NATIONAL QUALITY FORUM

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SCIENTIFIC METHODS PANEL

SPRING 2020 MEETING

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TUESDAY

APRIL 1, 2020

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The Panel met via teleconference, at 9:00 a.m., Dave Cella and Dave Nerenz, Co-Chairs, presiding. **PRESENT:**

DAVE CELLA, PhD, Co-Chair DAVE NERENZ, PhD, Co-Chair J. MATT AUSTIN, PhD BIJAN BORAH, MSc, PhD JOHN BOTT, MBA, MSSW DANIEL DEUTSCHER, PT, PhD LACY FABIAN, PhD MARYBETH FARQUHAR, PhD, MSN, RN JEFFREY GEPPERT, EdM, JD LAURENT GLANCE, MD JOSEPH HYDER, MD SHERRIE KAPLAN, PhD, MPH JOSEPH KUNISCH, PhD, RN-BC, CPHQ PAUL KURLANSKY, MD ZHENQIU LIN, PhD JACK NEEDLEMAN, PhD EUGENE NUCCIO, PhD SEAN O'BRIEN, PhD JENNIFER PERLOFF, PhD PATRICK ROMANO, MD, MPH SAM SIMON, PhD ALEX SOX-HARRIS, PhD, MS MICHAEL STOTO, PhD CHRISTIE TEIGLAND, PhD RONALD WALTERS, MD, MBA, MHA, MS TERRI WARHOLAK, PhD, RPh, CPHQ, FAPhA ERIC WEINHANDL, PhD, MS

SUSAN WHITE, PhD, RHIA, CHDA

NQF STAFF: SHANTANU AGRAWAL, MD, MPhil, President and CEO ASHLIE WILBON, MS, MPH, FNP-C SAM STOLPE, PharmD, MPH MIKE DIVECCHIA, PMP HANNAH INGBER, MPH CAITLIN FLOUTON, MS

ALSO PRESENT: KATIE BALESTRACCI, Yale CORE LISA BERGERSEN, Boston Children's Hospital LISA SUTER, Yale CORE

C-O-N-T-E-N-T-S

Welcome, Introductions, and Disclosures of Interest
Meeting Overview, Updates, and Process Overview
Reliability Testing Thresholds
Reliability Testing Methodologies and Interpretation
Relationship Between Reliability and Validity Testing
Guidance on Social Risk Adjustment 147
Considerations for Evaluating Cost Measures 204
Opportunity for Public Comment
Measure Evaluation
Patient Experience and Function Standing Committee
Cardiovascular Standing Committee 304
Opportunity for Public Comment
Day 1 Wrap Up, Debrief, Preview of
Day 2 Discussion
Adjourn

I	
1	P-R-O-C-E-E-D-I-N-G-S
2	(9:06 a.m.)
3	MS. WILBON: Good morning, everyone.
4	This is Ashlie Wilbon, the technical expert from
5	NQF. I want to thank everyone for joining us
6	today. This is NQF Scientific Methods Panel
7	Spring 2020 Evaluation Meeting.
8	We're certainly happy to have our
9	Methods Panel members on as well as those of you
10	who have joined and members of the public and our
11	developers given these trying and special
12	circumstances we're all living through at this
13	point.
14	So, we're happy to have you and we are
15	looking forward to an interesting discussion
16	today despite things that may be going on around
17	us. Again, welcome.
18	I did want to hand it over to our CEO
19	here at NQF, Shantanu Agrawal, to give us some
20	welcoming remarks, Shantanu.
21	MR. AGRAWAL: Thanks, Ashlie. Can you
22	hear me?

1	MS. WILBON: Yes, we can hear you.
2	MR. AGRAWAL: Excellent. I'll just do
3	a quick welcome very unique and trying times.
4	And so the fact that this committee would take
5	the time to be part of this meeting and, more
6	than that, be part of the work, we very much
7	appreciate.
8	I think we are trying to move forward
9	on our endorsement work as best as possible. We
10	will likely be giving some guidance to measure
11	developers and giving them some leeway in the
12	coming weeks in order to accommodate some of the
13	bandwidth constraints that developers and others
14	are feeling right now.
15	But again, we've gotten a host of
16	measures for this endorsement cycle which I think
17	is a great show of support. And just a great
18	statement on the part of our stakeholders.
19	We internally have reviewed the agenda
20	for today and there are a host of very
21	interesting, I think, measurement issues. And so
22	I think you'll have a really robust dialogue

throughout the day.

2	And I think you'll be able to provide
3	a lot of guidance and recommendations back to us
4	so that we ensure that our approach to measure
5	endorsement remains rigorous and we are tackling
6	some of these new issues as they come up.
7	So, again thank you very much. I want
8	to thank all of you for attending and want to
9	thank the NQF staff as well. They have really
10	done yeoman's work to create a great agenda even
11	in challenging times.
12	So thank you, Ashlie and team, and
13	thank you all for attending. I'll turn it back
14	over to Ashlie.
15	MS. WILBON: Thank you, Shantanu. And
16	I did want to see is Kathleen, are you there?
17	Kathleen Giblin is our acting senior vice
18	president of quality measurement.
19	I wanted to check in to see if you
20	would like to say any words or if you're there.
21	If not, we'll give an opportunity to our co-
22	chairs to provide some welcoming remarks and then

1	we'll get started here very shortly.
2	Okay. I don't think Kathleen is on.
3	So, Dave and Dave, would you like to give some
4	opening remarks?
5	CHAIR CELLA: This is, excuse me, this
6	is Dave Cella. Good morning, everyone. Thanks
7	for attending.
8	We have a lot scheduled to talk about
9	and I won't delay any further so that we can be
10	as efficient as possible and get right to some of
11	the meat of the meeting. Thanks.
12	CHAIR NERENZ: Yes, Dave Nerenz. I'll
13	echo that. Really tough time for folks and
14	particularly those who are active clinicians, who
15	are right on the front lines of what's going on
16	around us.
17	Thanks for your ability to spend some
18	time with us. So, without further ado, let's get
19	to it.
20	MS. WILBON: Thank you. Thank you
21	both. And just a couple of quick meeting and
22	webinar reminders. You can see from our agenda

1 today we do have -- we'll be meeting in about 2 two-hour blocks with a couple one-hour breaks. We wanted to give folks sufficient 3 4 time to be able to grab a bite to eat, stretch 5 your legs and do other -- make sure you can check in with your other obligations throughout the 6 course of the day. 7 8 We do understand that you guys have a 9 lot of other things going on around you. So, if you need to step away outside of a break, please 10 feel free to do so. 11 12 We do just ask that if you are 13 stepping away, if you try to be present during 14 our measure discussions, particularly if your subgroup is up for discussion, then we ask that 15 16 you try to attend during those times so that we can make sure that we are able to maintain a 17 18 voting quorum for those measures. 19 And please feel free to use the chat 20 feature in the webinar. Our team is on and will 21 be able to provide any support you need. 22 We'll do our best to mitigate any

1 technical issues you might have in interacting 2 with us today. And we found the chat box very 3 useful to communicate during meetings. So please 4 feel free to use that.

5 As we go, since we're not sitting in 6 a room together and we don't have our table 7 tents, our proxy for that via the webinar is the 8 raise your hand feature. You each should be able 9 to raise your hand if you would like to speak at 10 any point during the discussion.

11 NQF staff and the co-chairs will be 12 watching those indicators to see who would like 13 to raise their hand and we'll do our best to call 14 on folks in a timely and orderly way. So, we'll 15 try to catch people in order of when they raise 16 their hand to make sure that everyone has an 17 opportunity to speak.

And if we're not catching you, please feel free to send us a chat or kind of summarize your comment in the chat and we'll make sure to interject that comment so that we can call on you accordingly.

We are transcribing the discussion
today similar to how we would do for an in person
meeting. We do have a court reporter who is
dialed in so that he can get an accurate
transcription and recording of today's
discussions.
So we do have a couple of asks in
order to make sure that goes smoothly.
Particularly if you're a presenter, if you could,
and that would be essentially anyone who is a
member of the Methods Panel, if you could
remember to keep your line muted on your phone so
that we don't get the background noise and
echoing during the discussion that allows him,
the transcriptionist to hear the speaking clearly
and make sure that he's able to get a clear
recording.
We will also ask that if you can
remember to be sure to introduce yourself as
you're speaking. Again, it helps him keep track
of who is making which remarks.
You may find us interrupting if we

don't know who is speaking to make sure that we 1 2 have a good idea of who is contributing to the discussion. One more note that we were given as 3 a reminder so that we can make sure that the line 4 5 is as clear as possible, if you are able to dial 6 in and use a set of headphones or a headset of some sort to speak rather than having on 7 8 speakerphone, I think that does also help with 9 background noise and the clarity of the sound. So, if possible and you're able to do 10 11 that please do. And again, we'll be doing our best to mitigate any technical issues as we go 12 13 along. I think everyone is familiar with our 14 team at this point. I think we've all sent 15 16 enough emails at this point that everyone is 17 pretty familiar. 18 But I did want to just take an 19 opportunity to recognize my team. We've all 20 worked really hard. 21 They, in particular, have worked 22 really hard to pull this together and transition

1 and pivot from an in-person meeting to conducting 2 the meeting over the web and they've done a really great job at being flexible and 3 accommodating for folks. 4 5 So, thanks to the team. I did also 6 want to just recognize Sam Stolpe, who I think 7 you all met last cycle. He is a senior director 8 here. 9 He will be my backup today in case anything comes up and he'll be helping with some 10 of the measure discussion later on this 11 12 afternoon. I did want to just offer an 13 14 opportunity for each of the team members to do a 15 brief introduction and to say hello to everyone 16 this morning. 17 Mike, are you there? You want to say 18 hello? 19 Hi. Good morning, MR. DIVECCHIA: This is Mike DiVecchia and I am the 20 everybody. 21 project manager for the SMP. And I'm looking 22 forward to the next couple of days.

1	MS. INGBER: Good morning, everyone.
2	This is Hannah Ingber. I'm also very excited to
3	hear the discussion. Thank you all for joining
4	us.
5	MS. FLOUTON: Good morning. This is
6	Caitlin Flouton. I am a new analyst here. I am
7	available in the chat and in email. If you need
8	any help, feel free to reach out and thanks for
9	joining us.
10	MS. WILBON: Thanks, team. So, at
11	this point in time we'll get a sense of who from
12	the Panel is on the line. We will be combining
13	the roll call with our disclosure of interests.
14	If you recall, any time we do measure
15	review, we will need to do a disclosure, an oral
16	public disclosure of interest. And so bear with
17	me.
18	Some of this process is scripted and
19	it will be very familiar to you. But it is
20	important that we do this and make sure that we
21	have any oral disclosures that are needed.
22	I will point out that I know a couple

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of our West Coast Panel Members may be dialing in
a little bit later and we'll just make sure to
follow up with them as we get a little deeper
into the discussion.
So, we'll start with our co-chairs.
I think they are both on at this point. Dave
Nerenz.
CHAIR NERENZ: Good morning. Dave
Nerenz here. No conflicts to disclose.
MS. WILBON: Apologies, Dave. Sorry,
I should read my little script here. So, you
each received a disclosure of interest form from
us before you as you were named to the Panel.
And it asked you about some general
professional activities. And then we also
provided you with a measure-specific disclosure
of interest.
It's specific to the measures we
received and will be under review for this cycle.
So, in the interest of transparency today we're
going to ask you to orally disclose any
information you provided that you believe is

relevant to the discussions today and the matters 1 2 that will be under review. We're specifically interested in 3 grants research, consulting, measure development 4 activities related to the work today. 5 There are seven measures for review today on the agenda. 6 7 So, we'll be specifically -- looking 8 to specifically hear any conflicts related to 9 And again, most of you have heard this those. before. But just a couple reminders. 10 11 You sit on this group as an individual 12 and you do not represent the interests of your 13 employer or anyone who may have nominated you for the Panel. We're interested in disclosures of 14 both paid and unpaid activities relevant to the 15 16 work today. 17 And just because you disclose does not 18 mean you have a conflict of interest and again, 19 the oral disclosures are in the spirit of 20 openness and transparency. 21 And just another brief reminder that if at any point you believe that you may have a 22

1 conflict of interest or someone else on the Panel 2 may have a conflict we ask that you let staff know so that we can address it in as real time as 3 4 possible or as soon as possible. And at this time we'll jump back in. 5 Apologies for that. Dave Cella? 6 7 CHAIR CELLA: Good morning, again. 8 This is Dave Cella. I am an unpaid member of a board of directors of the PROMIS Health 9 Organization which is a non-profit foundation 10 11 that supports PROMIS. 12 And PROMIS will come up in one of the 13 discussions today or tomorrow. 14 MS. WILBON: Thanks, Dave. Matt 15 Austin? 16 MEMBER AUSTIN: Yes, good morning. Ι have no disclosures to offer related to this ---17 18 this morning. 19 MS. WILBON: Thanks, Matt. Bijan Borah? 20 21 MEMBER BORAH: Hi, good morning. Ι 22 have nothing to disclose relating to the measures

1	we will be discussing today.
2	MS. WILBON: Thank you, Bijan. John
3	Bott, are you there?
4	MEMBER BOTT: Yes, hello. Good
5	morning. John Bott, I have no disclosures of
6	interest related to the work of the Panel. Thank
7	you.
8	MS. WILBON: Thank you, John. Daniel
9	Deutscher?
10	MEMBER DEUTSCHER: Yes, hello. I have
11	no conflicts or disclosures related to any of the
12	measures submitted during this cycle, thanks.
13	MS. WILBON: Thank you, Daniel. And
14	I just want to recognize Daniel who is calling in
15	from Israel, I believe. So, thank you again for
16	your engagement. I appreciate that. Lacy
17	Fabian?
18	MEMBER FABIAN: Good morning. I have
19	nothing additional than what was disclosed on the
20	forms for the post-acute care measures. Thank
21	you.
22	MS. WILBON: Thank you. Marybeth

1 Farquhar? 2 MEMBER FARQUHAR: Good morning. This is Marybeth Farquhar. I have nothing to disclose 3 with relation to the measures. 4 5 MS. WILBON: Jerry, I'm sorry, Jeffrey 6 Geppert? 7 MEMBER GEPPERT: Hi, good morning. 8 Nothing to disclose for today. 9 MS. WILBON: Thanks, Jeff. Larry 10 Glance? Okay, I think Larry is --11 MEMBER GLANCE: Can you hear me now? 12 CHAIR CELLA: Yes. 13 MS. WILBON: Hi, Larry, yes. 14 MEMBER GLANCE: Hi, good morning. Sorry about that. I was muted. I don't have any 15 16 additional things to disclose, thank you. 17 MS. WILBON: Okay, great. Thank you. 18 Joseph Hyder? Joe, are you there? Okay, Sherrie 19 Kaplan? 20 MEMBER KAPLAN: Hi, I'm a consultant 21 to the AHRQ-funded Shared Decision Making 22 Measures Development group. But that's not

relevant to the measures today. 1 2 And the PCORI, I have I -- I am a PI on a PCORI-funded child-reported -- patient-3 4 reported outcome, Type I diabetes, but also not 5 relevant for measures today. Thank you, Sherrie. 6 MS. WILBON: Joe 7 Kunisch? 8 Hi, good morning. MEMBER KUNISCH: 9 This is Joe Kunisch and I have no conflicts of 10 interest to report. 11 MS. WILBON: Thank you. Paul 12 Kurlansky? I think Paul might have been having 13 some trouble getting in. Paul, are you there? 14 Maybe on mute. PARTICIPANT: I know he said that he 15 16 could not make both days. This may have been the 17 day he can't make. 18 MS. WILBON: Yes. I think we had some 19 communication from him this morning. He was 20 trying to get -- well, we'll come back to Paul. 21 Zhenqiu Liu? 22 MEMBER LIU: Yes, hi. I'm involved

1 with two measures we discuss today and tomorrow. 2 One is 3559. One is 2539. Thank you, Zhenqiu, 3 MS. WILBON: 4 appreciate that. Jack Needleman, are you there? 5 MEMBER NEEDLEMAN: Good morning. Nothing to disclose. 6 7 MS. WILBON: Thanks. And Jack is also 8 joining us from the West Coast so thanks for 9 dialing in early, Jack. We appreciate that. Gene Nuccio? 10 11 MEMBER NUCCIO: Hi, yes. Hi, no 12 disclosures on any of the measures today, thank 13 you. 14 Thanks, Gene. Sean MS. WILBON: 15 O'Brien? Jen Perloff? 16 MEMBER PERLOFF: Hi. No conflicts of 17 interest. 18 MS. WILBON: Thank you. Patrick 19 I know Patrick is one of our West Coast Romano? 20 folks so he may be dialing in a little bit later. 21 Sam Simon? 22 MEMBER SIMON: Good morning.

Mathematica is a measure developer and we have a 1 2 contract with CMS to develop a measure that is very similar to 3559. 3 It's basically the clinician level 4 analog to 3559. So, that's the only thing I have 5 to disclose. 6 7 MS. WILBON: Thank you, Sam. Alex 8 Sox-Harris? 9 MEMBER SOX-HARRIS: Good morning. I'm an unpaid workgroup member for the American 10 Academy of Orthopedic Surgery for some of their 11 12 measure development efforts. But nothing related 13 to the measures today. 14 MS. WILBON: Okay, thank you. Michael 15 Stoto? 16 MEMBER STOTO: Good morning, everyone. 17 I have nothing to disclose for today's meeting or 18 tomorrow's. 19 MS. WILBON: Thank you. Christie 20 Teigland? 21 MEMBER TEIGLAND: Hi, good morning. 22 And I also have nothing to disclose related to

1 the measures we'll be discussing over these two 2 days. Thank you. Thank you. Ron Walters? 3 MS. WILBON: Good morning. 4 MEMBER WALTERS: I have 5 nothing to disclose relevant to the discussion of this committee. 6 7 MS. WILBON: Thank you. Terri 8 Warholak? 9 MEMBER WARHOLAK: Good morning. Ι have nothing to disclose related to the measures 10 11 today. And as you will hear, there's a little 12 background noise but I'm actually in my 13 apartment. 14 So, I'm going to try to keep myself muted as much as possible. 15 16 MS. WILBON: Okay. Thanks, Terri, appreciate that. Eric Weinhandl? 17 18 MEMBER WEINHANDL: Good morning. This 19 I am an employee of Fresenius Medical is Eric. Care North America. 20 21 It's a supplier of dialysis services and products and I have no conflicts of interest 22

with respect to the measure development. 1 One of 2 the measures being discussed tomorrow relates to emergency department readmissions for dialysis 3 4 facility evaluation. So, my employer is 5 certainly subject to that measure. Okay, thank you. 6 MS. WILBON: Susan White? 7 I believe Susan let us know she probably 8 would not be able to attend. But just checking 9 in, in case. Susan, are you there? 10 Okay, she said she may be able to pop 11 in throughout the two days. So, thank you 12 everyone for that. As we get into the measure review later on this afternoon we'll make sure 13 14 that those who speak are identified. For those of you that are on the 15 16 Panel, you'll note on the annotated agenda we 17 have noted the conflicts that we've noted for 18 each of the measures. So please be sure to 19 review that, and if you are -- have been 20 identified as someone who should be recused, 21 please note that you should be refraining from discussion and voting on the measure. 22 So, thank

1 you again for that.

