EXHIBIT C

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

IN RE: SOCIAL MEDIA ADOLESCENT ADDICTION/PERSONAL INJURY PRODUCTS LIABILITY LITIGATION	)	MDL No. 4:22-md-3047-YGR
People of the State of California, et al.	)	CASE NO. 4:23-cv-05448-YGR
v.	)	
Meta Platforms Inc., et al.	)	

COMMONWEALTH OF MASSACHUSETTS

SUFFOLK, ss		SUPERIOR COURT
COMMONWEALTH OF MASSACHUSETTS, Plaintiff,		CIVIL ACTION NO. 2384CV02397-BLS1
v. META PLATFORMS, INC. and INSTAGRAM, LLC. Defendants.		

Thursday, March 5, 2026

CONFIDENTIAL - PURSUANT TO PROTECTIVE ORDER

Video-Recorded Oral Deposition of JUSTIN McCRARY held at the Westin Downtown Austin, 310 East 5th Street, Austin, Texas, commencing at 9:13 AM CST on the above date, before Michael E. Miller, Fellow of the Academy of Professional Reporters, Certified Court Reporter, Registered Diplomate Reporter, Certified Realtime Reporter, and Notary Public.

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the MDL report, I believe you'll see that same case, but it occurs in a different place in the chronological order, because at that time, the most recent report would have been filed May 8th, 2025.

Q. Okay. Thanks for pointing that out.

A. Sure.

Q. Let's go back to the MDL Appendix B.

Now, Dr. McCrary, you'd agree that you have not given expert testimony previously about any case involving child mental health, correct?

A. I think that's correct.

Q. Okay. You have never given expert testimony about a case involving teen mental health, correct?

A. Correct.

Q. Okay. You've never given expert testimony before about social media addiction, correct?

MR. PEREZ-MARQUES: Object to form.

A. Correct.

BY MR. DOWNING:

Q. You've never given expert testimony about harms from social media, correct?

A. I think that's correct.

MR. PEREZ-MARQUES: Object to form.

THE WITNESS: I apologize.

BY MR. DOWNING:

Q. Well, this may be the reason that counsel is objecting.

You do list on your report -- or, sorry, Appendix B, a case -- let me look here -- related to State of New Mexico v. Meta Platforms Inc. on page 2?

A. That's a totally fair point.

So when you were asking me those questions, I was not thinking of any of the cases in which Meta has been a defendant. That should be a modifier probably to all of the above questions.

Q. Okay. So then, just to make sure we have a clear record, other than the case involving State of New Mexico v. Meta Platforms, you've never given expert

testimony about child mental health, correct?

A. Well, in --

MR. PEREZ-MARQUES: Object to form.

A. And I don't mean to be disrespectful, but there's something about your question that bothers me to a certain extent, which is that's not really what I'm doing here either.

So what I'm doing here is I'm putting forward a rebuttal report regarding an economic damages analysis put forward by another expert.

So you're right in terms of the narrow implication of your question, but it's not as though I'm doing something different in connection with this case than what I've done in many other prior cases.

BY MR. DOWNING:

Q. I can appreciate that.

But my point -- my question was sort of a narrow one. Your counsel may choose to ask you questions at a later point about that topic.

But just then now to clarify

the record, other than the State of New Mexico v. Meta Platforms case, you have never given expert testimony about teen mental health; is that correct?

MR. PEREZ-MARQUES: Object to form, and asked and answered.

A. So -- and I take the point you want to perceive your question as narrow, but it's both narrow and broad. And I would say in my experience, you know, a question can also have a response that's taken out of context.

So I think the way that I answered it was designed to be as clear as I can about what I'm doing here, and I'm not trying to hide the ball on anybody and say that, you know, I've done something in prior cases that I've not.

My expertise is in economics and statistics, and that's the opinion that I've submitted here and the basis for it. And that's what I have done in many prior cases.

If we take the narrow aspect of your question, were the cases that I've

A. That's correct. I'm not offering an affirmative opinion in connection with this. What I'm describing is what's missing from Mr. Saba's analysis.

So the citation to the American Academy of Pediatrics is really saying something that should be straightforward, which is if you're calculating a metric for a litigation matter, that metric has to be something that's pertinent to the litigation.

And in particular, this particular metric is one that would encompass potentially problematic use, but potentially pro-social use, so the opposite, roughly, of what would be relevant for the litigation is my understanding.

