEN: Yes.

23 (Whereupon, Exhibit

24 No. 12 was marked to the

1 testimony of the
2 witness.)

3 Q (By Mr. Siri) And so you're not a lawyer and
4 you'll have a chance to look at this later, but
5 this is the -- this is the act that enacted the
6 National Childhood Vaccine Injury Act of 1986;
7 okay? And this is a page excerpted in which
8 Congress required studies to be conducted for
9 certain things. Can you please read that, the
10 portion highlighted in yellow? Can you read it
11 out loud?

12 A Oh, I'm sorry. The Secretary of Health and
13 Human Services shall complete a review of all
14 relevant medical and scientific information on the
15 nature, circumstances, and extent of the
16 relationship, if any, between vaccines containing
17 pertussis and the following illnesses and
18 conditions, and number 9 on that list of
19 conditions is autism.

20 Q So were concerns about whether or not certain
21 vaccines, in this instance pertussis, causing
22 autism, were those raised -- were there concerns
23 raised about vaccines causing autism before Andy
24 Wakefield's article in 1998?

1 A Apparently they were in this particular
2 instance here because autism is on the list.

3 MR. SIRI: All right. Mark this as
4 Plaintiff's Exhibit 12? And --

5 MS. CHEN: 13.

6 MR. SIRI: 13, thank you.

7 (Whereupon, Exhibit
8 No. 13 was marked to the
9 testimony of the
10 witness.)

11 Q (By Mr. Siri) Now, the Institute of Medicine
12 was a creation of Congress; correct?

13 A I don't know. I guess.

14 Q And when Congress required the Department of
15 Health -- the Secretary of Health and Human
16 Services to conduct this review of whether or not
17 pertussis-containing vaccine caused autism, are
18 you aware that the Secretary of Health and Human
19 Services then contracted with the Institute of
20 Medicine to conduct that review?

21 A No.

22 Q Are you aware that the Institute of Medicine
23 published a report in 1991 that actually reviewed
24 whether there's any science or whether

1 pertussis-containing vaccine causes autism?

2 A I am now.

3 Q Okay. And from -- based on what's in front
4 of you on the screen, can you see what the IOM
5 concluded?

6 A They concluded that there's no evidence
7 bearing on causal relationship with autism.

8 Q Meaning there is no study one way or another
9 with regard to whether pertussis-containing
10 vaccine causes autism; correct?

11 A I don't know what it means in terms of them
12 leading -- leading them to draw that conclusion.
13 All I know is that's their conclusion.

14 Q Well, you see the second category is evidence
15 insufficient to indicate a causal relation?

16 A Yes.

17 Q So that means there's some evidence, but not
18 enough to reach a conclusion; correct?

19 A I don't know that it implies some evidence.
20 It just says that evidence is insufficient.

21 Q Okay. What do you think no, no evidence
22 bearing on a causal relation means?

23 A Well, it means that there's not any.

24 Q So the concern that pertussis-containing

1 vaccines was causing autism was well and alive
2 well before Andy Wakefield's study published in
3 1998; correct?

4 A Yes.

5 Q Okay. Now, 20 years later, are you aware
6 that the IOM was again commissioned, this time by
7 an agency within the Department of Health and
8 Human Services called the Agency for Health --
9 excuse me, Health Research Services
10 Administration, HRSA, and paid for by them and the
11 CDC, are you familiar -- are you aware of that?

12 A No, I don't know any of this history.

13 Q Well, they looked at a whole host, about over
14 150 conditions, and whether or not there's any
15 evidence whether those -- each of those conditions
16 are caused by the vaccine under review. Here
17 they're looking at autism and whether or not
18 pertussis, diphtheria, or tetanus-containing
19 vaccines cause autism. Can you read the causality
20 conclusion?

21 A The evidence is inadequate to accept or
22 reject a causal relationship between diphtheria
23 toxoid, tetanus toxoid, or acellular
24 pertussis-containing vaccine and autism.

1 Q You'll have an opportunity to look at the
2 rest of this, and what you'll find is that when
3 you review the epidemiological evidence and
4 mechanistic evidence, what you'll see is that they
5 couldn't identify any signs to support that
6 pertussis-containing vaccines, as well as the
7 tetanus and diphtheria vaccine, do not cause
8 autism. Twenty years after the 1991 IOM report
9 saying there's no evidence -- well, I guess we
10 should start with 25 years after the Congress
11 required a review of whether pertussis-containing
12 vaccine caused autism, 20 years after the
13 Institute of Medicine reviewed that question in
14 1991, in 2011 there still had never been a study
15 conducted of whether pertussis-containing vaccine
16 caused autism. Is that true?