2	Just a quick review of our agenda
3	today. We're going to go through some evaluation
4	updates, a process overview, some evaluation
5	guidance discussion which is designed as the
6	emailed you guys later last week to really give
7	the committee or give the Panel an opportunity to
8	discuss some of the overarching issues that were
9	identified through the evaluation of the measures
10	this cycle.
11	And we'll be trying to use that
12	discussion to establish some common principles
13	that we'll be keeping in mind as we evaluate the
14	measures later on in the afternoon and early part
15	of tomorrow.
16	And so we'll pick up with the measure
17	evaluations later this afternoon. And tomorrow
18	we will be spending the morning on measure
19	evaluations.
20	And as we noted from our email update
21	yesterday or a couple days ago, we will be kind
22	of truncating the meeting on Day 2 to conclude

after measure evaluations, just keeping in mind
 the many external activities and things going on
 around us.

We'll try to keep Day 2 as brief as possible. But obviously, we'll need to make sure that we get through the measure evaluations for the cycle.

8 So, the criteria recommendations and 9 evaluation guidance discussions will be moved to 10 a future webinar for the Panel in the spring. 11 So, thanks for that.

12 And we just went over the agenda. I 13 did just want to give a brief overview of the 14 meeting materials that we provided because we 15 will be referring to many of these today.

16 Obviously, the agenda provides some 17 good information about who we're expecting to 18 attend, who should be voting on the various 19 measures and what members should be recused from 20 discussion.

The discussion guide will be a
reference tool when we begin measure review. It

1	has all the important information about the
2	measures that will be under review.
3	It also includes links to the measure
4	information form and the testing attachments, as
5	well as the additional information that was
6	provided by developers in response to your
7	preliminary analyses.
8	There are also several background
9	materials that we provided, some for reference
10	and some that we were hoping you would be able to
11	review, to provide you with a little bit of
12	context of some of the upcoming discussions.
13	We'll be referencing various elements
14	from the 2011 NQF Testing Task Force Report as we
15	start thinking about some of the evaluation
16	guidance and policies and recommendations for
17	changing our criteria and evaluation policies
18	coming up.
19	We also provided the SMP Measure
20	Evaluation Guidance document that we have created
21	since the SMP has been in existence, which
22	basically outlines for developers and others some

of the preferences that the Methods Panel has expressed in starting to review measures so that developers have a sense of how we might like to see data presented and so forth.

5 We also wanted to share the risk 6 adjustment paper that Larry led and has just 7 published and was supported by many of the SMP 8 members as background as well as a paper from He, 9 et al., on the PIUR which references a method for 10 reliability testing that would be for several of 11 the measures this cycle.

12 So, to just jump right in here and 13 give everyone some foundation on where we landed 14 with the measures this cycle. So, we had a total 15 of 50 measures that were submitted to NQF for the 16 2020 cycle.

And about a little less than half of those were evaluated by the SMP. So, we had a total of 21 measures. And again, about half of those were new and the other half were maintenance measures.

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We have three subgroups this cycle,

about nine to ten folks. And each group had 1 2 seven measures. We ended up with 14 that passed 3 4 reliability and validity, two that were consensus 5 not reached upon either reliability or validity, and five that did not pass reliability or 6 7 validity. 8 And there are a total of seven that 9 are slated for discussion today, which combines the two that were consensus not reached and the 10 11 five that did not initially pass a preliminary 12 analysis. 13 For most of those measures that did 14 not pass, as well as the ones that were consensus not reached, the group did submit additional 15 16 information for consideration. So, we'll be 17 discussing that information in the context of 18 reconsideration and submitting additional votes 19 later on today. 20 And again, here is a breakdown of the 21 type of measures that we got. We had a set of 22 six top measures, one PRO-PM, one composite, and

the rest were outcome or intermediate clinical
 outcome.

I just want to pause there to see if there's any questions before we move on. But the next section is around updates on the Panel's, kind of, evaluation performance and some of the disposition of the measures that have gone through previous cycles.

But any questions about this cycle or
meeting materials or anything like that before we
move on? Okay, hearing none, I'll keep filing
away.

So, we did want to kind of bring back
to you some of the facts that we've been
selecting since the Methods Panel has been in
existence. And we've seen definitely some
fluctuation in the number of measures that have
been reviewed by the committee.

We certainly had a peak in spring of
20 2019 with almost 50 measures. And we've kind of
21 come down in terms of the number of measures that
22 have been reviewed from fall of 2019 to spring

1

2	And we've been more in the 20 range,
3	which certainly seems a lot more palatable, I
4	think, for us all. The number of measures that
5	have where consensus was not reached, I think
6	have certainly been decreasing over time.
7	And I think certainly the number is
8	consistent with the total number of measures that
9	have been reviewed by the committee.
10	And we'll actually share in the
11	following slide a little bar graph that actually
12	is able to show kind of how the committee is
13	becoming more consistent in evaluating the
14	measures and coming to consensus a lot more
15	frequently since the committee has been working
16	together.
17	So, this is what I was referring to.
18	So you can see over time that the number of
19	measures or the percentage of measures where
20	consensus was not reached is trending down.
21	So that is certainly positive from our
22	perspective, in that the committee or the Panel

seems to be coalescing around some common 1 2 principles and tends to be, more often than not, on the same page about where the, you know, which 3 4 measures are -- should be considered passing and 5 considered for full endorsement and which should 6 not. I did just want to go back to last 7 8 cycle to give a little bit more details of where 9 we landed. We did, we evaluated 22 measures. We had 50 measures that were discussed at that 10 11 meeting. 12 And that was a combination of measures 13 being pulled by staff, being pulled by Panel 14 Members, and also there were six measures where 15 consensus was not initially reached in the 16 preliminary evaluations. Ultimately, the SMP 17 passed 16 of the measures and -- which was about 18 73 percent. 19 And there were four that did not pass, 20 two that were eligible for Standing Committee 21 revote and the -- both of those were pulled for 22 Standing Committee -- by the Standing Committee

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for reconsideration.

2 And there were also additional, those other two were pulled for further discussion as 3 And we did have one measure that was well. 4 withdrawn by the developer. 5 But if you recall, we did implement a 6 7 new process starting last cycle where Standing 8 Committees had an opportunity to pull measures 9 for discussion if they had not passed the SMP and potentially be eligible for revote depending on 10 11 the reason for it not passing. 12 And I think I saw a hand from Matt. 13 Did you have a question or a comment? 14 MEMBER AUSTIN: I do have a question. 15 But you may get to it in the future so I sort of 16 inadvertently raised my hand. 17 But I'm curious to know if you have 18 any specifics on measures that haven't passed 19 that have come back to the Panel and if those 20 have passed the second time or if you have any sort of statistics on those that we have 21 22 reevaluated.

I	
1	CHAIR CELLA: Ashlie, are you there?
2	MS. WILBON: Hi, sorry. I was talking
3	on mute, apologies. It's a good question. I
4	don't have those numbers in front of me but it's
5	something that we can work on and bring back to a
6	future meeting.
7	I think it's something we should be
8	tracking. I do know this cycle that we did not
9	have any that came back that were previously
10	reviewed.
11	We have certainly, over previous
12	cycles, seen more coming back. And typically, I
13	think, this sort of experiential data, I can tell
14	you that it typically does take about a year for
15	them to come back.
16	So, they aren't typically coming back,
17	let's say, in the following cycle. But, yes,
18	it's a good question. I don't have it, but I can
19	get it.
20	MEMBER AUSTIN: Thank you.
21	MS. WILBON: So, switching gears a
22	little bit, but again just a bit of kind of Panel

maintenance if you will, we do have several
 members whose terms will be ending in the fall.
 And we did want to just do a check in with those
 folks.
 We will be distributing a survey to

you guys via email. And we just ask if you could complete that. It's literally one question to just let us know whether or not you would like to continue on and extend your term.

We're acting now because, depending on how many folks decide to let their terms expire we may need to do additional nominations and we need to do that before the next cycle. So, if you could complete that for us and let us know if at your earliest convenience that would be awesome.

I did also want to let folks know,
Dave C., if it's okay for me to share that Dave
will be, his term will be expiring in September
and he unfortunately will not be returning with
us. So, we will hang on to him for as long as we
can through September.

But we'll be looking for another co-
chair in September and we'll be in touch about
that over the coming months. But we still have
him for several months.
But I just wanted to give a brief
update on that. Okay. So, we do have a few
updates here on the process I wanted to share.
As I think most of you guys are
familiar with this so I won't spend a lot of
time on these. They are things that you have all
seen before.
But I do think they are helpful
reminders as we get into review, just to make
sure we're all starting off on the same page. If
I am going too fast or you need me to repeat
something, please let me know and we will
certainly go back.
But again, in the interest of time and
not making sure we can get to the meat of what
we're doing here as quickly as possible, I'll
move quickly.
So, I did want to bring up the
remind us about the process we implemented last 1 2 cycle, which was around the ability for Standing Committee Members to be able to evaluate measures 3 4 that had not passed the Methods Panel's 5 evaluations. So, similar to previous cycles, we 6 7 have not changed the process, in that measures 8 that passed the review or where the SMP does not 9 reach consensus, those measures will automatically go to the Standing Committees. 10 11 And so, that has not changed. That's 12 been consistent since we started the Methods 13 Panel. 14 The newer process that we added last cycle was about consideration of measures that 15 16 did not pass by the Methods Panel, by the 17 Standing Committee and the fact that some 18 measures may be eligible for revote if it's 19 considered eligible. 20 And so, the next slide here talks in 21 a little more detail about that. So, after the 22 Methods Panel's final vote NQF staff basically

reconvenes with the co-chairs.

1

2	They review the measures that didn't
3	pass, and discuss kind of the key issues on the
4	rationale for why they didn't pass, and see
5	whether or not they will be eligible for
6	consideration by the Standing Committees.
7	And typically, measures that do not
8	pass the SMP are not eligible for revote if it
9	if the reason that it didn't pass hits one of
10	these four bullets. So, if there was an
11	inappropriate methodology or testing approach
12	applied to demonstrate reliability and validity,
13	there is incorrect calculations or formulas used
14	for testing, the description or testing approach
15	results, or data is insufficient for the Methods
16	Panel to apply the criteria.
17	That would be inclusive of, you know,
18	specifications being unclear or different
19	information that would be needed to correctly
20	calculate the measure. So, that kind of falls
21	under that bullet or the appropriate level of
22	testing was not provided or otherwise did not

meet our minimum evaluation requirements. 1 2 Typically, in our kind of screening of measures before they go to SMP we try to catch 3 4 everything that does not have the right level of 5 testing. But that's not always clear in our 6 initial screening. 7 So, sometimes those do get through to 8 the Methods Panel for review. So there is 9 another stopgap at this point for us to be able to catch those measures. 10 11 I'll just pause there to see if 12 there's any questions. I think we had some questions previously from the Methods Panel and 13 other stakeholders about this. 14 So, I did want to just pause here and 15 16 just sure that the Methods Panel requested that 17 it was clear what the policies and procedure for 18 that. Okay. 19 CHAIR CELLA: Just a sec. Jeff 20 Geppert has a hand up. 21 MS. WILBON: Okay, Jeff, sorry. Hi. 22 MEMBER GEPPERT: Hi. Yes, so my

1	question isn't so much about the policy but where
2	the, will there be a feedback loop, you know,
3	from the Standing Committees back to the SMP
4	about, especially I think in your earlier
5	slide about 75 percent of the time there was
6	agreement, about 25 percent of the time there
7	wasn't.
8	So, it would be nice to know, you
9	know, if there are some lessons learned from when
10	they disagree.
11	MS. WILBON: Yes, that's a good
12	question. I think for the last cycle, for spring
13	2019, when we first initiated a policy where they
14	could pull measures for revote I do not have
15	in front of me kind of the disposition of those
16	measures, on whether or not they actually ended
17	up passing, and what the committee's rationale
18	was.
19	But it's certainly something we could
20	do, we could bring back, to provide that feedback
21	to you guys, certainly.
22	And I think even from an even broader
-	

perspective, the measures that you do pass 1 2 forward, those 75 percent, was there any kind of discrepancy in what the committee believed in 3 terms of their recommendations for endorsement or 4 5 for passing and not passing is certainly something we could bring forward. 6 7 I think we have stats on that. But I 8 don't think I included it here. So, at this 9 point it's just something we'll look into. Okay, moving forward again to the 10 11 ratings here. I think you guys are all familiar 12 with this. 13 But I did just want to just recap a 14 couple of things, particularly because I think the rating scale has been something that has been 15 an element of discussion for the Panel in 16 17 previous meetings, and to just recap a couple 18 things, and differentiating high from moderate, 19 for example. 20 Moderate is the highest rating that a 21 measure can be eligible for if only data element 22 testing was presented or if only face validity

was conducted. So, typically score level testing
 is required in order for a measure to receive a
 high rating.

4 And the rating for the measures should 5 be -- should encompass your evaluation of, you know, whether or not the test was appropriate for 6 7 the measure and the purpose of the testing, 8 whether or not the scope of testing was adequate, 9 so representative of the sample, representativeness of the population, the right 10 11 sample size and then also of whether or not the 12 results were acceptable. 13 So, I'm kind of thinking about those 14 three elements and the findings or ratings all

16 a bit of a repeat.

15

17Two-day consensus, we're looking for18a quorum of 66 percent of the Panel Members. So,19that will be a slide at the subgroup level. We20will be loading just within the subgroups.21Unfortunately, we were not able to22change the process at this point to do a full

just to be considered. Again, here this is just

1	Panel vote. It is something we're still
2	considering.
3	So, for this cycle we will continue
4	with our existing process for only subgroups to
5	vote. I do see a hand from Sherrie. Do you have
6	a question?
7	MEMBER KAPLAN: Yes. I have to be
8	really careful with my phone because the off
9	button is right above the mute button. And so, I
10	don't want to turn the phone off.
11	But I had a question on the
12	high/moderate. Can you go back to that for a
13	second because it doesn't really it's not
14	really relevant to whether the measure passes or
15	doesn't.
16	So, my interest is in trying to make
17	these distinctions meaningful what, if anything
18	are you going to do with the moderate ratings
19	because it doesn't really matter from your
20	perspective when the final vote is tallied,
21	right?
22	MS. WILBON: Right. It is something

1	that when in reviewing, in refreshing myself as
2	well on the initial, kind of, rationale for
3	having the high and moderate ratings was so that
4	the moderate rating gives developers a sense of
5	kind of the minimum that needs to be done in
6	order to be considered for endorsement.
7	And it's supposed to be an achievable
8	rating that can be sought after, that would
9	provide less kind of burden on the developer in
10	order to still be considered for endorsement.
11	So, I think that was the initial rationale.
12	But I think, Sherrie, you make a good
13	point. I think going forward, perhaps, you know,
14	there will be some we could come up with some
15	recommendations and theories from this group
16	about how we should be considering ratings going
17	forward and whether or not there is really a need
18	to have a high and moderate since it's really
19	pass or not pass is really the ultimate decision.
20	MEMBER KAPLAN: Well, I was wondering
21	why if you're eventually going to a star
22	rating that makes a lot of sense. But if it's

1	pass/fail, at least at the Methods Panel, maybe
2	pass/fail is more efficient for us to be
3	considering as opposed to the three tiers. But
4	thank you.
5	MS. WILBON: Yes. It's a good point.
6	And we don't have any decisions yet. But I think
7	it's something that this group would be really
8	helpful in us thinking through some options and
9	how we might make recommendations to modify that
10	going forward.
11	So, we'll try to incorporate that into
12	our discussions about criteria recommendations.
13	MEMBER KAPLAN: Thanks.
14	MS. WILBON: So, achieving consensus.
15	Again, we're looking for quorums of 66 percent of
16	the subgroup members and we need greater than 60
17	percent to pass.
18	Consensus not reached is in the 40 to
19	50 percent range and less than 40 does not pass.
20	The next few slides are around, kind of, the
21	differences in the testing requirements for the
22	various types of measures.

1	I know you guys are all familiar with
2	this. So I'm going to kind of skim through this.
3	But again, if there's something there
4	that you would like me to spend more time on if
5	you have questions please let me know and we can
6	certainly do that. I'm getting a question here
7	in the chat box.
8	Just bear with me here for a second.
9	Let me make sure that there's a question. So,
10	there was a question about the guidance on
11	ratings, whether it applies to only initial
12	endorsement or that initial endorsement does not
13	require empirical validity.
14	So, yes, that's correct. But if, for
15	example, a developer only submitted face validity
16	for their initial submission, the highest rating
17	they could get for validity would be a moderate.
18	So, that's how that's interpreted.
19	And hopefully that helps out. If not, please
20	keep asking.
21	And there's another, Dave is
22	responding to that. Okay, so we're good there.

If there are other questions on the ratings, feel
 free to speak up and I'll have a brief discussion
 on that if it's necessary.

Okay. So, again the next few slides
here are about, kind of, reminders around the
testing requirements based on measure type. So,
outcomes, clinical, intermediate clinical
outcomes, cost and resource use measures.

9 For both reliability and validity we 10 only require either data element at the score, 11 measure score level testing. Again, this is our 12 current requirement.

This is actually kind of the core piece of the discussion that we had planned to have tomorrow afternoon as to whether or not we can finalize some of the recommendations on whether or not that requirement should be changed. But again, we are operating under that current requirement.

20 So, either or, either data element or 21 measure score. And again, face validity is 22 discussed for new measures.

1	The second element of our discussion
2	for the five tier recommendations is around this
3	second sub-bullet. That is data element validity
4	testing is provided.
5	We do not require additional
6	reliability testing. If they do this and if the
7	developer does submit a measure with this type of
8	testing we would apply the vote for data element
9	validity to the reliability vote.
10	And we did have at least one measure
11	this cycle that submitted based on this policy.
12	So, for composite measures we do we defined
13	that as both traditional composite and all-or-
14	none measures does not include multi-item scales
15	or survey questionnaires.
16	We require reliability testing on the
17	composite measure score. And they can also show
18	reliability of the components, but we don't
19	currently require that.
20	Score level testing is not required
21	until maintenance. And composite measures do
22	have an additional subcriterion. And you'll note

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1 that so for those measures we do ask for revotes 2 of reliability, validity and the composite construct. 3 And you'll see that reflected in 4 5 action in one of the measures we're going to review, we did review, sorry. 6 It's not on the agenda today. 7 8 For instrument-based measures, 9 reliability and validity testing is required for both levels, both data element and measure score. 10 11 And I know it's a little bit tricky to wrap our 12 heads around. 13 But at this point we do allow multiple 14 performance measures under one NQF number. And I 15 don't think we had any issues with this 16 particular bullet here, so I won't spend time on It can be a little bit confusing. 17 it. 18 So a few additional reminders. 19 Testing should align with the specifications. We do our best to screen for this in the staffing 20 21 review before we send the measures out to you. We don't catch them all, but we do our best. 22 And

so just another reminder there.