And what I'm putting forward is not, for example, the kind of subtext of your question of what might be a survey of the literature. That's not what I'm saying.

I'm saying there's nothing like a defense of the metrics that he's put forward that Mr. Saba is engaged in. Just, he doesn't say anything about that.

Q. So you're not giving an opinion

in this case about what would be an appropriate metric to identify problematic use, right?

A. I would agree with that.

What I'm responding to is the economic damages calculation put forward by Mr. Saba. That's the only opinion that I've offered in connection with this matter.

Q. Okay. Can you look at paragraph 60.

A. Sure.

Q. The first sentence of paragraph 60 says: Second, Mr. Saba also does not establish that using -- strike that. Let me restart.

Paragraph 60 states: Second, Mr. Saba also does not establish that use exceeding the particular thresholds of time spent on Instagram or Facebook constitutes harm or represents excessive or addictive use of Instagram or Facebook.

Did I read that correctly?

A. I believe so.

Q. Okay. Dr. McCrary, you're not giving an opinion on what constitutes

excessive use, correct?

A. No. It's the same answer as I gave you a moment before. The opinion that I'm offering is a rebuttal opinion pertaining to the economic damages calculation put forward by Mr. Saba.

So I'm describing what's missing from his analysis. I'm not putting forward an affirmative analysis, and certainly not an analysis that could be thought of as perhaps medical in nature. That's not the nature of my expertise.

Q. Okay. And you're not giving an opinion about what constitutes addictive use, correct?

A. Well, again, it's the same point, which is what I've described is what's missing from Mr. Saba's analysis. So Mr. Saba doesn't point to how what he's measuring is connected to the challenged conduct.

He doesn't describe how it's connected to the adoption of at-issue features. He doesn't describe how it's connected to something like consumer harm.

So it's really the missing pieces, but I'm not putting forward anything that's an affirmative opinion or anything along those lines, that's correct.

Q. So, Dr. McCrary, you have not reviewed academic literature on what constitutes excessive use, correct?

A. No. I'm a rebuttal economist responding to an economic damages opinion, and so the work that I've done is staying in my lane as an expert with my own expertise and not taking on somebody else's role.

Q. Okay.

A. So in my role, all I'm doing is responding to Mr. Saba's economic damages analysis.

Q. And I realize you want to explain to me what you are doing. I'm asking sort of questions to make sure I understand what you're not doing. So if we can focus on that, that would help me.

Can you --

MR. PEREZ-MARQUES: I object to the instruction to the witness as to how to answer questions.

MR. DOWNING: Well, what I'm trying to do is make sure we're moving along in a reasonably -- I'll continue.

BY MR. DOWNING:

Q. Dr. McCrary, you have not reviewed academic literature on what constitutes addictive technology use, correct?

A. I don't detect a distinction between this question and the prior one, and it's the same answer.

Q. Okay.

A. Which is the work that's put forward by Mr. Saba doesn't do anything along those lines. He's putting forward a particular methodology. I'm putting forward a criticism of that particular methodology, staying in my lane as an economist. I'm not a medical doctor or something along those lines.

Q. And, Dr. McCrary, you have not reviewed any expert reports on what constitutes excessive or addictive technology use, correct?

A. That's correct. Earlier today you asked me about an appendix where I describe the expert reports that I reviewed, and those were limited to the expert reports of Mr. Saba.

Q. Okay. All right. Let's turn to paragraph 61 of your MDL rebuttal.

A. You said paragraph or page?

Q. Paragraph.

A. Paragraph, got it.

Q. That paragraph 61 starts out saying: Third, Mr. Saba's analysis suggests that every single instance where a teen exceeds an average time spent threshold is associated with harm.

Did I read that correctly?

A. I believe so.

Q. And you're not giving an affirmative opinion about whether teens experience harm each month that teens exceed a certain average time spent threshold, correct?

A. For the avoidance of any doubt, the phrasing that you just used of "affirmative opinion," I've described to you

several times. I'm not offering an affirmative opinion, and the opinion that I'm offering, I'm offering rebuttal testimony regarding an economic damages calculation, and that's it.

Q. Thank you.

Let's go to page 31. And page 31 of your MDL rebuttal contains Figure 1, correct?

A. That's correct.

Q. And Figure 1 is titled The Amount of Time Spent on Screens Has Not Increased Over Time Since the Alleged Conduct.

Correct?