17 A I don't know.

18 Q You've -- you've never seen a study -- I
19 mean, the Institute of Medicine's report is 800
20 pages long and had a giant panel of scientists
21 looking for a study of whether DTaP vaccine did
22 not cause autism. They only found one by Geier
23 and Geier, which did show an association between
24 DTaP and autism. Have you ever seen a study that

1 showed that DTaP vaccine does not cause autism?

2 A I've never seen a study that says it does.

3 Q And Dr. Stepp, have you ever seen this study?

4 A No.

5 Q As the title states, it's a pilot study of
6 health -- of the health of vaccinated and
7 unvaccinated 6 to 12-year-old children in the
8 United States.

9 A Okay.

10 Q Do you see that?

11 A Yes.

12 Q Do you see that it's out of the Department of
13 Epidemiology and Biostatistics, School of Public
14 Health, Jackson State University?

15 A Yes.

16 Q Okay. Now, it's a pilot study, right,
17 meaning it's not going to be a large study, and
18 like all the MMR studies you relied upon, it's
19 retrospective. Let's just take a quick look at
20 some of the conclusions in this study when they
21 compared vaccinated to unvaccinated children. Do
22 you see that in unvaccinated children they had
23 about four times the rate of chicken pox?

24 A Yes.

1 Q Okay. And it's statistically significant,
2 right, the confidence interval of .2 to .4?

3 A Yes.

4 Q And do you see that the children who are
5 unvaccinated have about three times the rate of
6 whooping cough?

7 A Yes.

8 Q And it's statistically significant as well;
9 correct?

10 A That's correct.

11 Q Do you see that the study when in --
12 comparing it to the autism spectrum disorder rate,
13 do you see that it found that the vaccinated
14 children are 4.2 times the rate to have autism
15 versus the unvaccinated children?

16 A I see those numbers, yes.

17 Q Okay. Was it also statistically significant
18 since it didn't cross the 1 value?

19 A Not being an epidemiologist, these odds rate
20 shows -- I struggle with them, but the numbers are
21 right there.

22 Q Okay. So have you now seen a study in which
23 children who received vaccines, including DTaP,
24 did have higher rates of autism compared to those

1 who haven't?

2 A You're showing me this study. I don't know
3 anything about that journal. I don't know
4 anything about what others think of this study,
5 and so it's -- it's just not within my --

6 Q Okay.

7 A -- expertise to be able to evaluate the
8 results of this study.

9 Q Well, it's a pilot study of about
10 600-and-something kids. It was -- had some
11 parental interviews, so there's some recall bias
12 in it and it was also a retrospective, but it was
13 what the person who did it could do on the budget
14 that they had. But you said you'd never seen a
15 study, all right, that supported that DTaP can
16 cause autism, but now you've seen one study;
17 correct?

18 MR. SANDERS: Object to the form of the
19 question.

20 A I'm looking at this study, but I don't have
21 the expertise to evaluate the study.

22 Q (By Mr. Siri) Fair enough.

23 A And I don't know anything about the journal.

24 Q All right.

1 A If I had heard of the journal, I might have
2 more confidence.

3 Q Okay. I mean, it might be that the study, as
4 I said, based on parental surveys and with the
5 small sample size, it's a pilot study, would
6 certainly be good to have a larger study with more
7 kids; right?

8 A Sure.

9 Q And it would be good to look directly at
10 medical records, not parental surveys; correct?

11 A If -- that would sound good.

12 Q Yeah, and but that study has never been done,
13 has it?

14 A I don't know. Not that I know of.

15 Q All right. Well, that's true. How would you
16 know? But here's the other -- I shouldn't have
17 asked you if it's ever been done. I should ask
18 you has it ever been published, because that's
19 something you could know.

20 A I could know, but I do not know.

21 Q Okay. The -- you know, the clinic,
22 The Jackson Clinic has got this video about autism
23 that I'd like to play for you for a moment. It's
24 just going to take me a second to pull it up.

1 Let's see if I can pull this off, so to speak.

2 THE VIDEOGRAPHER: If you're going to
3 share, be sure to take -- click off those little
4 boxes on the bottom about computer audio.