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2	For risk adjustment this will be a
3	discussion for today around the inclusion or not
4	inclusion of certain risk factors particularly
5	clinical or social factors should not be a reason
6	for not passing a measure on validity.
7	We do we would ask you to kind of
8	focus on concerns with the determination and
9	calibration or the methods they used for
10	adjusting the measures which would be a grounds
11	for voting down on the validity criterion.
12	But we should be very clear about that
13	in our rationale for the voting. If there are
14	comments about the clinical factors and the
15	social factors, that's certainly something that
16	you can discuss and provide recommendations and
17	other comments to the Standing Committee for
18	consideration. But again, it should not be
19	grounds for not passing the measure.
20	Again, incomplete or ambiguous
21	specifications are grounds for rejecting a
22	measure. And we do our best to offer developers

opportunities to provide clarifications through
 the response process that we've added in. And so
 hopefully those are resolved for the most part by
 this point in the process.

5 There may be some measures where that 6 still may be a concern and that would be on the 7 table. And careful validity testing is discussed 8 at the time of maintenance for measures that are 9 returning for maintenance of endorsement.

10 This slide, basically it aligns with 11 one of the background documents that we shared 12 which is the SMP evaluation guidance.

These are some of the recommendations 13 14 that were shared in that document to provide developers some additional guidance on the things 15 16 they should be paying attention to when they are 17 submitting their measure which included, you 18 know, more detail in describing the methodology. 19 Don't just, you know, kind of give Provide the formula and any other, you 20 words. 21 know, information for example that they could to 22 provide you as much context about how they tested

the measure.

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2 Again, more than one overall statistic in reporting signal-to-noise for reliability. 3 So sample sizes, distributions and things like that 4 are always helpful. 5 And then again more detail in the 6 description of the concept validity and how they 7 8 selected the measure, the relationships you 9 expect to see, the strength of the association you would expect to see and so forth. 10 11 But again, that -- we're not 12 necessarily going to be rejecting measures based 13 on two and three. But that certainly, for number 14 one, if you cannot understand the methodology 15 that was applied to test the measure that that 16 would be something that would be on the table for 17 rejecting the measure if it was inadequate. 18 Okay, any questions? That was kind of 19 a mouthful, and I just want to provide an 20 opportunity to ask questions. The next section 21 we're going to kind of get into the meat of it 22 here.

1	I know a lot of kind of fluffy stuff
2	up front. But I am looking forward to hopefully
3	getting into some of the more interesting
4	discussion here coming up. Any questions before
5	we move on?
6	Okay. So our next section is around
7	some of the challenges that were identified by
8	various Methods Panel members through evaluation
9	of the measures this cycle.
10	You'll note that many of these have
11	come up not just this cycle but previous cycles
12	and have been the subject of discussion for many
13	of our meetings. Again, we, you know, given the
14	time that we have today, we don't necessarily
15	expect to come to consensus on any of these.
16	If we do, that would be great and
17	awesome, and we would love to have some level of
18	guidance that we could put forth for future
19	cycles.
20	The discussion here is generally
21	intended to make sure that as these issues come
22	up with measures we're going to review today that

we're consistent. We're not setting new guidance 1 2 now that would be applied to the measures we're going to be evaluating this afternoon. 3 4 This is merely to make sure that if 5 there are any overarching discussions that we can have now that would help facilitate the 6 7 evaluation of measures later on this afternoon 8 and tomorrow and make those discussions go faster

9 that we have them at a higher level now and that10 will help us later on in the meeting.

I also just wanted to point out that one of the strategies we're using today to help move things along is to think about these topics in the context of future White Papers.

We've been talking with the Co-chairs about how we might be able to have a productive discussion given the limited time we have to really dive into these issues. They are very complex, and we just want to make sure there is adequate time to do that.

21 And we think the best way to do that 22 would really to be able to have a plan going

forward for how we carry on the discussion of these topics in a thoughtful way in a written product.

So, you know, repeating what we did 4 5 for the Methods Panel paper, as well as the risk adjustment paper and taking these topics and 6 7 developing White Papers of them. So we will be 8 along the way asking for folks to volunteer if 9 you're interested in participating in the paper. But also be thinking about what those 10 11 papers would entail. So what are the key elements of the issue that we would want to 12 13 address in the paper?

What is some of the guidance that we would want to offer and some of the kind of more strategic challenges that we would want to address in each of these papers.

18 So keeping that in mind, I did just 19 want to offer Dave N. and Dave C. an opportunity 20 to add on or provide any additional context to 21 that opener if you would like to at this point. 22 CHAIR CELLA: No. This is Dave C.

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1	You've covered it so well, Ashlie, I'm fine.
2	CHAIR NERENZ: Dave N. You did, I
3	just want to reinforce the idea.
4	In these discussions that are coming
5	up now we don't seek or want to go back and
6	change any of the votes or the decisions for
7	measures that are not in front of us today and
8	tomorrow. That's not the goal at all.
9	The discussions we have now are not
10	going to change the rules by which developers
11	submitted materials on this cycle. There are a
12	couple ones on the agenda later today and
13	tomorrow to which this discussion we're about to
14	have might be relevant.
15	But a lot of this is really forward-
16	looking and say as this whole process evolves and
17	we continue to think more sharply about some of
18	these issues, how can we evolve these discussions
19	and eventually the requirements for developers
20	and the rules by which we operate, how can they
21	get better and better?
22	CHAIR CELLA: Larry Glance has his

2	MEMBER GLANCE: Hi. I just want to
3	very, very quickly make a clarification. I just
4	wanted to point out that the white paper that my
5	group headed up was not a risk-adjustment paper.
6	It was a white paper on evaluating the
7	scientific acceptability of risk-adjusted outcome
8	measures. So it's not just about risk
9	adjustment.
10	It's about looking at data
11	reliability, date validity, measure reliability
12	and measure validity. It's the whole thing.
13	Thanks.
14	CHAIR CELLA: Good point.
15	MS. WILBON: Thanks for clarifying,
16	Larry, appreciate that. Sherrie, do you have a
17	question?
18	MEMBER KAPLAN: Yes. Just sort of in
19	general terms, I mean I'm not looking for any
20	more meetings.
21	But it's tempting when we do it this
22	way to discuss these issues first and then

discuss the measures the bleed gets problematic. 1 2 You know, it's sort of hard to straighten out. And I'm wondering if it isn't better 3 4 either to separate the two, this kind of forward-5 looking guidance for NOF for measures development in the future versus considering current measures 6 7 in front of us and separate the two things pretty 8 distinctly because I'm finding the bleeds, you 9 know, harder and harder to track. 10 MS. WILBON: So, Sherrie, let me just 11 make sure -- I'm just going to repeat that to 12 make sure I understand. So you're suggesting that we have a discussion now that's more about 13 14 how we would -- the question that would help us 15 evaluate the measures coming up and separate that 16 from future guidance? Well if it's, you 17 MEMBER KAPLAN: 18 know, I mean in a way what we're talking about is 19 forward-looking. It's, you know, what could be 20 done? 21 What are acceptable methods and 22 measures for establishing, for example, threshold

type scoring versus norm reference tested scores, 1 2 et cetera, et cetera? That's the kind of thing that's 3 4 forward-looking. And then we go into the 5 discussion of the measures. I was maybe suggesting either we flip 6 the order or at least, you know, it's too hard 7 8 for me to sort of -- maybe I'm just on West Coast 9 time and I'm cognitively impaired as I get older. But this kind of thing is tempting to 10 kind of slide into the discussion then we have 11 12 about existing measures which are going to 13 evaluated based on former guidance not current 14 quidance. Dave N. here. 15 CHAIR NERENZ: Sherrie, 16 I think that's a good point, and we could 17 probably take the view that much of what we're 18 going to talk about now or the main emphasis is 19 the forward-looking. 20 Maybe the way to talk about the connection is that a number of the measures this 21 22 cycle have exemplified or have crystallized some

of these issues. And you're right, we can't 1 2 treat them differently as a result of discussion we're about to have. 3 4 But part of my thinking, a lot of 5 these may have exemplified some of the problems I think we have to try to work through. 6 MEMBER KAPLAN: 7 Thanks. 8 MS. WILBON: Thanks, Sherrie. I mean 9 you bring up a good point. And that is our job as NOF staff to make sure that the criteria that 10 11 we apply for the measures being evaluated does 12 align with our current criteria. So that's -- I will make sure that 13 14 we're on our toes for that discussion, but point well taken. 15 16 MEMBER KAPLAN: Thanks. MS. WILBON: So with that we'll dive 17 18 right in. Just a couple of quick reminders about 19 our current definitions for reliability, data 20 element reliability. 21 We consider repeatability or reproducibility of the data elements for the same 22

population in the same time period.

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2	And measure score on reliability is
3	focused on precision and the proportion of
4	variation in the performance score due to
5	systematic differences across measured entities
6	or, more commonly, the signal to noise.
7	So, Dave N., if it's okay, I will hand
8	it over to you. I'm happy to go over this slide.
9	But if you would like to take the discussion from
10	here.
11	CHAIR NERENZ: Yeah. Let me just tee
12	it up a little bit, then we'll have max time for
13	discussion. There was an email that went around.
14	I'll just try to summarize that briefly for those
15	of you who didn't get a chance to take a look at
16	it.
17	This is an old issue for us. We've
18	had this in some of our conference call
19	discussions before we even went into cycles of
20	measure evaluation. It's popped up now and then.
21	But my sense is a lot of the measures that we saw
22	this cycle really call the question on this issue

of thresholds.

2	You know, if we look back at the 2011
3	document that serves as the basis for much of
4	what we do so far when talking about reliability
5	and, you know, what criteria we should be looking
6	for, there's reference to vague phrases like so-
7	called accepted standards but without defining
8	what exactly those standards are.
9	There's a table in the back of that
10	document that does make reference to the .4 is
11	kind of a minimum threshold. It doesn't name it
12	that way. It doesn't come out and declare it
13	that way.
14	But the number appears. And I think
15	as we watch measures come through and we look at
16	how the developers describe what they're seeing
17	this often comes up.
18	The reference is usually to the Landis
19	and Koch article from late '70s that was set in
20	the context of the kappa statistic for inter-
21	rater agreement. But others have made different
22	statements about thresholds.

1	Adams, in the 2009 article for a piece
2	that's often cited about signal-to-noise, talks
3	about .7. Allan Kozlowski did a piece a couple
4	years ago pointing out that there could be even
5	significant misclassification of providers with a
6	reliability statistic of .9.
7	The Heet (phonetic) article that was
8	given to us this cycle to take a look at makes
9	passing reference to.7. So there are different
10	numbers out there that are offered as thresholds
11	or guidelines without any clear reason, I think
12	in my mind, for saying we should adopt one or the
13	other.
14	The call the question time comes when
15	you get measures that are bringing forward
16	reliability statistics in the .5, .6 range. And
17	at least in the subgroup I was part of, we had
18	many, many of those this time.
19	And the action question is clearly
20	what do you do about it? Do they pass or do they
21	fail?
22	And I noted also in the slide you saw

a little while ago that was defining the ratings 1 2 for low, moderate, and high, the phrase not satisfactory was part of the definition of a low 3 4 rating. So what's not satisfactory? 5 Is something at .5 not satisfactory? So, there's a clear call to question -- this year 6 7 when you come -- when you see reliability 8 statistics in this range. 9 Ultimately, do they pass or do they So I think somehow we need to come to 10 fail? grips with this a little more sharply than we 11 12 have in the past. 13 And also Sherrie's question a while ago about what's the difference between moderate 14 The definitions don't link those two -15 and high. 16 - these numeric values. 17 But in other settings, you know, that 18 kind of verbal label does. We may want to say 19 that if somebody shows us reliability statistics 20 in .9 range we might want to call that high and 21 have that label carry forward into the review 22 process.

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We don't currently do that. 1 So I 2 don't have a further clear direction. But I did want to have this on our agenda to invite folks 3 4 who have been thinking about this to suggest 5 possible ways we might carry this forward. Not that in the next half hour or so 6 7 we can agree on some specific number. But 8 questions, for example, like should the same 9 general threshold apply to all measures of reliability or do different statistics lend 10 themselves to different thresholds? 11 12 Should we ask for different higher or lower standards for measure score than for data 13 14 element? Are there certain criteria for data element reliability that set an upper limit on 15 16 what we can expect to see at the measure score 17 level? 18 So I think these are in front of us, 19 and I'm hoping the people who have been thinking about this a bit. 20 21 CHAIR CELLA: This is Dave C. T'm 22 going to call on Jack because he's got his hand

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2	MEMBER NEEDLEMAN: Thank you. That
3	was a great summary. And I just want to add two
4	or three things to it.
5	One of the other issues that has
6	emerged in some of the reviews is our developers
7	are picking threshold levels. And, by the way,
8	the documentation we've been getting has been
9	extremely good.
10	Nothing I say about the measures is a
11	slight at any of the developers. They've been
12	doing a great job of trying to document things.
13	And as we've asked for more, they've been
14	incredibly responsive. So the developers have
15	been terrific. It's about the measures.
16	But one of the other issues that I
17	think has emerged here is the thresholds for the
18	number of cases or the size and practices where
19	we're getting reliability statistics across
20	different ranges of those numbers.
21	And the overall reliability may meet
22	an acceptable standard. But for the smallest of

the groups they don't look like they do.

And the question is how to deal with reliability when we think the measure developers picked a threshold that's simply too low in terms of when they start, who they are including within the measure. So that's another issue to throw on the table.

With respect to the Landis-Adams 8 9 documentation here, I would simply note that Adams when he said .7, analyzed things at .7 and 10 found that in a simple split of upper quartile 11 12 rest of the sample, .7 produced -- was a number 13 in which 20, 25 percent of them, if I'm 14 remembering the article correctly, could be shifted from one side of that dividing line to 15 16 the other which suggests that -- and we've got to 17 think about how comfortable we are saying a 18 measure is reliable when 25 percent can shift. 19 Similarly, the Landis article these 20 classifications were arbitrary in that. They did 21 not ground their definition of these moderate, 22 substantial, almost perfect to any empirical

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2	They had simply picked those labels
3	based upon their some without analyzing the
4	impact on reliability or so forth. So I think
5	there is a real issue about whether the Landis
6	characterization of these levels should be
7	accepted by us.
8	And I personally think that the Landis
9	standard is too low.
10	CHAIR CELLA: Thanks. David, just as
11	a process, there's an interesting quirk on the
12	hand raise function where as the list comes up
13	they are ordered by alphabetical order by first
14	name.
15	So Alex and others are going to be
16	advantaged if we don't watch out for that, and
17	Zhenqiu is never going to get to say anything
18	ever at all. So I'm going to try to watch the
19	sequence as best we can.
20	I think actually in this case I've got
21	Alex and then Mike Stoto and then Larry. But
22	I'll try to watch the sequence in which they pop

1 up. 2 CHAIR NERENZ: That's correct. At least we have correlation of one on that. 3 4 MEMBER SOX-HARRIS: Great, so this is 5 Alex --CHAIR NERENZ: And then Sherrie is 6 7 next after that. This is Dave. Go ahead, Alex. 8 MEMBER SOX-HARRIS: Okay. I really 9 appreciate the opportunity to discuss this. Ι think this is obviously an essentially important 10 issue for this group. 11 12 Unless we have some consensus or, you 13 know, reasonable agreement on this, it's very 14 difficult to make judgments on the measures. So 15 I think this is great that we're doing this. So I went back to the Landis article 16 17 to really understand what it said and did and 18 what it didn't. And it was clear to me that it's 19 a really -- it's addressing a very particular 20 context. 21 It's element reliability for sure and then it's a particular flavor of that which is 22

agreement between raters on a categorical
 classifier. And it has its own range and
 distribution of data.

The statistic kappa has its own range 4 5 and distribution including negative, you know, numbers below zero. It's testing a specific 6 hypothesis of -- null hypothesis of no agreement. 7 8 And as Jack just said, the proposed 9 mapping of kappa to adjectives was completely arbitrary and not evaluated in any serious way. 10 So even if it was the last word on 11 12 this particular context, you know, the agreement 13 between raters on a categorical classifier, it's 14 a conceptual and mathematical leap to other reliability contexts. 15 16 And in fact, just in my little 17 literature review of previous thinking and work 18 on, or more recent thinking and work on this 19 particular context, it's not the last word.

There are people who have evaluated those ranges and found it to be problematic if you apply those ranges. And after my comment I'll put a link to

one such paper in the chat box.

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2	But the overall point I'm trying to
3	make is that I think we need to think more
4	carefully about reliability context, not just the
5	element versus measure distinction, which I think
6	is essential.
7	But even within, like element
8	reliability there are different contexts. There
9	are different data generation methods. There are
10	different statistics that I think we need to be
11	more specific about.
12	And just as an example of another
13	element reliability context, think about
14	reliability of an instrument. Like I know some
15	of the measures that well one of the measures
16	we're looking at today has the KOOS and HOOS
17	instrument to measure hip and knee pain and
18	functioning.
19	So, and I believe the reliability
20	statistics was something like a test, retest
21	reliability of that instrument. So I mean there
22	are dozens if not hundreds of articles to give

1	guidance for what are acceptable ranges of test -
2	- test reliability of an instrument like that.
3	And none of them even overlap
4	practically with the Landis scale. You know, .7
5	is considered minimum commonly.
6	So I think in that context we would be
7	charged looking forward to look at instrument
8	level reliability and what is the current best
9	thinking of that separate from the agreement
10	between rater context and so forth.
11	And finally, and I apologize this is
12	a little long-winded. But, you know, and then
13	jumping into a completely different context which
14	is the measure level reliability where the
15	distribution of data and statistics are again
16	different.
17	And so we need to look, I believe, to
18	work that is specifically evaluated, what
19	different reliability levels mean in terms of
20	misclassification and so forth in that specific
21	context.
22	Not just, you know, take one mapping
•	
of statistics, adjectives in a completely 1 2 different context and assume it applies across all contexts. So I'll stop. 3 Thank you. CHAIR CELLA: Great. Thanks, Alex. 4 5 I think we have Michael next. MEMBER STOTO: Hi, yes. 6 Thanks. Ι 7 think those are both good comments. And I think 8 mine relates a bit to what Jack was speaking 9 about. And the idea is that reliability really depends, in practice, on the number of 10 11 observations that go into the measure. You know, 12 if you're looking at what physicians did certain 13 procedures, you have to look at how many 14 encounters. If you're looking at a consumer satisfaction survey, it depends on how many --15 16 what was the sample size for that one. 17 So, you know, we tend to look at this 18 in terms of testing, whether there were 19 sufficient numbers in the reliability tests that are presented to us. 20 But that doesn't really answer the question. 21 If we say something has 22 good reliability in general, or in average, the

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1	question I think we need to address is, when it's
2	actually used for a performance measurement, were
3	there enough elements, however defined, to have a
4	reliable score?
5	You know, I think what we need to say
6	is, you know, this only works if you have so many
7	encounters or a sample size of x and so on. And
8	really to set thresholds for when these measures
9	are used.
10	CHAIR CELLA: Okay, thanks. That's
11	good. I think we've got Larry, then.
12	MEMBER GLANCE: Hi. Great discussion.
13	I've got a couple comments to add to this.
14	I completely agree that that Landis
15	scale is completely ad hoc. Also suspect that
16	although the Adams criteria greater than .7 is
17	slightly more based on empiric analysis, I
18	suspect that if you were to look at different
19	measures and different parts of measures that you
20	would see different thresholds for the signal-to-
21	noise ratio to be when you see physicians
22	switching from one group to another in terms of

Neal R. Gross and Co., Inc. Washington DC performance. In our white paper, I think that we kind of suggested a level greater than .7 for reliability which was reasonable. And I think that may be a good starting point for this discussion.