A. That's correct.

Q. And then Figure 1 shows four individual figures for four states, correct?

A. That's correct.

Q. That's California, New York, Illinois and Pennsylvania, correct?

A. That's correct.

Q. The source of the data for these four figures is data from the Centers for Disease Control and Prevention, Youth

Risk Behavior Survey Data, correct?

A. That's correct.

Q. I'll call this the YRBS data. Does that make sense?

A. Sure. I do too.

Q. Okay. All right. If you can look at your Massachusetts rebuttal report.

(Interruption by the videographer.)

A. Sorry, you want me to look at the Massachusetts rebuttal report?

BY MR. DOWNING:

Q. The Massachusetts rebuttal report.

A. Okay.

Q. On page 29 of the Massachusetts rebuttal report, you have Figure 1 as well on page 29 of the Massachusetts rebuttal report?

A. That's correct.

Q. Okay. And this says: The Amount of Time Spent on Screens By Teens Nationally Has Not Increased Over Time Since the Alleged Conduct.

Did I read that correctly?

A. I believe you did, yes.

Q. So the source for Figure 1 of the MA rebuttal report is also the YRBS data, correct?

A. Yes, that's correct.

Q. Can you tell me in Figure 1 of the Massachusetts rebuttal why this is showing time spent by teens nationally rather than time spent by teens in Massachusetts?

A. I believe it pertains to the YRBS data. Give me one moment.

(Document review.)

A. You know, I'd have to go back and double-check to be sure. I believe it pertains to a feature of the YRBS data, but I'm not a hundred percent sure off the top of my head.

BY MR. DOWNING:

Q. Okay. Let me ask just a few questions about the YRBS data generally.

Did you review the underlying YRBS data in the course of preparing both of these expert rebuttal reports?

A. These and other. I think the first time I became familiar with the YRBS survey was probably around 2001 or something

like that, so quite some time ago.

Q. How was it in 2001 that you became familiar with the YRBS survey data?

A. It was at that time called something slightly different. I think it was called the BRFSS, but it's basically a survey that asks questions that are about behaviors in some instances, and I have a number of colleagues who study a variety of different things. I referee papers about a variety of different things.

There was a graduate student colleague of mine who I believe brought the survey to my attention for the first time around that time.

Q. Have you used YRBS data before in your scholarship?

A. I would say in my research activities, that's a clear yes. I think in the scholarship that I've authored, I don't think that's correct.

Q. Okay.

A. That is to say, I think in research activities, the answer is yes. I think in terms of published work of mine, I

think the answer is no.

Q. Okay. And you would agree with me that the YRBS data captures school-day usage, correct?

A. I think that might be true about some questions, and might differ actually across the survey. I can't tell you off of a memory test for sure. I'm not sure you're right, actually, but you sound like you're thinking of something specific --

Q. Okay.

A. -- then you can point me to whatever you're thinking of and I can see if that jogs my recollection.

Q. You have a note, it's in both reports, but let's, for the purposes of ease, go to page 32 of the MDL rebuttal. If you look at the note on page 32, about a quarter of the way down, you list questions that you considered. The questions you considered start with the phrase: On an average school day.

Does that refresh your recollection?

A. Yes. And I think that's almost

exactly what I was describing to you a second ago, that that might be how particular questions are phrased, but that wouldn't be about the YRBS in general as much as it may be about the way a particular question is posed to the survey respondent.

Q. Okay. So then in the note here on page 32 of your MDL rebuttal, you're providing the quoted language of the survey question that you used in the YRBS survey, right?

A. That's correct. So the quotation "On an average school day, how many hours do you watch TV" is how the question is phrased. There's probably more nuance to that in the questionnaire, but at a rough level, that's descriptive of how the question is posed to the respondent.

Q. Okay. So Figure 1 has different colored lines, correct?

A. That's correct.

Q. The red-colored line is entitled Average Screen Time on Computer/Personal Device, right?

A. That's correct.

Massachusetts rebuttal address the same topics generally, correct?

A. Yes. I think the phrasing you used earlier today was thematically the same, and I can easily agree with that.

Q. Okay. We can turn to the MDL rebuttal.

A. Okay.

Q. Paragraph 92 starts out with the following: You say: If the vast majority of teens experienced declining psychological health, one would expect to see a corroborating result when examining indicators of mental health among teens in UDAP states, such as consistently deteriorating mental health after the launch of the at-issue features of Facebook and Instagram across the mental health outcomes pointed to by plaintiffs, and in all UDAP states.