5 MR. SIRI: Yes. Absolutely. So let's
6 see. Oops. Sorry. Just a second. And -- I
7 apologize. Hopefully I'll have this in a minute.
8 Okay. Here we go. Sorry about that. Okay.
9 Sorry. I apologize. I think I've got it. I was
10 trying to get it to -- all right. I'm just going
11 to play it from the -- from The Jackson Clinic
12 website. I was trying to do it a different way,
13 but so be it. Okay. I'm going to mark this video
14 right here from The Jackson Clinic website as
15 Plaintiff's --

16 MS. CHEN: Exhibit 16.
17 (Whereupon, Exhibit
18 No. 16 was marked to the
19 testimony of the
20 witness.)

21 Q (By Mr. Siri) Okay. All right. Actually,
22 to make sure that my -- you can hear the audio,
23 let me make sure that I've clicked the right
24 button. Okay. Here we go, and --

1 (Whereupon, a video clip
2 was shown.)

3 THE VIDEOGRAPHER: Only audio is
4 playing.

5 MR. SIRI: I'm sorry. You couldn't see
6 the video?

7 THE VIDEOGRAPHER: No, it's just audio.
8 We're seeing a Word document displayed.

9 MR. SIRI: I showed the wrong screen.

10 THE VIDEOGRAPHER: I --

11 MR. SIRI: That's weird. Really --

12 Q (By Mr. Siri) Well, could you hear what she
13 said? Well, you couldn't see that it's from
14 The Jackson Clinic. So much for --

15 A I could see that it was from The Jackson
16 Clinic.

17 Q You could see the video?

18 A I -- there was video in the first couple of
19 seconds and then it went to something else but the
20 audio continued.

21 Q Okay. I want to see if I can fix that.

22 MR. SIRI: To the extent that any
23 document was being shown on the screen, that's
24 obviously work product or privileged. Please make

1 sure to delete any captures of that document.

2 Okay, Mr. Sanders?

3 MR. SANDERS: Yes.

4 MR. SIRI: Thank you.

5 MR. SANDERS: I don't have it captured.

6 MR. SIRI: Okay. All right. So
7 let's -- we'll try it one more time and then we'll
8 just move on. Okay. Last try. Can everybody see
9 the video?

10 MR. SANDERS: Yes.

11 THE VIDEOGRAPHER: Yes, and the website.

12 (Whereupon, a video clip
13 was shown.)

14 Q (By Mr. Siri) Okay. So that was a video
15 from The Jackson Clinic; correct?

16 A Correct.

17 Q Do you recognize the individual in the video?

18 A I recognize an individual, but not the one
19 that was just speaking. She was hired after I
20 left.

21 Q Okay. And she identified a number of risk
22 factors for an increase in autism; correct?

23 A Correct.

24 Q One of those was being born premature;

1 correct?

2 A Correct.

3 Q Okay. Now, I showed you in one of the
4 studies that was done by that group out of Jackson
5 State -- well, I'm going to show you one more.
6 Have you ever seen this study? Preterm Birth,
7 Vaccination, and Neurodevelopmental Disorders?

8 A No.

9 Q Okay. Take a moment to read the yellow
10 portion to yourself.

11 (Whereupon, the witness
12 is reading the document.)

13 A Okay.

14 Q Okay. Now, without asking you about the
15 validity of this study or whether its results are
16 correct, this study does though claim that what it
17 found was that children who were born preterm and
18 vaccinated have 14.5 times the rate of children
19 that were born that were not preterm and not
20 vaccinated, that the vaccinated children have 14.5
21 times the rate of NDD, which was defined as ADHD
22 and autism spectrum disorder and learning
23 disability.

24 A That's what it says.

1 Q Okay. But you've never seen this study;
2 correct?

3 A I've never seen that study.

4 Q Okay. Are you aware that -- that there have
5 been studies that -- that found a three-time risk
6 among children that got HepB vaccine in the first
7 month of life compared to those that didn't get
8 HepB vaccine, three times the risk of autism?

9 A No.

10 Q Okay. I want to make sure you've never seen
11 this study. Have you ever seen this study,
12 Doctor?

13 A No.

14 MR. SIRI: Okay. This is going to be
15 Plaintiff's Exhibit --

16 MS. CHEN: 18.

17 (Whereupon, Exhibit

18 No. 18 was marked to the
19 testimony of the
20 witness.)

21 Q (By Mr. Siri) And take a moment to read the
22 yellow.

23 (Whereupon, the witness
24 is reading the document.)