The second comment I have is that when 6 7 you're looking at data reliability I think that 8 it's important to consider which data element 9 you're looking at. I think it's critically important that the outcome data element be highly 10 11 reliable, because that's the essence of the 12 If the covariates that are used the measure. 13 risk adjusted model are less reliable that's not 14 as much of a problem.

So, when we're talking about data
reliability we may want to think about having
different thresholds for the outcome versus
standard risk factors.

And the third and last comment that I want to make is that -- and we talked about this quite extensively in that white paper -- is that a risk-adjusted measure that is poorly risk-

adjusted, meaning that you're not accounting for 1 2 differences in case mix between providers, hospitals, and physicians, you may appear to have 3 4 pretty good reliability. But then when you start 5 to really do a good job of adjusting the differences in base mix, all of a sudden you will 6 7 see that the reliability will go down 8 substantially. Meaning that you can't really 9 evaluate score level reliability independently from score level validity. If you do a poor job 10 with risk adjustment it will end up biasing -- it 11 12 will upwardly bias your estimate of the measure 13 reliability. Thank you. I think 14 CHAIR CELLA: Thanks, Larry. 15 we're moving along here. I've got, at the 16 moment, Sherrie, Jennifer, and Eric. 17 MEMBER KAPLAN: Hi. I want to 18 disagree a little bit with Larry, unless I 19 misconstrued your point there, Larry. But you 20 can be reliably wrong. And so the idea that, 21 like my bathroom scale is reliably wrong, this is 22 the kind of thing that we need to kind of see in

context.

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2	And so, the idea that reliability can
3	be uniquely and kind of we can do thresholds sort
4	of without paying attention to the type of
5	measure we're using and the purpose it's being
6	put to is I think a problem, at least for me.
7	There's all different kinds of
8	reliability. Inter-rater reliability, test-
9	retest reliability, internal consistency
10	reliability, split half reliability. It depends
11	on what you're trying to measure and why you're
12	trying to measure it, the purpose you're trying
13	to put it to.
14	And I think that's important for
15	things like between physician differences. And
16	we sent around a while back some work that we've
17	done showing the variation for different types of
18	measures, like attributing to the doctors the
19	number of office visits made, for example, for
20	efficiency purposes.
21	And the variation around that is very,
22	very big. You can't discriminate between

physicians using that kind of measure. The error variances are too large. On the other hand, for composite measures, you can narrow the variance very tight and then risk adjust those and then you can narrow the variance so that you could use those kinds of measures.

So, I don't think that we can
establish sort of what's thresholds uniformly
across all different types of measures for all
different types of purposes.

11 But, having said that, I would also 12 say that the units of analysis are a problem here And we need to be thinking carefully 13 for us. 14 about them, especially for things like composites, like functional status that we're 15 16 going to review, because you have another term in the denominator for certain kinds of units of 17 18 analysis at the physician level, for example. 19 You have within patient across items in the 20 denominator. Then you have across patients 21 within doctor. And then you have between doctor variance all in the denominator. 22

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1	That reliability coefficient, which in
2	this case would be an interclass correlation
3	coefficient, is going to be low. It's not going
4	to meet the targets even probably here. I
5	suspect that it's going to be down around .05.
6	And so I think that those kinds of
7	calls that we need to make about what's an
8	acceptable threshold are not going to be uniform.
9	It's going to depend on the type of measure being
10	considered and then whether or not you have data
11	element reliability, for example. And I still
12	get a little confused about that. But if you've
13	got disagreement between two raters that's very
14	low, that rating is low, and if you square those
15	Landis coefficients you get the amount of
16	reliable variance. And you can see that. So .4
17	to .59 is about 16 percent. It's roughly 20
18	so 36 percent. So, that's considered moderate.
19	But, you know, it depends on the
20	purpose you're putting it to. But if it's at
21	that level and then you roll it up to the next
22	level of the score level and you've got

imprecision there, you've got a real problem when
 you're kind of combining that and then
 accelerating.

And I put it to David Nerenz's piling 4 5 on the reliability problem for the error variance. We've got some issues around units of 6 analysis that I think are important to consider. 7 8 Okay, just David here. CHAIR CELLA: 9 So far, Sherrie, even though you mentioned perhaps a little bit of disagreement with Larry, 10 11 I'm hearing largely so far some common themes 12 about thresholds or expectations being context-13 dependent, statistics-dependent. You can't say 14 that a guideline or threshold for one automatically then carries to the others. 15 And 16 that's with respect to what we said in the white 17 paper that Larry led about, you know, .7 is at 18 least a rough general threshold of expectation. 19 So, I think we can work through that in a bit more detail. But at least so far I'm not hearing 20 21 sharp and clear disagreement.

22

We need to start out -- so I guess so

1	far on the list we've got Jennifer, Eric, and
2	Sam.
3	MEMBER KAPLAN: Dave, can I just kick
4	back in for one quick second?
5	CHAIR CELLA: Sure.
6	MEMBER KAPLAN: Sorry. The Adams
7	thing, the .7 came from the group comparisons
8	from Nunnally (phonetic) originally. And so it
9	was thought, well, if you can't at least achieve
10	a sort of 50 percent reliable variance you're not
11	really doing very well. And it came from
12	Nunnally a long time ago. And I think that needs
13	to be reconsidered too.
14	CHAIR CELLA: Okay, thank you.
15	MEMBER PERLOFF: This is Jen. Just a
16	quick comment to repeat something that was said
17	earlier about the minimum sample size at the
18	physician and provider level.
19	One of the things we see in resource
20	use and cost measures is that developers will
21	choose a bottom threshold, often 20 or 50 events
22	or episodes at the physician level. And they

obviously make a trade-off. If they lower the 1 2 threshold, the more physicians, clinicians can be included in the measure but the lower the 3 4 reliability sometimes. 5 So there is this tension. And it would be helpful to see developers test different 6 lower bounds on the minimum thresholds for 7 8 participating in the measure. So I just want to 9 throw that idea into the mix. 10 CHAIR CELLA: Okay, thanks. That's 11 qood. Eric. 12 MEMBER WEINHANDL: Yeah, thank you. 13 So, I was in Subgroup 3 this time. And one of 14 the interesting facets that I see in several of the measures, and I think they were common to a 15 16 single developer, was an appeal to a quantity profile IUR. And it was new to me, so I had to 17 18 read the literature about what that quantity was. 19 But, if I understand it correctly, it was 20 essentially about being able to identify reliably 21 outliers, extreme values in a distribution of 22 measure scores.

1	And so I sat there and thought to
2	myself, well, how do I evaluate this in the
3	context of the guidance of the SMP? Because here
4	we're talking about, you know, essentially
5	reliability statistics for individual measures
6	that look to be pretty modest or poor on some of
7	these scales that we're talking about. The
8	profile IUR appears to be quite good.
9	And so then it raises the question of,
10	well, if we're talking about reliability, do we
11	need to be thinking about reliability in the
12	context of the intended use of the measure or
13	what, say, a payer might be interested in grading
14	facilities, physicians, et cetera, on with this
15	measure?
16	That seems to me to be a little bit of
17	a tenuous strategy because you can, of course,
18	talk about how the measure is going to be used
19	today as proposed. But what if the measure
20	which, you know, every facility or every
21	physician is using for an entirely different
22	purpose in a future application such that, you

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know, worrying about outlying values becomes less of a concern?

And so then, you know, the interest should rotate back to, say, the inter-unit reliability rather than a so-called profile inter-unit reliability.

7 So, I think that, you know, the 8 general point that I'm trying to make is 9 essentially that, in the context of all this discussion about what are appropriate threshold 10 values for reliability, it's the question of, 11 12 well, if we have a measure, how will it be used? And does that influence what kind of reliability 13 14 statistics ought to be considered?

Eric, thank you. 15 CHAIR CELLA: If 16 everybody could just sort of hold that thought in 17 mind. And I think that is really the essence of 18 our next block of discussion that appears on the 19 agenda. And I also was part of the same subgroup and had the same sort of observation and 20 21 question. So, rather than follow immediately if 22 we can just hold that we can delve deeply into

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that when we get on that guideline. 1 2 Sam, I think, is next. MEMBER SIMON: Hi, thanks. Yeah, just 3 4 very quickly I wanted to go back to a point that 5 I think was originally raised by Alex around context. And when we are thinking about data 6 7 element reliability I think one thing to keep in 8 mind is that the prevalence of the data element 9 is going to matter quite a bit in terms of the maximum amount of agreement we might see. 10 We don't often see this contextual 11 12 information, but I do think it would be helpful 13 to us as evaluators. So I just wanted to sort of 14 put a pin in that and raise it to the group. 15 Thanks. 16 CHAIR CELLA: Okay, thanks. I've qot 17 Zhenqiu and then it looks like we have Sherrie 18 again. 19 MEMBER LIU: Yeah, hi. This is 20 Zhengiu. So, obviously, we are all concerned 21 about low reliability, and that's understandable. But I also want to draw attention to that 22

sometimes like in a monthly cycle in the past I 1 2 have seen in several measures reported better Several measures and when they 3 than one. 4 calculate reliability for that measure it's about 5 25 percent or even 50 percent with measure reliability as one. 6 I mean, just I'm very 7 skeptical. 8 CHAIR CELLA: Let me just follow up on 9 that. I can think of a couple where we've seen Is there any way that we could possibly 10 that. raise questions about a "too good to be true" 11 12 sort of situation? How do we think about those 13 when they come in front of us? 14 I think it depends on MEMBER LIU: content also. You know, I would prefer more 15 16 detailed information, more nuanced information. 17 So it may just show you something that I 18 calculate this in that certain method. And 19 certain methods tend to give you higher number. 20 You know, I have seen the same data using 21 different methods to calculate you can get really 22 different. And, you know, some can get you .8 or

.9 and you use a different method you get .3, .4.
 So, it's not easy -- I'm not sure there's an easy solution.

CHAIR CELLA: Okay. So, Zhenqiu,
thank you. I've got Sherrie and Alex.

Hi, this is Sherrie. 6 MEMBER KAPLAN: 7 The issue with the sort of really, really high 8 levels of reliability seen caused me to wonder, 9 and this happened a few times a few cycles ago too, where it looked like the measure developer 10 was averaging at the patient level across 11 12 patients just averaging the patient level data 13 for each hospital, which isn't how you, you know, 14 would do hospital level, for example, interclass correlation coefficient. 15

So, I think that's come up before. And it does raise questions about it. But it goes back to detail. If we could get more detail about exactly how things were being done, what measures were used, and how they were being calculated, that would help us to understand whether or not we can believe what we see.

1	CHAIR CELLA: Okay, Alex.
2	MEMBER SOX-HARRIS: Yeah, to continue
3	that thread, I mean the whole in research it's
4	more common for journals and others to ask for
5	source data and statistical code to enhance
6	transparency and evaluation of what people
7	actually did. It's a whole open science
8	framework that's similarly just asking for more
9	access to the details.
10	So, that's something that could be
11	considered. Is that some kind of minimum data
12	set? And actual statistical code, the computer
13	code that was used to generate the statistics, so
14	we can answer these questions more directly about
15	did they do it right.
16	CHAIR CELLA: Okay. Jeff.
17	MEMBER GEPPERT: Yes. Just a question
18	for the methods folks. So, does it matter if the
19	measure uses some kind of shrinkage to the mean?
20	Does that change the way that we think about the
21	reliability metric or any potential evaluation of
22	the reliability metric?

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1	CHAIR CELLA: Sherrie, do you have an
2	answer?
3	MEMBER KAPLAN: Well, any time you
4	inflate the mean you're obviously going to reduce
5	the variance. But you probably spuriously
6	inflate the reliability as well because you're
7	inflating the mean and shrinking the variation
8	around the mean, which is going to usually help
9	you with precision.
10	CHAIR CELLA: Jack.
11	MEMBER NEEDLEMAN: Yeah. What the
12	shrinkage methods do is basically they say we
13	acknowledge that the folks with smaller sample
14	sizes are inherently less reliable. And they
15	move them towards the mean. They average the
16	mean of the overall sample with the value for
17	that individual unit. And the rating of that
18	averaging depends upon the sample size.
19	So, that's what's going on with
20	shrinkage, basically, which means that the
21	smaller practices are all pulled in closer to the
22	middle. And, you know, I sat on another panel

where one of the folks complained bitterly about losing information about individual units. But the fact is that we've got low reliability in those small units. We see that when we get these tables by size, the quartile by size, and we see the reliability statistics much smaller.

So, they're trying to deal with the 7 8 problem of reliability smaller in these units. 9 The question is, from our perspectives endorsing, whether the shrinkage method accommodates our 10 11 concerns about low reliability for smaller n's 12 within practices or whether we'd like to see the 13 thresholds simply increased, and whether the 14 shrinkage is an inherent part of the measure or something that's done later on when people are 15 16 applying it in practice.

I can't remember seeing explicit
statements in any of the measures I've reviewed
that said "we're going to be using Bayesian
shrinkage here."

21 So, I think those are the issues that 22 are raised for us in looking at that. Is that an

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1	acceptable way to deal with the inherently low
2	reliability of low volume units? Or do we want
3	to see the thresholds raised? And do we need to
4	see an explicit discussion of the impact of that
5	for the reliability?
6	CHAIR CELLA: Okay, thanks. Paul had
7	his hand up.
8	MEMBER KURLANSKY: Can you guys hear
9	me now?
10	CHAIR CELLA: Yes.
11	MEMBER KURLANSKY: Okay. So, this
12	issue of shrinkage is something that comes up in
13	the Society of Thoracic Surgeons database. And
14	it's something we struggle with in terms of the
15	reliabilities of the measures for small programs.
16	And one thing that might be helpful is
17	if there was some way, in such situations, for
18	the developer to show reliability over time. In
19	other words, you know, just in a simple
20	explanatory, you've got a small program that had
21	a zero percent mortality on a given year, so the
22	shrinkage would not assign that zero percent

1	mortality. But if you were actually to follow
2	that same site for three or four years and they
3	had zero percent mortality you would tend to
4	believe it.
5	So, I'm just wondering, in situations
6	where shrinkage is used, if there could be some
7	sort of additional requirement to show for the
8	small volume sites, for whatever is being
9	measured there, the reliability over time of the
10	measure.
11	CHAIR CELLA: Okay, good point.
12	Patrick has a hand up. Is Patrick on mute?
13	I guess not. David here again.
14	I'll quickly pass this question to our
15	NQF staff folks, and recognizing our time block
16	is about to close on this topic.
17	A lot of the discussion that we've
18	had, and I have a full page of notes here so far,
19	might be cast in the question of, what's the
20	minimum requirement? Essentially, what's the
21	pass/fail cut-off?
22	But if we go back to our ratings we

still have this moderate, high. In the future, 1 2 as you envision it, is there any possibility of our group coming up with some kind of numeric 3 4 criteria for assigning values of moderate versus 5 high? And if we did that, would that make any difference downstream in the other steps of the 6 7 process, or even all the way out the back side to the way measures are identified as being 8 9 endorsed? Is it conceivable that trying to work 10 on some kind of distinction like that would 11 12 matter in a tangible and positive way, or should 13 we focus strictly on the issue pass/fail? 14 MS. WILBON: Hi, Dave. This is I don't know that 15 Ashlie. It's a good question. 16 I have an answer. I would say to the -- I think 17 my first reaction would be: simpler is better. 18 Yeah, without thinking about it a little bit 19 more, I don't know if I have an answer right now. 20 But I think both are potentially 21 viable. So, I think, you know, again my gut 22 reaction is simpler is better, that maybe a

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pass/fail might be more digestible, for not only 1 2 the Panel but for external audiences. And it might be a good place to start and then if 3 there's more details we can filter that. 4 5 CHAIR CELLA: Seeing that Okay. 6 Patrick is having trouble with sound let's do 7 Daniel and see if we can get Patrick back on 8 before we close out. 9 MEMBER DEUTSCHER: Yes, thanks. This 10 is Daniel. I just wanted to note that in some cases the extremely high reliability could also 11 12 be related to very high sample sizes analyzed. 13 And I think we're seeing some of these 14 examples through our last cycle. So, for example, analysis as a health plan level. 15 16 So, I just wanted to note that's 17 probably also one possibility for those extremely 18 high reliability results. 19 CHAIR CELLA: Okay, thanks. Larry. 20 MEMBER GLANCE: I just put my hand 21 down, thanks. 22 CHAIR CELLA: Okay. So, I hate to cut

Patrick off here. Any chance Patrick is 1 2 reconnected? MS. WILBON: We're troubleshooting 3 4 We're going to try to work in the now. 5 background on that. But I don't think he is on 6 yet. 7 CHAIR CELLA: Okay, because otherwise 8 just watching the time and making sure we stay 9 tight, I've got quite a good set of notes here and I appreciate the discussion and the thought 10 11 that you've put into this. 12 What I can commit to doing is to 13 summarize the notes and try to organize it in 14 terms of a set of issues that we might look more 15 deeply into and at least potential, some steps 16 forward because clearly what seems to be 17 happening here is that we're moving away from 18 anything like a blanket acceptance of .4 as a 19 minimum standard. 20 I haven't heard any support for that 21 at all, which is a pretty significant thing actually. And I'll summarize that. 22

1	And we can then sort of offline by
2	email take up some next steps of, you know, who
3	is specially knowledgeable about this, who is
4	interested, who might want to work further on it.
5	But I appreciate the thoughts and this has been
6	useful. Thank you.
7	We'll try to get Patrick on and we'll
8	get connected sooner or later and, Patrick, I
9	won't forget you.
10	MS. WILBON: Thanks, Dave. And,
11	Patrick, if you are able to type your questions
12	in the chat box we can at least try to read your
13	question out and maybe or comment and at least
14	have an idea of what you would like to say.
15	And we can come back to it. And
16	that's another way to communicate if you're not
17	able to get your audio. So, we'll keep moving.
18	And as Dave mentioned earlier, the
19	next set of discussions was around, for
20	reliability was around the IUR and PIUR which was
21	something which was a reliability statistic we
22	saw in several of the measures.