Did I read that correctly?

A. I believe so, yes.

Q. Okay. So you used the term "indicators of mental health among teens" in that sentence, correct?

A. Yes.

Q. How did you determine what indicators of mental health among teens to focus on?

A. The amended complaint. It's spelled out in footnote 151.

Q. Okay. So based on footnote 151, am I understanding correctly that what you did is you looked at the complaint to identify mental health concerns; is that correct?

A. That's correct. I looked at what was being alleged in the complaint and then looked at publicly available data to see whether there were proxies for those mental health measures, including things that might be at the edge of mental health, like, for example, sleeping and things like that.

So in other words, I tried to take what was alleged in the complaint and to line that up with available data that's collected by the US government.

Q. And how are you able to determine in the complaint whether you identified the appropriate mental health

concerns?

A. Well, it's exactly what I just described to you, which is I lined up the amended complaint with what's available and publicly available information on mental health and other measures, and that's basically the work that I did.

Q. Were there any mental health concerns in the complaint for which you were not able to line up public -- or publicly available data?

A. There might be, but I'm not thinking of any of those right now. It might be right that if you, for example, point me to some particular thing that's alleged in the amended complaint, it might be right that I don't have a measure of that.

What I tried to do, however, is simply to see, okay, these are the things that are alleged. What is it that is present with respect to publicly available information that goes to that point where the broader emphasis is really on what's phrased in paragraph 92 as looking for a corroborating result.

So Mr. Saba's counts are consistent with the vast majority of teens being harmed and being harmed repeatedly according to his metrics, if they are measures of that.

And if that's true, then you would expect to observe a corroborating result, so -- with respect to the measures that are available from publicly available data.

So what I was doing is trying to see whether, despite the fact that he hasn't done any work connecting those two concepts, the concept of what it is that he's measuring with measures of mental health harms, whether the available evidence is more consistent with that being so obvious that you don't need to look at it or more consistent with this is a glaring omission.

And what I have spelled out in the report is that it's the latter, which is to say if there's a relationship, it's not clear from publicly available data what that relationship might be, underscoring the need for Mr. Saba to explain how those things

might be connected.

Q. Okay. I think I still have a couple of questions about the process you use when you're reading through the complaint.

Am I correct that, as you read through the complaint and you saw language about teen mental health concerns, you interpreted whether that was a concern that you were going to address in your expert opinion?

A. Well, I'm not sure that I could agree with the exact way in which you phrased that, but I could certainly agree with the first part of what you said, which is -- take as an example, I commended to you footnote 151. If you look at paragraph 7 of the amended complaint, it says associated with depression, anxiety, insomnia. Those are three measures that I actually have information on from publicly available data.

But then it goes on to say interference with education and daily life. It's not as obvious actually what that corresponds to, so I don't, for example, have a measure that I've put forward that

corresponds to that, which is a more encompassing concept.

And also, when they say many other negative outcomes also for that, I don't think that there was an ability to draw a connection to what variable I was supposed to look at.

But again, what my analysis is doing is not looking at the complaint to see if it's right. That's not what I'm doing.

What I'm doing is, instead, is I'm examining the opinion that's been put forward by Mr. Saba that's supposed to be an economic damages calculation.

He's counting things that he says go to economic damages, but without drawing the connections between the challenged conduct, at-issue features or any harms that might be experienced associated with that.

And if it were true that his metrics actually were capturing something like harms to teens, since, according to those metrics, virtually all teens have been harmed and many of them have been harmed

repeatedly according to his metrics, you would expect to see a corroborating result in those measures.

But that's different, actually, than just assessing whether the complaint is right. That's more work that somebody in Mr. Saba's role might be expected to do, but not what I've done in my work as a rebuttal expert.

Q. And when you refer to the indicators of mental health, the indicators of mental health are what you're extracting from the publicly available health data; is that correct?

A. Well, if you look at this section of the report, all of the time series analyses that I put forward are drawing on publicly available data, that's correct.

Your question about process, though, was one where I answered you correctly that it was both looking at what was available in publicly available data and looking at what was alleged in the amended complaint.