1 A Okay. I've read it.

2 Q Okay. And this study, without casting any
3 conclusion about its, you know, validity or -- or
4 anything else about it, this study though found
5 that children who received HepB in the first month
6 of life, compared to those that don't, have three
7 times the rate of autism spectrum disorder;
8 correct?

9 A That's what this states at the yellow.

10 Q Okay. Let me ask you this. Okay. Assume --
11 let's assume the Institute of Medicine is correct,
12 as well as subsequent reviews by an agency within
13 HHS called the Agency for Healthcare Research and
14 Quality, who neither of which was able to find any
15 study that showed that DTaP vaccine doesn't cause
16 autism, and let's further assume that just as the
17 AHRQ found, they couldn't find -- there was no --
18 they didn't find a study that HepB vaccine causes
19 autism. And as far as, you know -- as far as --
20 apparently I'm aware and Dr. Edwards is aware and
21 Dr. Mace is aware, there are no studies that
22 showed that any of the other vaccines that Yates
23 received other than MMR have a study which showed
24 it doesn't cause autism.

1 A Okay.

2 Q Shouldn't you wait until you do have a study
3 that supports that DTaP vaccine does not cause
4 autism to then claim that DTaP vaccine does not
5 cause autism?

6 A You're asking that to a person who has no
7 influence with the committee on infectious disease
8 at the Red Book, and that's not a decision for me
9 to make. It would be a decision for them to make
10 before they recommend it, and so I -- and I -- so
11 I don't have a good answer. I know when you're
12 trying to do a study that proves the negative that
13 there could be a philosophical debate about trying
14 to prove any negative.

15 Q Well, aren't --

16 A Generally the philos -- I'm sorry.

17 Q Yeah, didn't you claim that there are --
18 well -- well, then -- then, you know, it appears
19 that the CDC and everybody else are philosophers
20 or something. Is that correct?

21 A It --

22 Q Strike that. Strike that. Isn't it --
23 didn't you claim earlier that studies have been
24 done to show that MMR vaccine does not cause

1 autism?

2 A I think I said that there's studies that show
3 no association with autism.

4 Q Okay. Are there any studies which show no
5 association between DTaP vaccines and autism?

6 A I do not know.

7 Q Okay. Assuming there are none, as a
8 practicing pediatrician for almost 40 years, if a
9 parent asked you, Doc, does DTaP vaccine cause or
10 does it not cause autism, and assuming you were
11 not aware of a single study that showed no
12 association between DTaP and autism, wouldn't it
13 be premature to tell that parent that DTaP vaccine
14 does not cause autism?

15 A I wouldn't go about thinking about it in that
16 way. I think that I have to depend on the
17 consensus of the experts who make the
18 recommendations, and they certainly recommend
19 pertussis vaccine, so I would tell them that --
20 that it's the recommended vaccine. I also know
21 that if you stop giving pertussis vaccine, you'll
22 have an outbreak of pertussis, so I would still
23 recommend it based on the consensus of the people
24 I depend on.

1 Q But I'm asking you, if there's no study to
2 support that DTaP vaccine does not cause autism,
3 isn't it as a matter of logic, as a matter of
4 science improper, invalid to state that DTaP
5 vaccine does not cause autism?

6 MR. SANDERS: Object to the form of the
7 question. You can answer, Doctor, if you have an
8 answer.

9 A No.

10 Q (By Mr. Siri) So even in the absence of
11 science to support that DTaP vaccine does not
12 cause autism, you would still tell a parent that
13 DTaP vaccine does not cause autism?

14 MR. SANDERS: Object to the form of the
15 question. You can answer, Doctor, if you have a
16 question -- an answer.

17 A I don't try to keep current in these vaccine
18 studies that you're referring to. However, if
19 you're trying to do a study that proves a
20 negative, like this does not cause that, and you
21 have evidence over a period of time that there's
22 no evidence that it does, then after a while, you
23 have to be satisfied with that data instead of
24 doing one test after another test, trial, trying

1 to prove the negative. I -- I think there's just
2 a point in time you just go this doesn't cause
3 that.

4 Q (By Mr. Siri) Okay. Meaning --

5 A But --

6 Q Right. Meaning parents are widely
7 complaining that pertussis vaccine causes autism,
8 so you go out and you test the hypothesis and the
9 number of studies, and if you can't find an
10 association, then you say, that vaccine doesn't
11 cause autism; correct?