I

1	I believe that were in Subgroup 3.
2	And I think there were a lot of, we got several
3	comments not only in the preliminary analyses
4	notes but also from the Panel Members who emailed
5	us directly about wanting to have this discussion
6	about how we should be interpreting this and
7	particularly how the PIUR should be evaluated.
8	There were some measures that provided
9	the PIUR and some that didn't and how that should
10	be, how that should be interpreted.
11	The other question I think that was
12	posed in some of the analyses and from some of
13	the Methods Panel Members after their reviews
14	were whether or not this particular test or other
15	types of tests only demonstrate reliably for a
16	particular purpose.
17	So, for example, detecting extreme
18	outliers or demonstrating stability and whether
19	or not this is a method that would be acceptable
20	for demonstrating reliability of a measure that
21	may be used in any context for any purpose given
22	that our current criteria and process does not

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provide endorsement for a particular use, but
 just around the use for a particular, for any
 accountability purpose.

And then I think the final issue which we've already touched on quite a bit is around the idea of volume and minimal sample sizes and reliability testing and whether or not the testing results should be explicitly associated with the volume or sample size.

10 So, I'll pause there and I'll hand it 11 back over to the Daves to continue this 12 discussion. I did just want to point out that 13 one of the background materials that we shared, 14 the C.F. Howe (phonetic) article talked in detail 15 about the PIUR.

16 Hopefully you found that a helpful 17 reference for this question. And, Dave C. and 18 Dave N., I will hand it back over to you guys to 19 get this discussion going. Thank you. 20 CHAIR NERENZ: Dave C., this is Dave 21 N. I think we didn't choreograph this in advance. How about if I continue this one and 22

then you get the next two? Does that work? 1 2 CHAIR CELLA: It does. I think this is all yours. Go ahead. 3 CHAIR NERENZ: Well, now that's not 4 5 quite true. No, I think this is -- and Eric come in earlier about this a couple times hinted at 6 7 this. 8 The, a number of measures this time 9 had this two-part analysis where they had IUR and PIUR almost in every case. The IUR was not 10 11 impressive. The PIUR was pretty good. 12 And the conclusion would seem to be 13 then the measure is not very good for doing 14 things like putting people in quintiles or giving star ratings or comparing Provider A to B, 15 somewhere in the middle of distribution. 16 17 The measure would be reliable enough 18 though to identify extreme outliers. That's not 19 the kind of rating or the kind of decision we're 20 asked to make. 21 The practical question is what do you 22 do with this? You know, we can take that

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combination of statistics and say the measure 1 2 passes and it leaves our hand saying it's reliable. 3 But clearly everything we've looked at 4 5 says it's reliable for one thing but it's not 6 very reliable for another thing. So, it's kind 7 of an open question here, what do we do with 8 this? 9 And I think, you know, NQF staff and experts are certainly welcome to weigh in because 10 11 the -- I think we are only allowed as a practical 12 thing in what we've done this cycle and what we 13 have yet to do in the next day or so, we have to 14 use the criteria we're given. We have to use the categories we're 15 16 given. But is that going to work going forward in a situation like this? 17 18 And how can we handle something like 19 the ones we have in front of us, good enough for 20 one thing, not good enough for another purpose? 21 I have Alex, Eric, Michael, Paul. 22 MEMBER SOX-HARRIS: This is Alex. One

conceptual shift that might help us instead of 1 2 thinking of this as two uses of the same measure is to say these are two different measures, 3 4 related measures but they're different measures and need to be evaluated separately. 5 And if we think of measures as, you 6 7 know, specified with an output, one output is 8 just a distribution of, you know, performance. 9 And the other is okay, a determination of whether each individual site is an outlier or not. 10 11 So, I think if we can put it in 12 separate measures we can evaluate them 13 separately. The analysis, validity would need to 14 map onto the actual structure of each measure and that might solve the problem. 15 16 CHAIR NERENZ: Eric. 17 MEMBER WEINHANDL: Thank you. And 18 sorry for jumping the gun on this topic earlier. 19 I wasn't looking ahead on the agenda to realize the level of detail. 20 21 And so, I like what was just proposed. 22 I wanted to ground it in a little bit of reality

insofar as I understood some of the measures that 1 2 I typically encounter in the analysis phase. I think that the challenge is that we 3 4 truly don't have any control for how the measure 5 is used. And in fact, the measures -- The individual measures are used for both profiling 6 7 the entire space of say thousands of facilities 8 being evaluated and in other applications they're 9 used specifically for outlier detection. 10 So, some of the measures it's not as 11 though we are in front of the SMP in this cycle. 12 So, your standardized mortality ratios, 13 hospitalization ratios for the healthcare 14 facility. On the Compare website somebody could 15 16 use this when a consumer accesses the website and they see evaluation of facilities that are within 17 18 their region or their area or their zip code 19 they'll simply see text labels that correspond to 20 as expected, greater than expected, lower than 21 expected. 22 So, essentially there is text labels

that correspond to outlier detection. 1 So, that 2 said, all right. We'll profile IUR. That will be a great new thing to track if that's what 3 4 you're using the measure for. 5 On the other hand, those very same measures like standardized mortality and 6 7 hospitalization ratios are used in star ratings 8 and they're used in other kinds of payment system 9 that Medicare operates under Parts A and B. 10 And in those systems it's the point 11 estimate. It's literally only the point 12 estimate. There is no consideration of the 13 14 competence or the precision of the point estimate that's used when facilities are slotted in 15 16 through distribution and assigned a certain point 17 value that rolls up into a summary support 18 measure. So, I guess I'm showing my cards here. 19 20 But I think that the practical reality is that we 21 have no control. And in fact, these measures 22 truly are used for, entirely just for purposes by

in this case the same payer, Medicare. 1 2 So, I think it's -- It would be disingenuous for us to say well, as long as one 3 or two of the measures or one or two of the 4 reliability metrics are accessible, then we can 5 proceed with providing cover for the measure. 6 CHAIR NERENZ: 7 Okay, thanks. Mike. MEMBER STOTO: Yes. I think this is 8 9 going to be a really challenging discussion. Ι 10 personally think we actually have to challenge the assumption that NQF makes that we either 11 12 endorse a measure or we don't. 13 I think that what we've just been 14 saying, you know, of how it depends on how it will be used and how it depends on the sample 15 16 size essentially, means that it really isn't 17 scientifically justifiable to say this is either 18 valid or this is either endorsable or not. 19 And so, I think that the alternative 20 is to say this is endorsed for certain purposes 21 or this is endorsed with minimum sample sizes or

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things like that. Basically, to work them into

the specifications. 1 2 I recognize that might be a big But I think that we need to consider it. 3 change. 4 CHAIR NERENZ: Yes, thanks. Ashlie and others, any quick response to that? 5 I know this isn't the first time this has come up. 6 7 But for the next two minutes as we 8 talk about this should we spend time thinking 9 about how that might be done or is that forever off limits? 10 11 It's a tricky question. MS. WILBON: 12 I will say that NQF has certainly been through iterations of thinking through endorsement for 13 14 particular purposes. And it's, you know, something that we 15 16 don't currently do. And so, we haven't actually 17 ever landed on that as a strong path forward 18 because there are just so many considerations and 19 nuances. 20 And we haven't ever, I think been able 21 to reach consensus at the level of stakeholders 22 and various leadership bodies to go in that

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2	I think, I realize it does present a
3	dilemma of kind of the reality versus us trying
4	to, you know, have an endorsement type period
5	that is agnostic to use.
6	But I think at this point I think that
7	should be our path forward because we don't we
8	wouldn't be able to provide any guidance at this
9	point on kind of the concept of this
10	infrastructure in which, you know,
11	recommendations around, you know, reliability
12	testing or any other types of recommendations for
13	measures around a particular use of it.
14	So, it is a tough question. Again, I
15	don't have a specific answer.
16	But I think the safest place is to be
17	where our current policy lies which is, you know,
18	testing, you know, should be submitted and
19	presented in a way that there is confidence from
20	the reviewers that if the measure is used in any
21	accountability purpose that it is reliable for
22	that, you know, for that use in the context of

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any particular accountability purpose. 1 2 So, yes. Apologies I don't have anything more specific. And I think that's just 3 probably a question of where we are in this space 4 5 at this point for endorsement. Yes, I think that's it. 6 I'm not sure 7 that was very helpful. 8 I know it's a tough CHAIR NERENZ: 9 issue because we're talking about a fairly significant change in NQF policy and past 10 11 practice. 12 It's just, I think it's in front of us 13 that a number of people wanted this discussed 14 because the developers themselves essentially in 15 their presentation told us reliable enough for 16 some things but not for other things. 17 They're sort of compelling us to think 18 it through. I see Patrick with a hand up. 19 Hopefully we've got the sound issues worked out 20 now. 21 MEMBER ROMANO: Yes, can you hear me 22 now?

1 CHAIR NERENZ: Yes, we're good. Thank 2 you. 3 MEMBER ROMANO: Okay, great. Yes, I've just been waking up on the West 4 sorry. 5 Coast and I thought I was on Zoom. So, I was not dialing in properly. 6 7 So, anyway I wanted to make a point I 8 think others have here that as we think about 9 inter-unit reliability really we shouldn't be thinking about a threshold. 10 11 We should be thinking about how the 12 reliability measures provide guidance in how the 13 measures should be used. It's not a question of 14 whether the measure is acceptable or not. It's a question of how to use the 15 16 measure in a way that it becomes acceptable. And 17 so, we've already talked about some of these 18 suggestions. 19 So, I could easily as a measure 20 developer manipulate the inter-unit reliability 21 or I shouldn't say manipulate, maybe enhance is a 22 better term by, for example, using two years of
data instead of one year of data to do the 1 2 calculation or by setting a minimum volume threshold and saying that this measure should 3 4 only be used for providers of greater than a 5 certain volume or as Jeff suggested earlier, you raised a very interesting question. 6 7 Didn't really answer it. But the 8 point is that once you do shrinkage the classic 9 signal-to-noise estimation approach doesn't work 10 anymore because you've used that approach to 11 actually shrink or reliability adjust the 12 measure. 13 And so, that is a way of addressing 14 the problem. But we have to realize that we are making a tradeoff then. We're making the measure 15 16 more reliable by shrinking it toward the mean for 17 small units. 18 But in so doing we're compromising validity and there as we're introducing bias. 19 20 And so, we accept that tradeoff in certain 21 applications. But we might not want to accept that 22

tradeoff in other applications. So, I think that 1 2 as we understand this problem of inter-unit reliability better it really does challenge the 3 4 traditional assumption of, you know, whether the 5 NQF endorsement is a stop-go, red light/green light kind of process or whether it's really an 6 issue of reliability particularly about providing 7 guidance to users about how to use the measure in 8 9 a way that it has acceptable reliability in 10 practice. 11 CHAIR NERENZ: That's good, thanks. 12 I currently have Paul, Larry, Sherrie in that 13 order. 14 MEMBER KURLANSKY: So, I think this is extremely challenging issue which I struggle with 15 16 philosophically and practically. And it came up 17 in this context with the PIUR. 18 It also came up in context with the 19 socioeconomic risk adjustments, et cetera. And 20 it's extremely difficult. 21 I mean even if we were to provide advice to how a measure could be used, 22

unfortunately I think, the more I think about 1 2 this I think there is probably no ability to actually control what will actually be done once 3 the measure has received some level of approval, 4 which makes me tend to think that we should apply 5 sort of a minimum standard, if you will or maybe 6 7 that's not the right term. But in other words, the measure should 8 9 be considered, the threshold should be high, in other words. 10 There, for every application that we 11 12 can see this reasonably being used what would be 13 the reliability rather than the low threshold which would be well, for this particular 14 situation, you know, to identify outliers it's 15 16 okay, but to develop and distinguish people who 17 are in the vast majority of the middle it is not 18 reliable. 19 Therefore, we would approve it for 20 this particular purpose. I don't think we can 21 practically do that. And so, I'm tending to think now that 22

perhaps we should be very, have a very high 1 2 threshold and say or any, you know, application for which this could reasonably be applied it 3 4 would have to be, they would have to demonstrate, 5 the results would have to demonstrate reliability. 6 7 MS. WILBON: Hi, Dave. This is 8 Ashlie. If I could just jump in quickly. Jack 9 and I were actually having the chat on the webinar about this exact issue. 10 11 And his question was, you know, am I 12 implying that given that we don't endorse the specific uses of reliability just based on the 13 14 potential use that requires the highest reliability. 15 16 And I think what Paul just stated is 17 exactly kind of what I would say but he stated it 18 much more eloquently. You know, given the 19 spectrum of accountability applications and we 20 don't know where the measure might be used and as it's been stated we don't know how a measure 21 22 might be used by any program or we can't predict

that in the future that, you know, we should 1 2 thinking about evaluating the measure that is good enough for any accountability application. 3 4 And that may be the highest level of 5 accountability down to the lowest level of accountability and that we should kind of be 6 7 thinking in that context at this point in time. 8 And hopefully that's helpful. And I 9 think again, what Paul stated I think is very much in alignment with what we would like to be 10 thinking here. 11 12 And so, based on where we are at this 13 point not having endorsements for particular 14 purposes. I think, you know, the other challenge is that, you know, tagging measures before, you 15 16 know, particular purposes often gets lost. 17 So, when measures are endorsed, you 18 know, there's an asterisk next to it or, you 19 know, special consideration that this measure 20 should only be used for x purpose. That gets 21 dropped, it gets lost. We had in the past a time-limited 22

endorsement where measures that didn't have 1 2 testing yet could have a time-limited endorsement. And so, what we found is that what 3 4 people kind of latched on to was the endorsement 5 piece. And all the other kind of asterisks 6 7 and details about the conditions of that 8 endorsement were lost. And so, that's one reason 9 why we kind of had moved away from that. But I think having, you know, 10 11 endorsement means the same thing for all measures is the place that we should, you know, kind of be 12 13 focusing and trying to think about how our 14 evaluations could support that perception for people who are using an endorsement. 15 16 CHAIR NERENZ: Good. I've qot Larry 17 and Sherrie and Jack if you want to jump in too 18 after that. 19 MEMBER GLANCE: I'm a little worried 20 about going right before Sherrie because she's 21 going to respectfully disagree with some things I'm going to say. 22

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1	CHAIR NERENZ: She can probably
2	(Simultaneous speaking.)
3	MEMBER GLANCE: At the high level
4	validity or reliability or whatever we want to
5	say, so I've got a couple of points that I want
6	to make.
7	The first one and I think the most
8	important one is I think that we, you know, at
9	the end of the day we need to be kind of
10	pragmatic here.
11	We're having a really, really
12	difficult time choosing a threshold for just the
13	classic inter-unit reliability or what we often
14	times consider it's signal-to-noise ratio.
15	And that is going to be tough for us.
16	The profile inter-unit reliability, it's a very
17	interesting way of looking at reliability. This
18	is something that is just now appearing in the
19	literature.
20	And it uses the abstract. The authors
21	published this about a year ago said we propose
22	an alternative measure of reliability. This is

new.

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2	I don't think we need to establish
3	this as one of our testing criteria for
4	reliability. I think we should let this play out
5	a little bit and see what other people think
6	about this before we adopt this as one of our
7	standard tools to evaluate measure level
8	reliability.
9	That's my first comment. The second
10	comment I really want to iterate I think this is
11	a lot Is that when you look at measure level
12	reliability you first need to convince yourself
13	that the risk adjustment for a risk adjusted
14	outcome measure is balanced because if it's not a
15	lot of the variability between providers, and
16	that's what's going to drive your reliability in
17	part, is maybe because you have inadequate risk
18	adjustment.
19	So, if you have a, you know, you look
20	at cardiac surgery if you're going to compare
21	quaternary care centers that take care of the
22	sickest of the sick to the community hospitals

that take care of really routine cases and if you 1 2 don't do any risk adjustment, that's the extreme of broad risk adjustment, there's going to be 3 4 really good reliability because there's going to 5 be a big spread in outcomes between the providers that have the high mortality rate and the 6 7 providers that had the lowest mortality rates. So, I think you need to look at risk 8 9 adjustment when -- First before you look at measure level reliability. 10 11 And then the third point I want to 12 make, I want to push back ever so gently on the comments that Patrick made. 13 14 I think that what we call enhancements so the use of volume cut offs, looking at a 15 16 longer time frame, the use of shrinkage, I think 17 those are perfectly acceptable ways truly 18 pragmatic ways to allow you to measure 19 performance, provider performance in a reliable 20 way. 21 So, if we know consistently that very low volume providers and those that have case 22

1	volumes less than 25 that their performance just
2	jumps around in a very erratic fashion would be
3	what you would expect because of the small sample
4	sizes, it's okay.
5	And that doesn't mean something is
6	messed up. The second point is same thing with
7	time frame. There is nothing wrong with looking,
8	instead of looking at one year maybe looking at
9	two years or maybe even three.
10	It's a little problematic when you go
11	out further to the longer time frames because it
12	may be that the quality of a provider changes
13	over time. But that is still something that we
14	have to consider.
15	And then the third thing is use of
16	shrinkage estimators or reliability adjustment is
17	a very standard approach. And it's being used
18	increasingly by many groups.
19	It's what CMS does. And there are
20	some heated arguments about using it or not using
21	it. But I don't see any reason that we should
22	penalize measure developers because they use

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shrinkage estimators.

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2 That is a very valid and acceptable approach. And what it does is it basically 3 4 minimizes the fairly, sometimes fairly wide 5 fluctuations that you see in provider performance when the provider volumes are low, okay. 6 7 So, those are the main points that I 8 want to make. The first one again, profile 9 inter-unit reliability, I don't think we need to 10 go there. 11 The second point, consider risk 12 adjustment before you look at measure level 13 reliability. And third, the enhancements --14 they're okay. There's nothing wrong with it. 15 Thanks. 16 CHAIR NERENZ: Okay, thank you. Good 17 place to go. Sherrie, do you want to 18 respectfully disagree or are you going to go a 19 different direction? Is Sherrie on mute? 20 MEMBER KAPLAN: There I am. Am I okay 21 now? 22 CHAIR NERENZ: You're good enough.

1	MEMBER KAPLAN: Okay. So, I wanted to
2	respectfully agree with everything Larry said.
3	And I don't want to agree on the shrinkage
4	estimating rabbit hole.
5	But I wanted to come back to a point
6	to Ashlie's point. I got confused about what
7	exactly the, you know, purpose of measurement,
8	what you're going to do with that now.
9	And I'm concerned again about if
10	you're going to use my weight on my bathroom
11	scale for my psychological well-being that's
12	fine. That's a good purpose.
13	But if you're using it to give me
14	anesthesia, you know, it's wrong and I'm going to
15	get into trouble. So, I really am concerned that
16	NQF, CMS changed the game when they started
17	adjusting compensation.
18	They adjust, you know, we went from
19	quality improvement when Helen and I were having
20	this discussion years ago about NQF's agnostic
21	position on the purpose of measurement, from
22	quality improvement to quality assessment and

1 then adjusting compensation.