For example, a second ago I

talked to you about paragraph 7. Paragraph 306 is about things like inattention and hyperactivity, which seems as though that maps to ADD and ADHD.

So those are things which, you're right, I looked at publicly available data to see the extent to which it was possible to measure those. It is possible to measure those in publicly available data, and that's the analysis that's contained in this portion of the report.

Q. So then, to understand your methodology, is it correct that you looked at the complaint to identify teen mental health concerns and then you looked for teen mental health data that addressed those mental health concerns?

A. Well, just now you used a word that's very important, which was different than your prior questions. You used the word "methodology." And I would say my methodology actually started by looking at Mr. Saba's work, and conceptually, I identified quickly part of what was missing, which is the connection between at-issue

conduct, or better said, challenged conduct, at-issue features, the things that he's measuring and any concept of harm in terms of mental health measures.

So after having identified what was missing, the next part of my process is as you intimated, which is, well, let me see. The things that are alleged are that the things that Mr. Saba might be measuring might be connected up to things that are discussed in the amended complaint.

That's really the work that I did, and I hope that's responsive.

Q. No, I understand your referencing the term "methodology."

Is this methodology something you've done before?

A. Well, in general, as an economist, I've worked on a number of cases where I was putting forward a damages analysis or examining a damages analysis put forward by somebody else.

And in those contexts, I'm aware of the way that that unfolds as a matter of methodology.

So it's an economic methodology to put forward a damages analysis, and that's what Mr. Saba purports to have done. But there's pieces that are missing, work that he's not done that he ought to have done that -- and the handbook that he, himself, cites to says has to be done by the -- by the expert offering the economic damages.

Q. Let's move to part B of Section VII. Part B of Section VII, paragraph 99.

Paragraph 99 starts with the following: In this section, I analyze mental health indicators among teens in UDAP states using data from the National Survey of Children's Health, NSCH, Mental Health Client-Level Data, MH-CLD, from the United States Substance Use and Mental Health Services Administration, SMAHSA --

A. SAMHSA.

Q. -- SAMHSA, and YRBS.

Did I read that correctly?

A. You did, yes.

Q. So you had three sources of determining mental health indicators, NSCH,

SAMHSA and YRBS, correct?

A. That's correct.

Q. Okay. You mentioned before that you had used YRBS before.

Have you ever used data from the NSCH database?

A. Yes.

Q. Okay. In what context?

A. General research context.

Q. Can you give me a little bit more of an understanding of what you mean by general research?

A. Research activities as an economist.

Q. Okay. SAMHSA, have you used SAMHSA previously?

A. Yes.

Q. Okay. Is your answer the same --

A. Yes.

Q. -- as far as the context in which you've used it?

A. Yes.

Q. Now, the NSCH data is survey data, correct?

A. That's correct.

Q. Okay. Do you know if the NSCH data surveyed parents or teens -- or strike that. Let me restate that.

Do you know if the NSCH data is a survey of teens or parents of teens?

A. I believe off a memory test that it's a survey of parents of teens. It may be right that there's additionally modules that are put directly to the children, but I think it's right that it is instead an answer from the parents, at least for many of the measures that I use.

The report actually may have enough detail that it might refresh my recollection as we go, but I think that's right.

Q. Okay.

A. Yeah, actually, I think the way that I phrased it just now, my answer is exactly right, which is that it's a household survey generally. There are questions that are put to parents of teens and -- but the reference of the question is actually about the teen and their own experience. But it's

A. That's correct. If you look at paragraph 93, it's obviously on the heels of paragraph 92, that's describing that if it was right that the measures that Mr. Saba is counting are measures that are indicative of something like psychological harm, then you would expect for measures of psychological harm to show that there were, for example, increases associated with adoption of at-issue features or things along those lines.

So it's really about the -- about what's missing from Mr. Saba's analysis.

You're right that the analysis I'm putting forward is limited to the three datasets that I've put forward. I think it's right that it may be possible that there's other datasets as well, but sitting here right now, I'm not aware of any.

Q. So you aren't saying that there is no other available public data sources on teen mental health, correct?

A. That's correct. That's a bridge too far. It's possible that there

are, but sitting here right now, if there are, I'm not aware of them.

Q. Yeah.

And in Section VII, when you're referring to teen mental health data, you're not referring to academic articles, correct?

A. I'm not sure I follow.

Q. Well, your analysis of teen mental health data is analysis just of the three databases and not a meta-analysis of the literature on teen mental health, right?