12 A Okay, yeah.

13 Q But if you don't do the studies, despite
14 parents complaining that that vaccine causes
15 autism all the way back before 1986, and you
16 haven't done any studies at all regarding whether
17 DTaP -- to see whether there's an association
18 between DTaP and autism, and the only study out
19 there that the parent could find is that Mawson
20 study we looked at that did show an association,
21 isn't it premature to tell that parent DTaP
22 vaccine doesn't cause autism?

23 MR. SANDERS: Object to the form of the
24 question. He's asked -- been asked and has

1 answered that question.

2 A The burden of that decision was not on my
3 shoulders. It was on other people's shoulders, so
4 I didn't make that decision. Other people came to
5 the conclusions they did on their basis, whatever
6 that may have been, so if the Red Book recommends
7 that you do be immunized against pertussis, I rely
8 on their consensus and advice and I don't --

9 Q (By Mr. Siri) But --

10 A -- try to reinvent the wheel by doing some
11 study on my own.

12 Q I didn't mean to cut you off. Are you
13 finished? I'm sorry.

14 A I -- that's enough, yeah.

15 Q Okay. Does the Red Book state anywhere in it
16 that DTaP vaccine does not cause autism?

17 A I'd have to look at it to see, but I suspect
18 that it doesn't. I think it probably addresses
19 the controversy, but again, I'd have to have it in
20 front of me.

21 Q But you're certain that DTaP vaccine does not
22 cause autism?

23 A I am personally satisfied that it does not.

24 Q And you base that on?

1 A There's no evidence that it does.

2 Q And you're okay with the fact that parents
3 have been complaining that pertussis vaccine is a
4 cause of their child's autism for at this point
5 over 24 -- 34 years, but yet, no study has been
6 done to see if there's an association between
7 pertussis vaccine and autism?

8 A In my personal --

9 Q You're okay with that?

10 A In my personal experience, I never had a
11 patient complain about there being a possible
12 association between DTaP and autism. Now, I have
13 had them with the MMR and autism, but I never
14 experienced that, so if they're complaining,
15 they're not complaining to me, and I have to be
16 okay with the consensus of the medical community
17 as to what to do about vaccinations, and the
18 consensus is that they should be administered.

19 Q All right. That's -- that's a different
20 question though. I'm not asking you what -- the
21 consensus about administering vaccines. I'm
22 just -- I'm asking you a different question, and I
23 understand that it's a difficult question to
24 answer and you don't want to answer it. I'm just

1 asking you something quite far more basic than
2 that. I'm asking you if there are no studies to
3 support that a certain vaccine doesn't cause
4 autism, shouldn't you wait until there is?
5 Shouldn't you wait until there's -- the science
6 has been conducted one way or another before you
7 reach a conclusion about whether the vaccine
8 causes autism?

9 MR. SANDERS: Same objection.

10 A I think no. I think you go ahead and
11 vaccinate. No, I don't think you need to wait for
12 that study because that study is very difficult to
13 come by. You're trying to prove a negative. And
14 if you do do a study and it, quote, proves a
15 negative, unquote, and somebody doesn't like that,
16 then you have to do another one and then another
17 one, and at some point, you have to just act and
18 trust what you want. It's just difficult to prove
19 a negative --

20 Q (By Mr. Siri) But again --

21 A -- in a study.

22 Q Right. But again, the -- for the MMR
23 vaccine, it does, but yet, nonetheless the CDC
24 states, right, categorically vaccines do not cause

1 autism; correct?

2 A That's my understanding of what they say, as
3 well as the AAP.

4 Q They don't say no association has been found
5 or not found. They say vaccines do not cause
6 autism; correct?

7 A Correct.

8 Q And the AAP says that; right?

9 A Correct.

10 Q Okay. So you think it's okay to ignore
11 parental complaints regarding pertussis vaccines
12 and autism because -- let me just finish the
13 question -- and conduct no studies regarding
14 whether pertussis-containing vaccine causes
15 autism, even though it's given at 2, 4, and
16 6 months of life, well before any MMR vaccine,
17 because you don't think -- because you just are
18 going to rely on what the AAP and CDC say.

19 MR. SANDERS: Object to the form.

20 A I'm going to rely on what the AAP says.

21 Q (By Mr. Siri) Okay. And you're not --
22 and -- and you are okay with those parental
23 concerns going uncalled and unresponded to in the
24 scientific literature regarding where parents

1 complain that pertussis-containing vaccines are
2 causing their children's autism?