2 So, maybe a way forward is to, for NQF is to consider the reliability question for 3 different units of comparison. 4 While it may be okay at one level of 5 comparison unit like the hospital or something it 6 7 might not be as good for or reliable for 8 estimating physician performance, for example, 9 comparing -- certainly not comparing individual physicians. 10 11 Is that a position NQF could think 12 about or have some basis for kind of adjusting 13 purpose at the unit of comparison level? 14 MS. WILBON: It could be. I think the challenge is that we're not there yet. And it 15 16 would take some time to get there. 17 And again, I don't have a great answer 18 because, you know, it's something that we kind of 19 -- we tried a couple times in the past to think about this issue and how it might impact the 20 21 weight of the endorsed measures. 22 It doesn't mean that we can't revisit

it and I think we should. But I just, I get a 1 2 little bit -- I don't want to have you guys coming up with recommendations or guidance on a 3 future that could be and we're not sure what the 4 5 context of that is or what the kind of parameters for that would be. 6 7 And so, I guess, I think my response 8 would be, yes, it's something we can and should 9 consider. But it would be a future, you know, a potential future state. 10 11 MEMBER KAPLAN: Thanks. 12 CHAIR NERENZ: And actually, Dave N. 13 here. Clearly, we get into highly forbidden 14 territory if we cross the line in starting endorsing or approving uses themselves. 15 16 It's not really our territory. Our 17 focus should be on the measures. 18 But clearly again, examples as with 19 these IUR/PIUR distinctions we're looking at data 20 that tell us that a measure is reliable enough 21 for a certain kind of use, is not reliable enough 22 for another.

		ΤZ
1	It doesn't mean we're judging the use	
2	itself. We're just saying, is the measure good	
3	enough for this or that.	
4	I'm also, I noticed here as we go	
5	along the point Eric made a few minutes ago	
6	about, you know, if you look at the portfolios	
7	ways in which CMS uses certain measures.	
8	And sometimes in which it's the point	
9	estimate and the variance, but other times it's	
10	the point estimate only. It's the same measure	
11	that's used because it's NQF endorsed.	
12	But if we really pull back the layers	
13	of the onion we might say that the endorsement	
14	should have supported one or two of these uses,	
15	but not have supported the other one.	
16	So, I'm left with the idea that it's	
17	hard for us to fully step up with integrity to	
18	our task as a scientific methods panel to judge	
19	reliability without somehow going a little	
20	further and saying reliable enough for x , y , and	
21	z, but not reliable enough for p, q, and r.	
22	I understand there are a lot of	

details to work through all the way through the
 CSAC and Board level at NQF about how that might
 play out.

But I just, you know, I'm sort of going back to the beginning of this that in some of these cases the measures, the cycle of the measure developers themselves have essentially made that statement.

9 And then we have to somehow deal with
10 that. Daniel has got a hand up. Go ahead,
11 Ashlie, and then Daniel.

12 MS. WILBON: Yes, a quick question in response to that. Is it, could it be though that 13 14 this particular task is not one that we would want -- if it is narrow in scope in that way and 15 16 the idea is that NQF endorsed measures could be 17 used for any accountability application, is it 18 that this just isn't one that we would want to be 19 for measures that are presented? I'm kind of thinking about it the 20

22 applying endorsements or a particular purpose

opposite way instead of us thinking about

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based on the test submitted, but to provide some 1 2 guidance to say if you were looking for, you know, measures that could be used for, you know, 3 4 the spectrum of accountability applications that 5 these are the types of tests that could demonstrate that and that maybe this is one of 6 7 those tests. 8 Is that something to consider? I'm 9 just trying to kind of digest the discussion as well. 10 11 CHAIR NERENZ: Yes, Dave here. Ι guess just responding for myself, I wouldn't go 12 13 that way at all because it seems to me that the 14 more information that we get about reliability in different forms and different flavors is just as 15 useful scientific information about the 16 17 evaluation measures suitable for this or that 18 purpose. 19 So, I would not ever shut anything off 20 and say we don't want to see it. I think the 21 question is, what do we do with it when we do see 22 it? I've got Daniel and Jack in the queue now.

MEMBER DEUTSCHER: Yes, this is
Daniel. What if I ask a question on whether
there may be a suitable first step could be that
instead of going all the way to an endorsement
for a particular purpose which definitely
requires more thought and I acknowledge it could
be difficult to monitor and control, my question
is could NQF request that at least the minimum
threshold of number of cases or minimum time
period needed to achieve an acceptable level of
reliability first identified by the developers
and then added to the specification?
MS. WILBON: Daniel, could you repeat
the last part of your comment, sorry?
MEMBER DEUTSCHER: Yes, sure. I was
wondering whether NQF could request that the
minimum threshold of number of cases or the
minimum time period or a combination of both
needed to achieve an acceptable level of
reliability be first identified by developers
because we've noted that not all of the
developers go ahead and identify those

thresholds?

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2	And then add that to measure
3	specification. It sounds like you would need,
4	you know, a compromise on maybe a first, a
5	suitable first step going forward with some kind
6	of restriction in terms of the use of the measure
7	under certain conditions.
8	MS. WILBON: Yes, I think that's a
9	good question. It's actually something that we
10	have been trying to do when possible to encourage
11	developers to indicate, you know, sample size
12	requirements and include it in the
13	specifications.
14	I think that is something very
15	feasible that we could do and it is something
16	that we do try to do. It's not and we could
17	probably be more explicit about it in our
18	guidance.
19	But I think that's certainly a very
20	feasible approach.
21	MEMBER DEUTSCHER: Okay, thanks.
22	CHAIR NERENZ: I've got Jack and Mike.

MEMBER NEEDLEMAN: Thank you. We are in a very rich discussion. And flying through a bunch of things on the schedule. I really want to come back to this issue of reliability for use.

But just want to note, shrinkage we 6 7 ought to have on another call because there are 8 multiple methods there including not ignoring 9 things which, you know, right now most of our 10 shrinkage measures are towards the general mean 11 and the question is whether those methods are 12 appropriate, whether we're losing information 13 about relative performance and we simply average 14 to the general mean.

And we've got risk adjustments later in the discussion. So, I just want to endorse the thought that if the risk adjuster isn't doing the work it's supposed to do, we do not have a valid measure.

20 But coming back to this issue of 21 reliability for specific uses. I think one of 22 the elements that we've seen in this discussion

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is that NQF does not endorse for specific uses. 1 2 We've been told that. The question is how that will affect our reliability judgment. 3 What I've seen specifically from new measures is 4 to some extent recognizing they won't immediately 5 be used for payment of the area where people 6 generally feel is the highest reliability is 7 needed. 8 9 So, to accept a lower level of reliability for an early endorsement of a 10 11 relatively new measure to see how it plays out to 12 get more data and so forth. 13 But given what we've said there is not 14 going to be endorsement for use, the question is whether we should all be moving our standards for 15 16 reliability to the level that we would require 17 for the use that we think requires the highest 18 level of reliability? 19 I think one of the consequences of 20 that is a bunch of measures may not get endorsed 21 that would have gotten endorsed in the past. 22 But we ought to be thinking

individually and collectively about whether 1 2 standards for reliability ought to be in the most restricted use or the use that requires the 3 4 highest reliability. 5 I'm taking from this conversation, 6 that's where I'm going to be moving in my assessments. But we ought to be thinking about 7 8 that and I'd love to hear some guidance from the 9 other, from the governing boards and to some extent from the developers about their 10 preferences about endorsements for use versus 11 12 always applying the most restrictive or the 13 highest levels of reliability. 14 And I think we ought to be inviting people to give us that feedback to help us in how 15 16 we use the and how we assess the reliability. 17 CHAIR NERENZ: Thanks, Jack. I've qot 18 Mike in the queue. But I've also got Apryl with 19 a hand up. Apryl, do you want to come in on something that should be said or talk about some 20 21 of the policy issues? Well, this is Mike and 22 MEMBER STOTO:

I actually do want to do that. 1 2 CHAIR NERENZ: Okay, Mike, go ahead. I just wanted to 3 MEMBER STOTO: Yes. 4 second Daniel's suggestion and maybe extend it a 5 little bit. I think that asking the developers to say what's the minimum sample size I think 6 7 would go a long way. 8 And, you know, in a way it's not that 9 different from what we already do because we require that they test it based on data that's 10 related to how it will be used. And sometimes 11 12 the developers lay out, you know, how the 13 reliability depends on the number of encounters 14 and things like that. So, I think that we could just try to 15 16 look at that more carefully and get that to be 17 done more extensively. 18 CHAIR NERENZ: All right, thanks. 19 Apryl. On mute maybe. Okay, so let's get to 20 Gene, sorry. 21 MS. WILBON: It's Ashlie. I was going 22 to ask the operator if you, we'll try to get

Apryl on a future line. 1 2 CHAIR NERENZ: Okay. Let's go to Gene then. 3 Real quick, given that 4 MEMBER NUCCIO: 5 we've got about five minutes before we're 6 supposed to have a break. This is a second bullet and I don't know whether we're still on 7 8 the first bullet. 9 It falls on the same line. It's not 10 exactly about use. 11 But when we look at the data that's 12 provided, for example, detecting extreme outliers 13 and discover that the measure is very good at 14 detecting extremes but very poor at detecting 15 differences and nuanced differences between 2 and 16 9 in our ten point or categories, I think we 17 should always think about the general use of 18 these measures which is for public reporting at 19 the very minimum. And for performance for many 20 of the measures either individually or as a composite. 21 22 And so, if they provide -- if the

developer provides different information about 1 2 how well the measure detects extremes it's very important evidence that it can detect the large 3 majority of differences or differences among the 4 5 large majority of our providers we should be, I would suggest rejecting that because the normal 6 7 use for these measures will be for public reporting and/or pay for performance. 8 9 CHAIR NERENZ: Good point, thank you.

And if I could just paraphrase it may be that if 10 11 we don't end up ever in the near future specifically endorsing for use we could 12 13 anticipate the range of uses out there and set 14 reliability thresholds and presumably validity thresholds with endorsed measures for the kind of 15 16 uses that the developers talk about or we think 17 will happen.

So, it's a matter of where you set the threshold more so than specific yes/no decisions on acceptability for certain uses. Did I go too far in my paraphrase or is that about right? <u>MEMBER NUCCIO:</u> That's about right.

My point is that as evaluators of the measure we 1 2 should be thinking about how do they, what's the evidence that the measure performs well in all 3 reasonable situations? 4 And reasonable situations, can you 5 detect outliers? If they give us good 6 information that they will then fantastic. 7 But if they can't make a distinction 8 9 between a 2 and a 9 on a ten point scale then, 10 you know, it doesn't pass basic reliability. 11 CHAIR NERENZ: Okay. Do we have Apryl 12 connected? 13 MS. CLARK: Hi, all. Can you hear me? 14 CHAIR NERENZ: Yes. So, this is Apryl 15 MS. CLARK: Hi. 16 Clark. I am the acting vice president of quality 17 measurement here at NQF. And so, I have been 18 working with Ashlie on the Methods Panel. 19 So, it's great to talk with you all 20 I just wanted to maybe just chime in today. 21 about sort of, you know, endorsement for use. 22 It's actually something that we, the

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1	NQF has actually been thinking about. We have
2	had some other issues that have come up in
3	endorsement committees where we would consider
4	different type of measures.
5	So, as you guys talked about there are
6	sort accountability measures. There's quality
7	improvement measures. There's appropriate use
8	measures.
9	And so, many times those measures
10	don't necessarily always fit exactly into our
11	criteria. And our Standing Committees have kind
12	of talked about how you, you know, they think
13	they are important measures but how do they feel?
14	So, reliability is one of those things
15	that has come up. And so, we've actually been
16	thinking about is there different levels of
17	endorsement or different ways of endorsement?
18	So, I'm not sure I would call it
19	endorsement for use per se. But I think that's
20	the idea is that maybe endorsement would be for
21	accountability measures and they have a certain
22	like criteria that they have to meet.

But maybe there's a clarification that 1 2 would be for quality improvement measures because they would have a different level to meet. 3 And then that's kind of how we would kind of think 4 5 about both the criteria and Part B. And as Ashlie mentioned, I think, you 6 7 know, a little bit the challenge in making sure 8 that measures are used in the appropriate way. 9 But it actually is really something that we're thinking about. 10 11 So, I think this has been a really 12 fantastic conversation. 13 CHAIR NERENZ: Thank you. All right, I'm inclined then to turn back to Ashlie. 14 We have hit the bottom of the hour. 15 16 Want to respect people's time and 17 biological needs and other pressing things. So, 18 Ashlie is here. 19 MS. WILBON: Yes, absolutely. Thank 20 And thanks, everyone for really great you, Dave. 21 discussions. I think we'll be looking forward to 22

getting hopefully some participation from 1 2 everyone on getting these ideas down on paper and having more thoughtful discussions about them in 3 4 future papers as well as future webinars. So, 5 with that again with attention to your other needs, including those biological ones we want to 6 7 -- We're going to take a break for an hour. Let's plan to reconvene at 12:30. 8 And 9 so, hopefully you guys will be able to tend to all of your needs. 10 11 We're looking forward to coming back 12 and finishing our last few kind of content level discussions before diving into our measure 13 14 evaluation discussions later in the afternoon, around 3:30 after another break. 15 16 So, we'll see you back at 12:30. If 17 you are able to, obviously if you want to hang 18 You might want to stay on the webinar. up. 19 We'll keep the webinar open so that you don't 20 have to go back that process. 21 But keep in mind that you will need to 22 dial back in and to give yourself time to get

back on the line so that we can be ready to go at 1 2 12:30. CHAIR NERENZ: Ashlie? 3 4 MS. WILBON: Yes. 5 CHAIR NERENZ: Can we leave the phone 6 lines connected if we don't need to hang up? 7 MS. WILBON: Yes, you can, you can. Ashlie? 8 CHAIR CELLA: 9 MS. WILBON: Yes. This is Dave Cella, Dave 10 CHAIR CELLA: Is it possible for Sam Simon and Dave N. and 11 C. 12 you to stay on for just three minutes if we could talk about the next session? 13 I also 14 MS. WILBON: Also, sure. 15 wanted to ask Alex Harris because I realize I 16 inadvertently swapped their names. And I think Alex was the one who emailed me about this issue. 17 18 CHAIR CELLA: Okay. 19 MS. WILBON: But I for some reason put Sam down. 20 Sam, I'm happy to have you still 21 participate and I think it will be great to have 22 a couple other discussors.

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1	But I also wanted to include Alex if
2	you're able to stay on. Apologies for that mix
3	up.
4	PARTICIPANT: No problem.
5	MEMBER AUSTIN: So, Sam, you can stay
6	on. Alex, can you stay on and Dave N. and
7	Ashlie? Everyone else can sign off.
8	(Whereupon, the above-entitled matter
9	went off the record at 11:33 a.m. and resumed at
10	12:29 p.m.)
11	MS. WILBON: Let's go ahead and get
12	started.
13	I wonder if folks from the Methods
14	Panel, if you're on or didn't hang up and you're
15	back on, or you're back on from dialing in, if
16	you could just give us a hello, just so we have a
17	sense of how many folks are on the line?
18	Or, Operator, could you give us a
19	sense?
20	CHAIR NERENZ: Or you can raise your
21	hand and lower it, too.
22	MS. WILBON: Oh, perfect, Dave.

That's a great idea. 1 2 CHAIR CELLA: If that was Ashlie, by the way, your voice is very distant. 3 4 MS. WILBON: It was. Thank you. Let 5 me try to fix my headset here. CHAIR CELLA: That was a little 6 7 better, actually. Maybe just speak up. 8 I've seen about five or six hands go 9 Mike Stoto is sending a message saying he's up. back. 10 11 I think we can get started. People 12 will join in. And this first topic for the second 13 14 half of the morning or early afternoon, to a 15 large extent, is a continuation of the previous 16 discussion, particularly that part of the 17 discussion in the previous session that related 18 to reliability demonstrated for a specific 19 purpose. But the specific question came up --20 (Simultaneous speaking.) MS. WILBON: Hi. Could we have folks 21 22 mute your lines?

	141
1	Operator, I'm not sure if you can help
2	us with the muting of the lines. That would be
3	great.
4	CHAIR CELLA: Thank you. Thanks.
5	MS. WILBON: Could everyone who's
6	speaking please mute their lines?
7	CHAIR CELLA: Okay. I'll try again.
8	So, welcome back.
9	And now, we're going to talk about the
10	relationship between reliability and validity.
11	It may be a shortened session because we covered
12	this topic to some degree in the previous
13	session.
14	But this was a specific question that
15	came from Alex, actually, although Sam is named
16	on the agenda. And the discussion question was:
17	if the measure has been shown to only reliably be
18	used to characterize outliers, should the
19	validity testing mirror this use? This issue
20	came up, actually, in the previous discussion.
21	So, Alex, would you like to tee it up
22	specifically with regard to the

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reliability/validity question?

2 MEMBER SOX-HARRIS: Sure. So, this issue came up for me on several of the measures 3 that we were evaluating. And as our previous 4 5 discussion highlighted, many of the measures the developer presented reliability for either two 6 uses or two forms of the measure, however you 7 want to think about it, one being the inter-unit 8 9 reliability for the whole distribution of performance scores and the other the reliability 10 for the PIUR for the identification of extreme 11 12 outliers. And we had a very rich discussion about how we should think about that. 13 14 And extending it into validity, and moving on to the validity analyses and evidence 15 16 that was presented, sometimes the evidence would pertain to the IUR formulation and other times it 17 18 would be constructed in such a way to map onto 19 the PIUR formulation. So, I think the general 20 question is, how should validity evidence 21 presented map onto the sometimes multiple forms 22 or uses presented in the reliability analysis?

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1	CHAIR CELLA: And, Dave N., did you
2	have a comment you wanted to make, also, as part
3	of kicking it off?
4	CHAIR NERENZ: No, I think that's
5	enough to get it started. I just was observing
6	that I don't think in the earlier discussion, we
7	specifically linked the reliability and validity
8	discussions, but there may not be a whole lot to
9	add. The question seems to be, if you looked at
10	reliability using a certain approach or a certain
11	kind of purpose, like getting rid of outliers,
12	should the validity testing match? But I think
13	that's already been teed up.
14	CHAIR CELLA: Good. Okay. So, the
15	floor is open for input, discussion.
16	It may be that people feel that this
17	has been sufficiently discussed in the previous
18	session. I don't see any hands up.
19	CHAIR NERENZ: Yeah, I would tend to
20	agree. I mean, if the question is, should the
21	reliability and validity analyses match, I think
22	a reasonable answer is yes.