A. I think it's plain that Section VII is not doing a meta-analysis of the academic literature. That being said, the three datasets that I'm describing are widely used in the academic literature, which is why your question confused me a little bit.

Q. Okay. On page 57, you discuss the NSCH Mental Health Data, correct?

A. That's correct.

Q. Okay. And you state at the end of paragraph 103 the following:

You say: My analysis of the NSCH data presented in this section supports

my conclusions that, (i) there are not consistent, widespread increases in mental health challenges over time, (ii) changes in mental health outcomes vary among UDAP states, and (iii) increases in mental health challenges do not appear to consistently coincide with the introduction of the features I describe in Section V.A that the Court specifically indicated are still at issue.

Did I read that correctly?

A. I believe you did.

Q. Okay. So you are providing what is essentially three subconclusions here in this paragraph, correct?

A. Sure. I mean, I would characterize those as observations or conclusions interchangeably.

Q. Okay. Sorry, I'm just going to jump ahead to paragraph 112. I can give you a page number in a second here. Page 75, paragraph 112.

A. Sorry, we're still talking about the MDL report?

Q. Yes.

Instagram or Facebook are limited to, for example, one state or a handful of states. It's obviously something that many people throughout the United States might use.

So if, for example, it was right that you looked at a given state and that state might be consistent with an increase that was consistent for a particular outcome that was a negative mental health measure, the next question that you would have is, well, wait, that isn't the only state that has many people using Instagram and Facebook. Is it also true, for example, that the same pattern that you see there is present in other states where people also would use Instagram and Facebook.

So when there is prevalence generally throughout the nation with respect to something, if that something is to be connected to measures of mental health challenges, you'd expect for it to be widespread and consistent, just as the (i) that you were asking me about says.

Q. Okay. Does your concept of something being widespread have to do with

the percentage of teens who are experiencing a mental health challenge?

A. No. It has to do instead with widespread across states. That's what I was trying to communicate. So if you will, guardrails against something like cherry-picking.

So one ought not look in, for example, the MDL matter at one state's evidence in isolation; you should look at the totality of the evidence.

I've tried to put that forward in my report. For space reasons, I have highlighted the four largest states in the main text, but that's why the appendices have all of the available evidence for all of the states that are MDL states.

Q. So in your view, if a metric increased in one state more so than it increased in another state, would that mean that you would not view that as a widespread increase?

A. Well, I --

MR. PEREZ-MARQUES: Object to form.

THE WITNESS: Apologies.

A. I'm not going to speculate about what I might conclude in some other factual circumstance. Just looking at the evidence in front of me, I think it's correct that there are a variety of measures that I've looked at.

What those measures point to is that there are not consistent increases over time, and to the extent that there might be one that could be consistent with that, it's not true that it's widespread across the MDL states.

But that's all that I'm doing, is I'm making that observation. Why am I making that observation? Is to underscore, again, what is missing from Mr. Saba's analysis. It's the connection between what he's measuring and the concept of the challenged conduct, the at-issue features and the mental health measures.

There's none of that connection in his work. And again, he disavows the need to do that. I don't think that's right.

If his measures are actually to

be taken seriously as measures of something like psychological harm, then you would expect for there to be widespread changes with respect to mental health measures captured by the US government in terms of surveys and administrative data that it administers. That's just not what the available evidence indicates.

That's not an affirmative opinion about that. That's just saying this is exactly why Mr. Saba needs to do this work. There's a series of puzzles actually that you confront as soon as you observe his opinion, because it doesn't seem to grapple with the evidence from publicly available data, and that's why, in my mind, Mr. Saba has not done the work that he needs to to substantiate the bases for his conclusions that the things he measures are actually things that are useful.

BY MR. DOWNING:

Q. You also, in (i), use the word "mental health challenges."

Do you see that?

A. I do.

Q. That's not a term specifically from the NSCH survey, right?

A. You know, I couldn't tell you whether it's entirely absent from the NSCH survey, but you're right that it's my phrasing --

Q. Okay.

A. -- of a question that's phrased differently as to whether or not the child needed to see a mental health professional.

So if you look, for example, in Figure 6, you're right that the heading of that does use the phraseology "mental health challenges," but the question involved is simply about whether or not the child saw a mental health professional.