3 MR. SANDERS: Same --

4 A I have never had a patient complain that they
5 think DPT causes autism.

6 Q (By Mr. Siri) It --

7 A So I'm not hearing that complaint.

8 Q And that -- your experience would be
9 anecdotal though; correct?

10 A Well, yes, it's just me.

11 Q Yeah, and your experience is similar to the
12 parents who claim a vaccine caused an injury and
13 they're told, hey, that's anecdotal, you're
14 just --

15 A Sure.

16 Q Right?

17 A Right.

18 Q We like to rely on properly controlled
19 studies; right?

20 A Okay.

21 Q Would you agree that to reach a determination
22 of whether there's a causal relationship, you
23 should have properly designed studies?

24 A Studies are great, and so whatever study is

1 fine, but again, studies to prove a negative are
2 difficult, and if I were to call up the AAP and
3 say I'm not satisfied with your studies, you need
4 to do more, I don't think they would talk very
5 long to me.

6 Q So you don't --

7 A I don't know what influence I could have if I
8 agreed with you.

9 Q So you're saying that because it might be
10 difficult, despite parental complaints for 34
11 years that pertussis-containing vaccines
12 don't [sic] cause autism, we shouldn't even -- the
13 scientific community shouldn't even publish one
14 study, not even one, one looking for an
15 association between pertussis and autism, they
16 should just not do any science on that question;
17 correct?

18 A I'm not saying what they should or shouldn't
19 do.

20 Q Uh-huh. Isn't it true that studies have been
21 done regarding MMR vaccine and autism?

22 A I know studies have been done. The exact
23 nature of those I couldn't tell you.

24 Q You had no issue earlier in this deposition

1 saying that those studies have concluded that
2 there's no association between MMR vaccine and
3 autism; correct?

4 A Apparently the CDC and the AAP have had no
5 problem and therefore they made their conclusions
6 and I'm following their advice.

7 Q And you'll follow their advice irrespective
8 of how substantiated or unsubstantiated it is;
9 correct?

10 MR. SANDERS: Object to the form of the
11 question. You can answer, Doctor.

12 A Yes.

13 Q (By Mr. Siri) Okay. So what serious adverse
14 events are you aware of that vaccines can cause?

15 A I think we went over this earlier and they're
16 written in the Red Book. Certainly you can have
17 an immediate allergic reaction, and if you want me
18 to list them, it would be easier if I read them
19 out of the book.

20 Q Sure.

21 A I don't have the book.

22 Q Oh, okay. But the serious adverse events
23 that you're saying vaccines can cause, you're
24 saying the ones listed in the Red Book are serious

1 adverse events that vaccines can cause; correct?

2 A I think the Red Book's list of those is
3 correct.

4 Q Have you ever conduct -- do you consider
5 yourself an expert in any regard with -- when it
6 comes to aluminum adjuvants?

7 A No.

8 Q Have you read any studies regarding aluminum
9 adjuvants?

10 A No.

11 Q Do you have any knowledge whatsoever about
12 the mechanism of action that aluminum adjuvants
13 have in the body?

14 A I have no idea.

15 Q You're not aware that -- that there's a long
16 series of studies that shows that aluminum
17 adjuvants are taken up by macrophages and then
18 after going to lymph nodes are deposited in
19 various organs including the brain?

20 A I'm not aware of it being deposited in the
21 brain, but that's the usual mechanism for foreign
22 material in the body, for the --

23 Q But if --

24 A -- lymph nodes it goes -- it's eliminated

1 other ways. I don't think it goes to the brain,
2 but no, I'm not aware of these studies.

3 Q But if animal studies shows that after
4 injecting animals with aluminum adjuvant and then
5 sacrificing them, the aluminum adjuvant was found
6 in the brain in those studies, would that change
7 your opinion?

8 A For those animals.

9 Q Well, we don't typically sacrifice children
10 after they're vaccinated, do we?

11 A I hope not.

12 Q Yes. Is there a better-designed study you
13 could think of other than doing it in animals to
14 see where it goes?

15 A I have no expertise in designing studies, so
16 I have no idea.

17 Q You are aware that encephalopathy after a
18 prior pertussis-containing vaccine is a
19 contraindication to further pertussis-containing
20 vaccine; correct?

21 A Correct.

22 Q Okay. So that means that if a child had a
23 pertussis-containing vaccine and had
24 encephalopathy within seven days, you would not

1 give that child more pertussis-containing vaccine;
2 correct?

3 A That's correct.

4 Q Okay. Are you aware that the various package
5 inserts for a number of vaccines disclose
6 encephalitis or encephalopathy as an adverse event
7 following those products -- the administration of
8 those products?