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1	CHAIR CELLA: Hearing no objection to
2	that reasonable answer, and seeing no hands still
3	up, we may be able to steal a little bit of time
4	for some of the future discussions and move
5	things along.
6	So, last call for any comments on this
7	issue.
8	MEMBER ROMANO: This is Patrick.
9	CHAIR CELLA: Go ahead.
10	MEMBER ROMANO: One thing I might add
11	is that I think this was alluded to earlier
12	but in some cases the reliability, the inter-unit
13	or inter-provider reliability could be falsely
14	high because the provider signal is capturing
15	both the variation in risk and variation in
16	outcomes. So, if the risk portion is not dealt
17	with appropriately, then you're essentially
18	exaggerating the provider signal because the
19	provider signal is capturing both features.
20	So, again, this has some implication,
21	right, because what it means is that these
22	metrics of reliability are to some extent
dependent on our ability to separate confounding. 1 2 And I don't know how that applies to this particular guestion, but it may have an 3 4 application. 5 We're probably on the cutting edge of research in this field to understand it better, 6 but we know, even, for example, the Adams 7 8 approach assumes no variation in risk. It 9 assumes that everyone has the same risk. And that's really not a valid assumption for outcome 10 11 So, the Adams approach is sort of measures. 12 geared more towards process measures, where 13 everybody can do what they're supposed to do. 14 And we have to be thinking a little bit 15 differently for outcome measures. 16 CHAIR CELLA: That's a great point. 17 Eric, you've got your hand up. Go 18 ahead, Eric. 19 MEMBER WEINHANDL: Yes. It's an 20 interesting question. I must admit to speaking 21 of my own way of sort of processing these when I think about hospitals or other kinds of 22

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facilities that are being evaluated.

2	To the extent that a measure developer
3	draws attention to outlier detection, I certainly
4	am interested or maybe I should say that I'm
5	suspicious, of course that outliers may
6	actually be more likely to reflect unmeasured
7	risk adjustment or residuals of modeling, just
8	because of unique sociodemographics within a
9	particular area where the facility is located.
10	There may be particular sort of patient
11	characteristics or medical phenotypes that a
12	particular facility is concentrating on, and
13	sometimes with an administrative database those
14	can be very difficult to extract.
15	So, I must admit that, although I
16	didn't think about it in this cycle as I was
17	looking at these measures that had a profile IUR
18	reported with them, it would be nice to see that,
19	if a measure developer proposes that a measure is
20	focused primarily on outlier detection, that
21	there was some evaluation or some reassurance
22	that these outliers that are being detected also

1 are as ably addressed by the risk adjustment 2 scheme as sort of overall is. CHAIR CELLA: A good point again. 3 4 Okay. So, I think we should move on. 5 Thank you for that input. Can we move the slide to the next 6 7 session? 8 And we're going to talk now about risk 9 adjustment. I think that we'll focus on social risk adjustment, but probably risk adjustment 10 generally. And, Ashlie, you were going to set 11 12 this up for us. 13 CHAIR CELLA: Sure. Thanks, Dave. 14 Can everyone hear me okay? 15 CHAIR NERENZ: Still a little faint, 16 but not bad. 17 MS. WILBON: Okay. Is this better, a 18 little bit better? 19 CHAIR CELLA: That's better, yes. I pulled 20 MS. WILBON: Okay. Great. the mic a little bit closer. 21 22 So, with this discussion of social

risk adjustment I think we had actually a very, 1 2 fairly extensive discussion over email just after the evaluations were done. I think that was 3 triggered by an article maybe that Gene shared, 4 or someone. And I think that was an initial 5 start for this discussion, and then, I think 6 7 certainly after the results for the preliminary analysis were shared back, there was some more 8 9 discussion amongst the panel via email about the Methods Panel's role in providing evaluation of 10 social risk adjustment. 11

12 I think certainly everyone understands 13 at this point that NQF prefers that decisions around the actual factors included in the risk 14 15 model, including social and clinical factors, are 16 left to the standing committees, although we 17 certainly recognize that SMP members will have 18 substantial and important feedback on those 19 factors as well, given your own backgrounds and 20 expertise in risk adjustment and other areas. 21 And so, we certainly want to provide 22 the opportunity for the Methods Panel to give

feedback to standing committees on things they should be thinking about when they're looking at the measure in totality, as we look through all of the criteria and in more detail at the clinical aspects of the measures.

And I think the question, then, comes 6 7 up, so if the Methods Panel is not voting on validity, particularly with an eye on social 8 9 factors, but certainly has perspectives to share what is the best way to provide that guidance to 10 standing committees and how can we ensure that 11 12 the standing committees are considering all the 13 factors that were not only recommended in the NQF 14 report, but also ensuring that developers are kind of using methodologies and making decisions 15 16 on risk adjustments that align with current 17 quidance and research?

So, I'll pause there, and then,
certainly hand it over to Dave N. for comments,
as he was very involved with NQF's report on
social risk adjustment, as one of the chairs.
So, I'll just hand it over to you, Dave, for

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additional comments.

2	CHAIR NERENZ: Yes, thanks, Ashlie.
3	I'll just mention a few things specifically about
4	the issue of social risk factors.
5	As Dave and Ashlie both pointed out,
6	I think the practical questions in front of us
7	apply to risk adjustment in general. The social
8	risk factors are just a specific example. And
9	this was on my mind in the cycle because a couple
10	of the measures that came to the subgroup that I
11	was on coupled social factors in a certain way
12	that raised questions for me. And then, it
13	raised the subsequent question about how do we
14	convey that message. If we think something is
15	not correct, how do we convey that? Where does
16	that message go?
17	Again, this is not new to us. So,
18	I'll do this very briefly. I think, as most
19	people know, prior to 2015 and 2014, the strict
20	policy at NQF was that social factors like
21	poverty, homelessness, minority status could not
22	be included as adjusters in performance measures.

And then, a panel was convened in 2014. I was
 co-chair of that. We had a group of experts kind
 of like the one we have gathered together today,
 but experts on this issue. We had conference
 calls. We had meetings. We then issued a report
 that basically changed the policy or recommended
 that it be changed.

And a couple of the essential things were that, after we really talked this through, we said social factors should be treated exactly the same as clinical factors in their inclusion or exclusion from risk adjustment models. There's no reason to treat them differently.

14 Then in both cases you think about 15 whether the variable was present before the start 16 of care. The fundamental constant was that, if a 17 particular variable stands as a marker or somehow 18 reflects differential quality of care, then you 19 don't want to adjust for it because you may be 20 adjusting away quality differences that you want 21 to see reflected in the adjusted measure.

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On the other hand, if the variable

reflects other influences apart from quality of care, particularly if the providers being evaluated have no control over it, you do want to adjust because, then, you get the clearest, least biased signal about quality of care.

And so, that report was issued. 6 The 7 CSAC and the Board did change the NQF policy. So now, as you see actually in the text, in the 8 9 materials that the developers use, they're asked to work through, is there a conceptual 10 relationship for the variable? 11 Is there an 12 empirical relationship, so that there's some 13 association between a factor like poverty and the 14 measure? Usually, outcomes are the ones we're 15 talking about here. And then, ultimately, is or 16 is not included in the adjustment model?

Now what we've seen over the years,
since when this report was issued, the public
comment was vastly in support of all the national
provider organizations' plans, everybody in its
court. CMS weighed in against, as did six other
organizations.

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And so, to this day, we still have 1 2 situations where a measure is presented to us. All the background work is done, in some cases 3 4 very thoroughly. Is there a conceptual 5 relationship? Is there an empirical relationship? 6 The answers come up yes, yes, yes. And then, in the end, they say, but we choose not 7 8 to include this factor like poverty because we 9 choose to. We never see that for factors like 10 11 diabetes or depression. If they seem to be 12 associated with the outcome, and it's understood 13 that it's harder to achieve good outcomes with 14 patients with these kinds of problems, they're in the adjustment models, they never get pulled out 15 16 after. So, there is a differential treatment. 17 Okay. That's all just background. 18 The reason this is on my mind in this cycle is 19 that in a couple of specific measures I was asked

to review, I thought that the analysis of some
candidate social factors was wonderful. I mean,
it was thorough. It was thoughtful. It brought

1	in all the relevant data. It did careful
2	analysis. It was great. And all of that, to my
3	mind, said that these factors should be in the
4	adjustment model. Then, the developer said, no,
5	we choose not to include them because we don't
6	want to. Okay.
7	So now, my quandary, as a reviewer,
8	is, what do I do about that? I'm not allowed to
9	fail the measure on either reliability or
10	validity grounds, except perhaps down Larry's
11	line of thinking, if I say this problem
12	essentially invalidates the reliability
13	statistics. But I'm left with the question, what
14	do I do? I can write a comment, but what happens
15	to it?
16	So, that's sort of the end of my
17	framing, and I am looking forward to some
18	discussion, including from our NQF experts about
19	what actually can we do and what should we do in
20	situations where we believe the risk adjustment
21	is not appropriate, not good enough? And that
22	would be true if it's a social factor or a

1 clinical factor.

2	CHAIR CELLA: Well, that's a really
3	great history and setting up of the issue. And
4	there's a lot to unpack there, Dave, but I think
5	the core question you're asking is, how can we
6	send a message that the standing committee will
7	hear that relates to concerns about not including
8	social risk adjustment when it appears that it
9	should be included? And the only sure way to
10	have that seen would be to vote low on
11	reliability, based on what Larry has pointed out,
12	as you said, that if the risk adjustment isn't
13	right, then the reliability is off. But I don't
14	know if you can tell that from a submission.
15	So, I open it up for discussion,
16	including NQF, if you want to help guide the
17	parameters of what's possible here, or what's not
18	possible.
19	Mike's got his hand up. Go ahead,
20	Mike.
21	MEMBER STOTO: Yes. I think this is
22	a really important issue. I'm not quite sure I

understood the issue about, not risk adjustment 1 2 being a reliability issue, but it certainly is a validity issue. That's why we talk about a risk 3 adjustment in the validity section. And it seems 4 5 to me that we should treat risk adjustment as it either makes this valid or not valid, regardless 6 7 of whether we're talking about clinical issues or 8 socioeconomic factors.

9 If we think, and the evidence 10 suggests, that there really are sociodemographic 11 factors that matter, and the developer doesn't want to do that, I think we could say, therefore, 12 13 the method scores low on validity, just as we would if it were on clinical characteristics. 14 CHAIR NERENZ: Yes, Dave here. 15 Let me 16 just, I'll channel Larry here, but he can 17 certainly jump in. 18 I think the connection to reliability

19 was this idea that, if you're dealing with 20 signal-to-noise statistics and then, because you 21 didn't do acceptable risk adjustment, some of the 22 apparent signal is based on things other than

quality, then the lack of adjustment means that 1 2 the reliability statistics are inflated and, therefore, questionable. 3 4 MEMBER STOTO: Okay. Thanks. This is Mike again. 5 That clarifies it, and I agree with 6 that, but I still think that what I said holds. 7 8 If we think that it should be risk-adjusted for 9 whatever characteristics, and if it's not, that's 10 a reliability -- excuse me -- that's a validity 11 issue. I'm just going to try to 12 CHAIR CELLA: 13 Jack had his hand up, but, apparently, he's see. 14 I don't know if he can speak. Jack, on mute. why don't you give it a try? 15 16 MEMBER NEEDLEMAN: Okay. Can you hear 17 me? 18 CHAIR CELLA: Yes, I can hear you. 19 Let me add one thing just so people 20 I believe that Larry is not on the call know. 21 right now. He had to take an hour off for a 22 COVID situation, but he'll be back later, if we

1	want to bring him into this.
2	But go ahead, Jack, and then, it will
3	be Patrick and Paul.
4	MEMBER NEEDLEMAN: Yeah, just so we
5	have consistency and we're scoring things, I
6	think we want to decide whether the problem with
7	risk adjustment is a reliability problem or a
8	validity problem. I tend to think of it as a
9	validity problem because the core of our measures
10	for a lot of these are observed to expected. And
11	the expected is driven by the risk adjustment.
12	If the risk adjustment model is wrong, not doing
13	what we think it's supposed to be doing of
14	getting an accurate assessment, a valid
15	assessment of expected, then the measure is not
16	valid.
17	CHAIR CELLA: Yes, I suspect, based
18	upon the setup of this question on the slide,
19	that NQF agrees with that because they did say
20	that this would not be a basis for voting
21	low/insufficient on validity. And I think if
22	they saw it as a reliability issue, they would

have probably said reliability. I'll let them 1 2 speak for themselves, but my guess is that that's probably where NOF is on this question as well. 3 MEMBER NEEDLEMAN: Well, then, can we 4 5 get some clarification? If we're supposed to be assessing validity, and we think poor risk 6 7 adjustment is making the measure invalid -- we 8 haven't got the right expected count -- are we 9 supposed to nonetheless accept the measure on 10 validity, waive that concern? What concerns do 11 you want the next committee to do, put that in? 12 How do they want us to handle this? I'm happy to 13 handle it in any way I'm told to. 14 Right. This is Ashlie. MS. WILBON: I think there's a couple of things 15 16 that -- can you guys hear me okay? 17 CHAIR CELLA: Yep, yes.

MS. WILBON: Okay. I think there's a couple of things that would be potentially on the table for us. I certainly sense the frustration, and I do want to also reiterate that we do pass on that discussion. Each measure that occurs at

the Methods Panel level is summarized and 1 2 provided to the standing committee in relatively great detail. We give them the preliminary 3 analysis, the combined PAs. We give them a 4 summary and their worksheets when they evaluate 5 And so, those issues are passed on. 6 it. Ι 7 think, certainly, we could maybe find some ways internally, as staff, to make the issues I think 8 9 a little more clear and stand out a little bit 10 more. 11 The other thing is that we had this 12 kind of moratorium -- I don't know if moratorium is the word -- but kind of prohibition in place 13 14 in terms of voting down the measure before we had 15 the policy in place where standing committees 16 could pull measures for discussion, even if they 17 did not pass. And so, something that could 18 potentially be on the table is, you know, we 19 could still allow the Methods Panel to vote as 20 they have been voting, as they would like to 21 vote, and in alignment with what they're seeing

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in the submission. And so, the signal about the

validity would be in the vote, but, then, 1 2 standing committees would have the option to pull a measure for that reason for discussion. 3 So, 4 that's something we could, you know, it would potentially be in that bucket of measures that 5 could be pulled for further discussion. 6 7 And at that point in time, we would 8 certainly share the details about why the Methods 9 Panel felt that that measure did not pass validity, if it was something specific to the 10 11 risk adjustment or the inclusion or not inclusion of social factors. So, that's something we could 12 13 consider. 14 Again, it's one of those process issues, but I think there may be some things we 15 16 can do on our end. But, certainly, if there's other guidance that the Methods Panel has for 17 18 developers, in particular, or for standing 19 committees as they're evaluating it, I think that 20 will be helpful as well. 21 CHAIR CELLA: This is Dave C. T'm just going to, I think, repeat what you said 22

there, Ashlie, but make sure that my repetition doesn't distort what you're saying.

I think you're indicating that NOF 3 4 will consider a change in this position that not 5 including social factors in a risk model should not be a basis for low/insufficient validity. 6 7 And the reason you can consider that change now 8 is that, between the time this policy was written 9 and today, you've allowed for standing committees to pull measures back in for discussion. 10 So, 11 they would be able to pull in a measure 12 application that has been deemed low/insufficient on the basis of social risk adjustment, or any 13 14 risk adjustment, for that matter. The fact that they can pull that in would enable this committee 15 16 to actually go ahead and make that vote, which I 17 think gets at Dave N.'s concern about not knowing 18 how to signal this concern other than putting a 19 comment that might not be seen. Is that right? 20 MS. CLARK: This is Apryl. Yes. So, 21 hi. This is Apryl. I just wanted to sort of 22 jump in here.

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1	I'm sort of new to the quality
2	measurement side, but certainly I've been working
3	on, I've been here since the social risk trial
4	started. So, I appreciate the background.
5	I think I would want to make sure that
6	we have the social risk trial actually being
7	funded. We're actually looking at measures that
8	come in. You have the conceptual basis and how
9	we're sort of thinking about that. And before we
10	make any changes, I'd want to make sure that
11	we're kind of tying the work that you guys do to
12	the work that that's doing and we can come out
13	with sort of an organizational-wide kind of
14	policy on social risk.
15	So, I'm not saying that we wouldn't
16	necessarily consider having the Committee you
17	know, as Ashlie mentioned, but I'd want to make
18	sure that we're sort of thinking about it a
19	little bit more broadly across the endorsement
20	portfolio, tying it into the current work that
21	we're doing, before we would make any policy
22	changes. But I understand the frustration, as

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1Ashlie mentioned, about being able to do that.2But I just want try to bring that other work in,3make sure that we're thinking about it, you know,4sort of holistically.5CHAIR CELLA: No, that's helpful. So,6Apryl, I was careful to say that consider as7opposed to making a policy change here on a phone8call.9MS. CLARK: Yes.10CHAIR CELLA: So, would you say that11that is accurate, that sort of a reconsideration12of this could be done in the context of the13larger picture, as you say?14MS. CLARK: Yeah. I mean, I think15that there is lots of discussion going on all16around the table17CHAIR CELLA: Right.18MS. CLARK: including with our19standing committee, about this issue.20CHAIR CELLA: Yes.21MS. CLARK: So, I'll make that part of22the discussion about that.		
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21 MS. CLARK: So, I'll make that part of	19	standing committee, about this issue.
	20	CHAIR CELLA: Yes.
22 the discussion about that.	21	MS. CLARK: So, I'll make that part of
	22	the discussion about that.

1	CHAIR CELLA: Okay. So, thank you.
2	That's very helpful.
3	So, with that in mind, are we now on
4	Patrick? Or Paul?
5	MEMBER ROMANO: Yes.
6	CHAIR CELLA: Patrick. Go ahead,
7	Patrick. And then Paul, and then Gene.
8	MEMBER ROMANO: Yes, I think that I'm
9	putting this discussion in the context of the
10	refresher that Ashlie gave us a few hours ago
11	when I was just waking up about the validity and
12	how we assess validity, and the fact that we can
13	take into consideration the performance
14	characteristics of a risk-adjustment model,
15	including its discrimination, its calibration, et
16	cetera, but we're not supposed to take into
17	consideration presence or absence of any specific
18	risk factor. And, of course, as we're now
19	talking about social determinants, that fits into
20	that framework clearly.
21	But, obviously, this is a bit of a
22	funny distinction, right? Because we know that,

let's say that we see from the evidence that has 1 been presented that the model is miscalibrated 2 with respect to low-income people, right? 3 Ι mean, the natural consequence of excluding social 4 determinants from a model where those 5 determinants belong is that the model will now be 6 7 miscalibrated for those individuals. So, the absence of those factors from the risk model 8 9 becomes a calibration issue, and then, it becomes 10 fair game for us to discuss, as it were. 11 In other cases, a risk model may 12 appear to perform well. I mean, the C-statistic 13 may be, let's say, .75. But we know from 14 previous published literature that the C-statistic ought to be .85. And if they had 15 16 adjusted for other things that they didn't adjust 17 for, then it probably would have been .85. 18 So, again, that leads us to say, well, 19 even though .75 might be considered adequate, we 20 know that it's not where it should be, and this 21 means that there's residual confounding or omitted variable bias. And we have a pretty good 22

sense what those omitted variables are, even 1 2 though we're not the clinical specialists who are on the standing committee, and therefore, 3 empowered to comment on the specific things that 4 should be in the model. 5 So, I'm just saying that this idea of 6 7 evaluating the overall performance of the model, 8 including particularly its calibration as well as 9 its discrimination, is not completely separable from this issue of what's in the model. 10 11 CHAIR CELLA: Thank you, Patrick. 12 Paul? 13 MEMBER KURLANSKY: A few comments, 14 though, some of which are going to echo things that have already been said. 15 16 But I don't think we need to say 17 definitively that this is an issue of either 18 validity or reliability. I think Larry's 19 analysis is probably pretty sound that a very 20 inadequate risk model can skew your assessment of 21 reliability. I mean, I have to agree that it is 22 fundamentally an issue of validity, but it can

certainly impact reliability. So, I don't think we need to say that it is purely an issue of one or the other. I think we can just acknowledge that it impacts both.