Q. Okay. Well, I guess the same thing with the SAMHSA data. The SAMHSA data doesn't use the terminology "mental health challenges" in its survey, right?

MR. PEREZ-MARQUES: Object to form.

A. I can't confirm that for you. That might be true, but I don't think there's anything confusing or misleading about the

So when you look at data and there's been, for example, a change to the way the question is phrased, you would usually take note of that.

For example, earlier you asked me about measures that I put forward for the years leading up to 2021 and then 2021, and I gave them different color codings to emphasize the way that the question was asked was different.

And in connection with the SAMHSA data, this is a determination by a medical professional who is using, however, the DSM as a contextual document describing what's the basis for a clinical determination.

So, of course, that might change the way in which the measures were comprised. The way that the footnote is described is exactly right.

It says: I note that the DSM, which determines, you know, what constitutes diagnosis for different disorders, was revised in 2013 and 2022. And I go on to describe, you know, the nature of those

changes just for broader context.

But I don't think it's right that the presence or absence changes an opinion that I'm offering. At the highest level of the opinions that I'm offering is that Mr. Saba has not done the work that he's supposed to do in connection with an economic damages calculation.

This is really more providing information for the Court regarding what the measures that I'm putting forward admit in terms of interpretations and what they don't admit in terms of interpretations.

Q. In the SAMHSA data, how did you determine whether a particular diagnosis was one that was related to the health outcomes that you cared about?

A. Well, it's, I think, similar to the process that was followed in connection with the NSCH, which is I reviewed the amended complaint and tried to understand whether there was a public health -- or a publicly available dataset that allowed me to measure that.

For example, the SAMHSA data

does allow me to actually put forward a measure of things like ADD, ADHD, and anxiety, and that's part of what I've done.

Q. When you're reviewing the SAMHSA data, are you able to determine whether a particular diagnosis fits a particular mental health outcome that you're focusing on?

I guess I can be more specific.

A. That might be helpful.

Q. In the SAMHSA data, you looked at mental health outcomes relating to depression, correct?

A. That's correct.

Q. Okay. How did you know whether a diagnosis in SAMHSA was one that was related to depression?

A. Because there's a field for that that says what the -- what the clinical determination was.

Q. Okay. And the field -- what term does the field use?

A. I don't recall off the top of my head.

Q. Okay. But you relied on the

field that was in the SAMHSA data?

A. That's correct. I'm not doing something that is interpretive or something like that regarding the underlying data. I'm just taking the data at face value.

Q. All right. Figure 14 on page 77 of the MDL report, that's entitled Share of Teens Who Accessed Mental Health Services in the Four Largest UDAP States Diagnosed with Depression Over Time.

Correct?

A. That's correct.

Q. Okay. And do you know whether the changes to the DSM in 2013 and 2022 had any change on the criteria for diagnosing depression?

A. I believe they may have. I would have to go back to be sure, but to be clear, the change in 2013 wouldn't have any implication for this chart, that being the first year, and the change in '22 would be towards the very tail end. The chart, after all, ends in 2023.

Just a quick examination of the trends around 2022 indicates that if it does

page 82.

A. I'm there.

Q. Okay. I'm correct that YRBS is a survey of ninth- to twelfth-grade students in private and public schools?

A. That's correct.

Q. Do you know approximately how many total questions were included in the YRBS survey?

A. Lots, but I couldn't tell you the exact quantum, not off the top of my head.

Q. Okay. And you didn't analyze all the -- you didn't analyze all the survey questions in the YRBS data, correct?

A. No. There are many questions that are included in YRBS that are not part of my analysis. For example, there's questions about the number of people in the household and stuff like that.

So the analysis of YRBS that I did was trying to connect up what might have been the connection between the things that Mr. Saba is measuring and the claimed harms, and connecting that up is what it is that is

measured in YRBS.

But there's far more variables in YRBS than are relevant to that remit.

Q. When you say the claimed harms, you're referring to harms claimed in the complaint; is that correct?

A. Correct. The same rough description of the methodology that you and I have talked about before where I would look at the amended complaint and then try to see whether the things that are spoken of there are measured in publicly available data.

Q. Okay. So in paragraph 116, you -- this is a third sentence. You say: I analyze the percent of teens who report experiencing feeling of sadness or hopelessness, suicidal behaviors and cyberbullying.

Do you see that?