9 A I don't read the package inserts.

10 Q Okay. Let's see one more.

11 MR. SIRI: Mr. Lawson, I'm -- I'm -- I
12 mean, Mr. Riley, I'm almost done. I'm going to
13 try to honor your request. I just want to see one
14 other thing.

15 MR. RILEY: You make it sound like we're
16 a good cop and bad cop. I don't intend to make it
17 like that.

18 MR. SIRI: Well, I mean, you know, as we
19 talked about it already, you're from Tennessee,
20 I'm from New York. You can be the bad cop.

21 (Laughter.)

22 MR. SIRI: You know what, I -- I think
23 I'm almost done. Let's go off the record for just
24 five minutes and we'll come back and I'll wrap it

1 up very quickly and we can put this one to bed.

2 Sound good, everybody?

3 MR. SANDERS: Yes.

4 MR. RILEY: Sounds good.

5 MR. SIRI: Okay.

6 THE VIDEOGRAPHER: We are off the record
7 at 4:53.

8 (Brief recess.)

9 THE VIDEOGRAPHER: We are now back on
10 the record at 5:01.

11 Q (By Mr. Siri) Okay. Dr. Stepp, I've got
12 just a few more questions and we'll -- we'll wrap
13 this up. Are you a member of any organization in
14 your community?

15 A What type of organization are you referring
16 to?

17 Q Well, let's start more specifically and we
18 can broaden out. Are you a member of any country
19 club?

20 A Yes.

21 Q Okay. What country club?

22 A Jackson Country Club.

23 Q Are you a member of any other country club?

24 A No.

1 Q How long have you been a member of the
2 Jackson Country Club?

3 A Since 1977.

4 Q Okay. And are you a part of any civic
5 association or committees in your community?

6 A No.

7 Q Okay. Are you a member of any religious
8 organization?

9 A Church.

10 Q Okay. What church is that?

11 A Fellowship Bible Church here in Jackson.

12 Q Okay. Do you attend there regularly?

13 A Well, the COVID business has --

14 Q Gotcha.

15 A -- interrupted that, but yes.

16 Q Okay. Any other church that you attend?

17 A No, just the one.

18 Q Okay. And so more broadly, are there any
19 other types of community groups, gatherings,
20 formal or informal, that you participate in in
21 your community?

22 A No.

23 Q Okay. So any social clubs?

24 A Not that's a -- not that's a formal club, no.

1 Q Is there an informal kind of club that you
2 participate in?

3 A Well, within the Jackson Country Club there's
4 an informal group of golfers that I play with, if
5 that's what you mean.

6 Q Okay. Let me -- as you -- I'm not -- I'm not
7 trying to pry. It's a jury trial, and obviously
8 your connection to the community are -- you know,
9 as doc -- and Mr. Sanders understands why I'm
10 asking these questions, so that's why, you know,
11 I'm asking the questions. Not -- I'm not trying
12 to get into what you're doing day to day
13 otherwise. Okay. It's only because it's relevant
14 to the case. So and then -- and your wife, is she
15 a member of any community -- you know, community
16 organizations or country clubs or -- or any other
17 social, formal or informal, group other than the
18 ones you've already listed that you're a part of?

19 A Other than the ones that I've listed, no.

20 Q Okay. All right. Do you -- have -- have you
21 ever had your patients sign any consent form
22 before they are vaccinated?

23 A No.

24 Q Okay. And do you know who Dr. Ed Hazlehurst

1 is?

2 A Yes.

3 Q Do you consider him to be a person who is by
4 the book?

5 MR. SANDERS: Object to the form of the
6 question.

7 A I don't know him well enough to categorize
8 him in that way.

9 Q (By Mr. Siri) Do you consider -- to the
10 extent that you do know him, do you consider him
11 to be somebody who has integrity?

12 A Yes.

13 Q Okay. How long have you known Dr. Ed
14 Hazlehurst?

15 A He was doing general surgery, I'm pretty
16 sure, when I moved to town, and you would
17 occasionally run into each other in the hall of
18 the hospital or something like that, so there may
19 be some mutual patients in the hospital.

20 Q And over the years you've had conversations
21 with him in those contexts?

22 A Some, not a lot.

23 Q Okay. Have you ever had conversations with
24 him outside of the hospital?

1 A Once.

2 Q What was that about?

3 A He did not like the rules associated with the
4 swimming pool at the country club, and I was
5 president of the country club at the time, and so
6 the general manager and I had to discuss with
7 Dr. Hazlehurst his preferences for the swimming
8 pool.