A. I do.

Q. Okay. And why did you select these three categories of survey data from the YRBS?

A. It's the same answer to your prior question and several versions of that

question previously, which is the connection between what's measured in YRBS and what I take it you're arguing in the complaint.

Q. You said you had previously reviewed YRBS data; is that correct?

A. That's correct.

Q. You previously reviewed questions regarding feelings of sadness or hopelessness, suicidal behavior and bullying?

A. Suicidal behaviors for sure. Cyberbullying, I don't believe so, and feelings of sadness or hopelessness, I actually don't recall.

Suicidal behavior stands out in my memory, and the absence of cyberbullying stands out in my memory.

Q. Okay.

A. But other than that, I'm not sure.

Q. In the instance where you reviewed YRBS for suicidal behavior, what was the context for that research?

A. At one point, I had a graduate student who was studying trends with respect to suicide.

Q. Did it have anything to do with social media?

A. No, it didn't. That would have been around -- that was in my Michigan days. I believe that would have been 2007, so quite a bit before this time period.

Q. All right. Let's go to paragraph 117. In the first sentence you say: The data presented in Figure 17 below show that while the rate of reported feelings of sadness and hopelessness among teens reported by the YRBS have increased over time in the UDAP states relative to the first year for which the data are available, changes in mental health outcomes vary across UDAP states.

Do you see that?

A. I do.

Q. Is it your opinion that data showing an increase in teens reporting sadness and hopelessness would be evidence of harm to teens in this case?

A. Sorry?

MR. PEREZ-MARQUES: Object to form.

If you look at other investigations you might want to do, there's a question as to whether the two points in time are measuring the same thing.

For example, if you look at what he's doing implicitly, he's extrapolating the BEEF survey, which is a way of saying the estimate that you get from the BEEF survey is the same throughout time.

And a survey taken at a different point in time is something where it might have counterpoint on that. It might give you a different quantum, and that might affect the particulars of the estimate that's being put forward.

As I've reviewed the work that he did in his original report and in his rebuttal report, he's not subjecting that to statistical scrutiny.

Q. Okay. Just one last point. One of the two categories of data -- shifting topics.

One of the categories of data you analyzed in your report is public health data. Do you recall that?

A. I do.

Q. And is analysis of public health data something with which you have expertise?

A. Yes. So in economics, we basically put forward a set of tools that actually can be used to study many different phenomenon. Some of those phenomenon are, of course, things that sound like the natural domain of economics, things like GDP, perhaps, or unemployment rates.

But economists also apply that same set of tools to study other phenomenon, including phenomenon of public health. I myself have published on public health measures.

For example, infant mortality is undoubtedly a metric of public health. That's something where I've analyzed impact of certain social phenomenon on infant mortality measures.

Also the rate at which, for example, pregnant women engage in smoking or consumption of alcohol during pregnancy by self-report as on birth certificate data.

That's, for example, contained in my 2011 American Economic Review paper that I commented to the questioner earlier in today's deposition.

So I would say, more broadly, at conference or in my activities as a referee, I routinely would examine analyses put forward of public health data, and that's because that's part of what economists do in some regards with respect to their research activities.

MR. PEREZ-MARQUES: Excellent. Thank you. Nothing further from me.

MR. DOWNING: We have no further questions. Thank you, Dr. McCrary.

THE WITNESS: Thank you.

THE VIDEOGRAPHER: Off the record, 4:26.

(Time noted: 4:26 PM CST)

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CERTIFICATE

I, MICHAEL E. MILLER, Fellow of the Academy of Professional Reporters, Registered Diplomate Reporter, Certified Realtime Reporter, Certified Court Reporter and Notary Public, do hereby certify that prior to the commencement of the examination, JUSTIN McCRARY was duly sworn by me to testify to the truth, the whole truth and nothing but the truth.

I DO FURTHER CERTIFY that the foregoing is a verbatim transcript of the testimony as taken stenographically by and before me at the time, place and on the date hereinbefore set forth, to the best of my ability.

I DO FURTHER CERTIFY that pursuant to FRCP Rule 30, signature of the witness was requested by the witness or other party before the conclusion of the deposition.

I DO FURTHER CERTIFY that I am neither a relative nor employee nor attorney nor counsel of any of the parties to this action, and that I am neither a relative nor employee of such attorney or counsel, and that I am not financially interested in the action.

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Dated: March 6, 2026