9 Q Was it --

10 A I'm being serious.

11 Q Was it a civil discussion?

12 A It was pretty good, yeah.

13 Q Okay. What was the outcome?

14 A He understood that we weren't going to change
15 the rules for him. He wanted to swim at night by
16 himself and we -- we turned the lights out, and he
17 wanted them on so he could swim late at night.

18 Q And he respected your decision?

19 A Yes. There was no lifeguard. We were
20 worried that something would happen to him.

21 Q Fair enough.

22 A So we -- it -- I think he just -- we resolved
23 that amicably, I believe.

24 Q And then in terms of your discussions in the

1 hallways at the hospital, I presume those are
2 typically about patients?

3 A They'd be about patients. We knew each other
4 enough to say hi as we passed each other.
5 Otherwise it was just about specific patient care,
6 and The Jackson Clinic has surgeons of their own,
7 and so most of my patients were seen by them. It
8 would just be the occasional patient. And later
9 he started doing gastroenterology, and of course,
10 that didn't pertain to pediatrics at all.

11 Q Understood. I'd like to just show you one
12 last exhibit, and I promise that -- Mr. Riley,
13 that will be it. Let me just share my screen.

14 MR. SIRI: Mr. Lawson --

15 THE VIDEOGRAPHER: Yeah, stand by. You
16 have the power.

17 MR. SIRI: Thank you.

18 (Whereupon, Exhibit
19 No. 19 was marked to the
20 testimony of the
21 witness.)

22 Q (By Mr. Siri) Okay. Dr. Stepp, have you
23 ever seen this page on the American Academy of
24 Pediatrics website?

1 A I may have. I don't remember.

2 Q Okay. Do you see that it's in -- at the top
3 left is the logo of the American Academy of
4 Pediatrics; correct?

5 A That's correct.

6 Q And that is the logo of the American Academy
7 of Pediatrics; correct?

8 A That is correct.

9 Q Okay. And have you ever seen the -- this
10 page titled Corporate Friends of Children Fund
11 Members?

12 A It seems like I've seen Friends of Children,
13 but I don't remember it being corporate.

14 Q Excuse me. I apologize. Well, it says right
15 above it corporate -- I was reading it from right
16 here.

17 A Right. I see that. But in the past I've
18 never seen the corporate.

19 Q Understood. This is www.aap.org is the AAP
20 website; correct?

21 A Correct.

22 Q And these are companies that have donated
23 more than \$50,000. This is provided on an annual
24 basis to the AAP; correct?

1 A That appears to be correct.

2 Q Merck is the manufacturer and seller of
3 vaccines; correct?

4 A Correct.

5 Q Sanofi Pasteur is a manufacturer and sells
6 vaccines; correct?

7 A That's correct.

8 Q Between the two of them, they would -- they
9 would actually comprise the majority of the
10 vaccines on the CDC and AAP's childhood
11 immunization schedule; correct?

12 A They -- they would comprise a large percent.
13 I wouldn't know what the percentage is, but yes,
14 they make a lot of vaccines.

15 MR. SIRI: Okay. Well, Mr. Sanders,
16 would you like to end the deposition now?

17 MR. SANDERS: I have no further
18 questions, so if you don't have any more, yes, I'd
19 like to.

20 Q (By Mr. Siri) And Dr. Stepp, thank you for
21 taking the time to answer some questions today.
22 We -- I've got -- we could probably spend a lot
23 more time together, but I think that was probably
24 sufficient.

1 A Thank you.

2 MR. SIRI: Thank you.

3 THE VIDEOGRAPHER: Okay. Anything
4 further?

5 MR. SIRI: Nothing further.

6 MR. RILEY: Nothing further.

7 THE VIDEOGRAPHER: All right. This is
8 the end of the video deposition of Dr. William
9 Stepp. Counsel did waive the formal reading of
10 the caption. We are now off the record at 5:11.

11 (Whereupon, the
12 deposition of William
13 Stepp, M.D., concluded.)
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C E R T I F I C A T E

STATE OF TENNESSEE:

COUNTY OF SHELBY:

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SIGNATURE OF THE WITNESS

STATE OF TENNESSEE:

COUNTY OF SHELBY:

WILLIAM STEPP, M.D.

Subscribed and sworn to by me on this the
_____ day of _____, 2020.

Notary Public

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