Having said that, I guess I would 5 strongly hope for a potential change in policy 6 7 because, as other people have said, if we assess 8 a risk model and find that it's methodologically 9 flawed and inadequate, so if we find that it's methodologically flawed and inadequate because of 10 11 this particular issue, then we can't comment on 12 it or we can't use that to vote that it is low 13 validity. But if we find a methodologic issue, 14 that it's inadequate based on some other 15 parameter, we can. It puts us in a very 16 compromised and untenable position, just as a 17 methods group.

So, I think that there is a certain ambivalence right now in the policy to where it has to be included and assessed, but it can't be used as a criterion. I think that really puts us in a very odd position.

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The final comment is, having said
that, this gets back a little bit to the issue
that we talked about before as to what the
metrics are going to be used for. For example,
if you elected not to put in these factors
because you were going to use this metric in
order to identify those sites which needed more
assistance and more support and more finances,
then you might specifically want to leave this
metric out I mean, excuse me you may want
to leave these parameters out for that particular
reason, because you want to identify sort of
underserved sites that need help. Then, it might
be a very compelling reason to leave it out.
But if we can't know or determine
exactly how the metric is going to be used, then
I think we have to go back to the sort of maximal
criteria. And based on maximal criteria, I think
if the risk model is inadequate, it's inadequate.
CHAIR CELLA: Thank you, Paul.
Gene?
MEMBER NUCCIO: Yes. Hi. In the

1	interest of complete disclosure, I was a member
2	of the NQF panel that Dave Nerenz chaired a few
3	years ago on sociodemographic risk factors. And
4	so, I come to this with a certain bias.
5	Kind of working from the bottom up in
6	terms of the questions on the screen, not all
7	risk factors have an equal impact on an outcome
8	or a provider's ability to achieve an outcome
9	with a patient. And as the number of risk
10	factors increases and I had examples this time
11	around where there were in excess of a hundred
12	risk factors that were used in the equation for
13	the prediction equation obviously, no single
14	risk factor is going to make that much
15	difference.
16	So, I think the rationale provided by
17	some of the developers that, well, it only
18	accounted for 1 percent of the difference, and so
19	that's not much, so we're going to ignore it
20	one of these sociodemographic risk factors is
21	bogus. Because when you put a hundred risk
22	factors into an equation, individually, there

isn't going to be a lot of change with any individual risk factor, adding it in. Stepwise, it might show something different.

The second question that's asked is 4 5 the decision to include or exclude in the provider's control. I call this is the 6 7 developer. So, in many cases the developers did a really excellent job of showing that, in fact, 8 9 there is a relationship between a patient risk factor of which the patient -- or the provider 10 has no control over, such as maybe the 11 12 availability of health care institutions in this 13 area or nutrition, or whatever, but then simply 14 decides not to do it.

Well, if the developer can simply 15 16 ignore the suggestion -- I think it's stronger 17 than a suggestion -- the directive from the NQF 18 that sociodemographic risk factors be included in 19 a prediction model for risk adjustment, then, you 20 know, what teeth is there in terms of having them 21 acknowledge the fact that hospitals, for example, 22 that deal with patients who are primarily

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homeless are going to have poor risk factors if you're not adjusting for whether or not they have a permanent residence? Now we're not asking them to correct the problem of homelessness, but we are simply saying that the outcomes that the provider can achieve is directly affected by these kinds of risk factors.

And finally, I agree with the previous 8 9 presenter or caller where they said it is not validity or reliability; it's both, primarily, in 10 my mind, validity. And if we're asking if these 11 12 measures are being used to make distinctions 13 among providers, not just in terms of the quality 14 of their work, but also in terms of whether or not they get rewarded monetarily -- and there's a 15 16 lot of value-based purchasing measures out there 17 -- then we need to enforce in some way that, when 18 you demonstrate that there is a relationship 19 between the sociodemographic risk factor and an 20 outcome, that those need to be included just as 21 the clinical risk factors would expect to be included. 22

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1	I'm sorry I took so long.
2	CHAIR CELLA: No problem, Gene. Great
3	points. Thank you.
4	Christie, you've got your hand up. Go
5	ahead, Christie.
6	You may be on mute, Christie. Can you
7	try to unmute yourself?
8	(No response.)
9	MS. WILBON: We'll work with Christie
10	to make sure she's connected.
11	CHAIR CELLA: Yeah. I think we'll do
12	something offline here, some on-the-side work to
13	see if she's muted remotely, and we'll come back
14	to you, Christie.
15	Jennifer has her hand up. Go ahead,
16	Jennifer.
17	MEMBER PERLOFF: Okay. Great. I have
18	multiple phones ringing here.
19	One concern I have with some of the
20	sociodemographic risk factors is that they often
21	require bringing in external or new data not
22	necessarily related to the core data source, like

claims or surveys. And we rarely see what 1 2 missing data gets introduced into the mix because of these factors being added. 3 So, are there 4 missing data elements? Does the assessment 5 sample size go down when you try these measures? That's just something I feel like we never get 6 7 good visibility on, and maybe it's a non-issue 8 sort of in this space, but a little bit 9 tangential, I just wanted to raise it. 10 CHAIR CELLA: Okay. Thank you. 11 I guess Christie's going to be trying to dial back in to a number that allows us to 12 13 hear her. 14 Any other comments? CHAIR NERENZ: Yes, Dave N. here. 15 16 Just a quick response to Apryl. 17 At least in my framing of this issue 18 and the questions I raised, I wasn't seeking in 19 any way to change broad NQF policy or to get out of line with broader discussions of policy about 20 21 social risk factors. It was really about how to implement the policy currently in place, where 22

developers are asked under certain criteria to 1 2 include social risk factors if a set of criteria are met. And our question is, as the Methods 3 4 Panel, what action can we take and what decisions 5 can we make if the treatment isn't satisfactory according to the policies that currently exist? 6 7 So, again, not pushing for any change that's out 8 of line. 9 CHAIR CELLA: This is Dave C. I don't know if Ashlie or Apryl want 10 11 to say anything to that. 12 But, if I'm not mistaken, at least one of the seven submissions we'll talk about, this 13 14 will come up in that context. So, even though it's good to know that NQF is going to take this 15 16 up under kind of a more general set of issues 17 that are under review and discussion, we will be 18 hoping for some guidance during this meeting, 19 specifically when these come up, when this comes 20 up again in the specific measure context. 21 I still haven't seen Christie join in. 22 So, we'll go to Eric and, then, Jack.

1	Are you there, Christie?
2	MEMBER TEIGLAND: Can you hear me now?
3	Yes?
4	CHAIR CELLA: Yes, I can hear you now.
5	So, go ahead, Christie. You're up next.
6	MEMBER TEIGLAND: All right. Yes, I
7	had to call in. I could hear, but I couldn't
8	speak, I guess.
9	Yes, I just wanted to reinforce
10	everything that has been just said. This has
11	been a thorn in my side since we started this
12	process and it seems to be getting worse, not
13	better.
14	And I just wanted to bring it home
15	with a real example. Well, there are many in the
16	measures I evaluated this round. But there were
17	some cost measures, and, yes, they did a great
18	job, as you said, laying out the conceptual
19	basis. They found that the social risk factors
20	were significant.
21	And when they presented the data, this
22	time they actually showed what the difference

These are cost measures. So, the cost for 1 was. 2 a dual-eligible patient in a skilled nursing facility is 18 percent higher across. For a non-3 white in a skilled nursing facility it's 25 4 5 percent higher. But, then, they said, yes, we already have 120 variables in the model and this 6 doesn't improve the model fit. 7 8 What does that say about those skilled 9 nursing facilities operating on very tight margins who have 14 to 25 percent higher costs, 10 11 who are treating patients with these social risk 12 Is it going to hurt the quality of care factors? 13 or is it really going to impact access to care 14 for those people? And the variables were significant 15 even in the model. It wasn't even like, oh, we 16 17 added them in at the end. And, of course, they 18 didn't add any -- you know, they weren't 19 significant. They were significant in the model. 20 So, there's something wrong with the 21 model, right, when you have that big of a variance in cost for these groups, but you're not 22

finding that in the risk-adjustment model. 1 So, 2 there's something wrong here. There was absolutely zero rationale, 3 as far as I could tell, to not include them, but 4 5 you're right, they just said, but we're not. We decided not to. So, I think we need to do 6 7 something about those kinds of situations. 8 CHAIR CELLA: Well, that really brings 9 Is that one you're referring to one of it home. the seven we'll be discussing? 10 11 MEMBER TEIGLAND: I don't think we're 12 going to discuss this measure. It's the PAC 13 Smith measure. I think they passed. Yeah, I 14 think they passed. These measures passed because

14 think they passed. These measures passed because 15 they had decent validity/reliability, which kills 16 you to make those judgments when you know they 17 are not being appropriately specified.

18 CHAIR CELLA: That really does bring
19 it home, Christie. Thank you.
20 MEMBER TEIGLAND: Yes, yes.
21 CHAIR CELLA: Eric?

MEMBER WEINHANDL: Hi. This topic

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1	absolutely tortures me. And part of it is
2	because I've got training in epi and I've got
3	training in biostats. And the two parts of my
4	brain don't really totally agree on this one.
5	(Laughter.)
6	MEMBER WEINHANDL: And then,
7	complicating the fact is, you know, that when I
8	think about these social risk factors,
9	definitely, my mind always goes toward the
10	denominator of patients who are Medicare-eligible
11	or Medicare-enrolled. The simple binary factor
12	of just the previous example: are you also
13	enrolled in Medicaid, yes or no? And so, that's
14	the easiest one for me to think about.
15	Obviously, there's lots of other social risk
16	factors that could be used, and some of them are
17	measured on a continuous gradient, and the
18	methodological challenges become more severe.
19	I guess a few thoughts. One, I want
20	not to forget is just reacting to the text on the
21	screen. And that is that question of the word
22	control. I guess it's the second-to-last bullet

2	I find that the notion of control is
3	pretty context-dependent. And what I mean is,
4	imagine that you're concerned about something
5	like food supply or about home security. Home
6	security may be a poorer example than food
7	supply. But you can imagine how there are,
8	depending on which provider is being evaluated in
9	this measure maybe it's a health care provider
10	or maybe it's a Medicare Advantage plan sponsor
11	there are genuinely different statutory
12	restrictions about what can be controlled in the
13	home for a patient or for a person, depending on
14	who the actor is that is being evaluated.
15	And so, there's a part of me that says
16	and I don't know if it's the word control or
17	in in the provider's control. I don't recall. I
18	have read the report from the NQF before, but I
19	don't recall if that specific language is part of
20	the policy or invoked in the report.
21	I think that it's tough to ask, say,
22	the Scientific Methods Panel, to opine, or even a
measure developer maybe, to opine on whether 1 2 something ought to be in control or not, unless you have a really detailed knowledge of what the 3 legal restrictions are for what is in control. 4 Ι 5 mean, Medicare Advantage plan sponsors, by virtue of the 21st Century Cures Act, have the ability 6 7 to do certain things now with respect to social 8 risk factors and food security that they didn't 9 have the province for before. So, you can imagine it then becomes complicated. 10 11 I'm definitely receptive -- so, that's 12 kind of the policy part of me. The biostats part 13 of me says, if you know that, among your list of 14 risk factors that explain your outcome, dualeligibility is a prognostic factor, then it's 15 16 kind of a black-and-white decision for me. It 17 should be in the model. And I suppose that my 18 judgment there is partly because of this lack of 19 clarity about what's in control versus what's not 20 in control. 21 I mean, it's easy to talk about a

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social risk factor and pretend that we think that

1	this is something that's exogenous to the system
2	and that, you know, you can make a principled
3	argument that you should be treating people who
4	are poor the same way that you treat people who
5	are not poor. But couldn't you make the same
6	argument rather easily about a lot of comorbid
7	conditions? If you have a drug therapy, would
8	you make a distinction between heart failure, yes
9	or no; diabetes, yes or no?
10	I find that when I think very
11	critically about this question of whether there's
12	something truly distinctive about social risk
13	factors, I often find myself eventually asking,
14	well, is there actually anything different or is
15	the same ethical decision in play for comorbid
16	risk factor as for a social risk factor? So,
17	then, the distinction begins to wash away.
18	And then, I guess that, on a related
19	note to all of that, it is that, when it comes to
20	the volume of risk factors in a risk-adjustment
21	scheme, I mean, no doubt, with administrative
22	databases, you're going to consistently find the

poverty of associated dichotomous, continuous
gradients -- it's going to be associated with
poorer outcomes.

But I often find that, to some degree, 4 5 when you see that independent adjusted association of, say, dual-eligibility with a poor 6 outcome, there's often a connection between the 7 8 strength of that association and how many other 9 medical factors are in the model. And sometimes I think that we concentrate on the social risk 10 factor when, actually, it's a proxy for poor 11 12 adjustment for a lot of other medical risk 13 factors.

14 And that's why I bring it up at the exact same time as talking about the distinction 15 16 between social and medical risk factors. 17 Because, from a statistical perspective, I'm not 18 sure that we're looking at anything other than a 19 large collection of very interrelated correlated factors. 20 So, that's the biostat part of me 21 that's speaking.

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Finally, the epi part, and then, I'll

wrap up. One of the things I'm struck by is 1 2 that, if we were to accept that we should include social risk factors if we know that there are 3 4 good data that support an association between 5 them and outcomes, would it be reasonable or, is it overstepping, for this evaluation process of 6 7 measures to encourage that, when measures are reported, they aren't simply reported en masse 8 9 with an adjustment for social risk factors, but that the measure is also reported in those who 10 are poor and not poor, those who are dual and not 11 12 So then you have an opportunity to see not dual? 13 only the risk-adjusted perspective. 14 You know, given the world as it is, 15 how is the provider doing? But also 16 understanding for that provider what is their 17 difference in all terms between poor and not 18 So that you can begin to understand poor. whether that delta is actually unique for that 19 20 provider versus other providers. 21 CHAIR CELLA: It's kind of like reporting actual observed means and modeled means 22

in a patient.

2	MEMBER WEINHANDL: Yes, yes.
3	CHAIR CELLA: Yes.
4	CHAIR NERENZ: Dave N. here.
5	That actually was one of the specific
6	recommendations of the 2014 panel report.
7	CHAIR CELLA: To report both?
8	CHAIR NERENZ: Yeah. If it makes
9	sense on all the criteria to do adjustment and
10	use adjusted measures, that's fine; that's good.
11	And that was a change in NQF policy.
12	But also then, a parallel
13	recommendation listed right in there is to
14	encourage reporting of what's referred to as
15	stratified rates. So, it's basically what was
16	just said, that, depending on what the variable
17	is and what the relevant categories are, report
18	out referring to that stratified fashion. And I
19	thought it was feasible because of some of these
20	issues and a few other considerations. But, as a
21	concept, yes, it's desirable.
22	Now that gets us into this territory

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1	of use and reporting and who mandates the
2	reporting, and that sort of thing, but we did
3	agree clearly as a concept it's an important and
4	good idea.
5	CHAIR CELLA: Eric, did the
6	epidemiologist part of you finish?
7	MEMBER WEINHANDL: Oh yeah, that was
8	my last part. Thank you.
9	CHAIR CELLA: Okay. We heard from
10	three Erics. You said epi and biostats, but we
11	also heard from the policy Eric. So, thank you.
12	It was a great expose.
13	Now Jack had his hand up, but I don't
14	see it up now, would be next, if you do want to
15	speak. And then, Larry is on.
16	So, Larry, welcome back.
17	MEMBER NEEDLEMAN: Yes, my hand is up.
18	CHAIR CELLA: Okay.
19	MEMBER NEEDLEMAN: My hand is up and
20	somehow the screen seems to keep lowering it.
21	CHAIR CELLA: Somebody doesn't want
22	you to talk, Jack. It must be that.

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1	(Laughter.)
2	MEMBER NEEDLEMAN: Right. Okay. Very
3	rich discussion, and I think a discussion of risk
4	adjustment in general dealing with issues of
5	what's downstream, what's under the control of
6	providers, is particularly to some of the cost
7	measures which look downstream three months, six
8	months, nine months, is valid. But I'm going to
9	stick with social risk adjustment for the moment.
10	And I think there are a couple of
11	things we have been seeing in these measures.
12	Often, the reason for we're not going to add them
13	is it doesn't add very much to the predictions.
14	The r-squared doesn't change very much. The
15	relative rankings of folks don't change very
16	much. And by very much, what I really mean is
17	what we're told is the r-squared changes
18	virtually not at all and the rankings change
19	virtually not at all. So, we're basically
20	saying, if we throw these in, it's de minimis.
21	And I think it's useful to reflect a
22	little bit on why that's the case and how it's

affecting the rankings it provides. One of the 1 2 reasons is some of the things that the social risk factors do are downstream from and included 3 4 in the models through other downstream variables. So, we've got mediated relationships. 5 The marginal contribution of the risk factors to the 6 7 outcomes are smaller than the total contribution 8 of the risk factors to the total through all the 9 different pathways. And that, I think, is one of the reasons why Christie commented about being 10 higher, and so forth. That's, I think, one of 11 12 the reasons why.

13 But the second reason is we are only 14 looking at Medicare data. This issue keeps 15 coming up in the CMS measures and we're only 16 looking at Medicare data. And what we know about 17 the facilities, particularly the facilities that 18 treat high-volume either minority patients or low-SES patients is they tend to have smaller 19 20 volumes of Medicare. 21 So, we're looking at a small

contribution, a small volume in these providers,

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adding to our uncertainty, but, also, you're going to see higher volumes of Medicare patients, including some in not particularly low-SESserving providers, where some of the low-SES folks there, you're going to see the balance there.

7 The concern that drives a lot of the 8 are we being unfair to low-SES-serving providers 9 is about their capacity to provide the kinds of 10 services and meet the kinds of needs that their 11 patient loads have. But an awful lot of the 12 patients that we're concerned about are not 13 Medicare.

14 So, we've got this real imbalance between a small number of Medicare patients in 15 16 those facilities, and they're not the only ones 17 whose care we're worried about. And the Medicare 18 quality is focused on just the Medicare patients. 19 So, we've got this small contribution to 20 r-squared, the small changes in ranking being 21 driven by the fact that we also have smaller numbers of Medicare patients in those low-SES-22

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serving facilities. And I've been told this by a 1 2 couple of folks who run these. Given the small number of Medicare, given that they're often paid 3 4 by Medicaid lump sums or per diem, they don't do 5 as a good of job coding, which means, at the same time you get some of the SES coding there, you 6 7 may have lower risk adjustment scores on the 8 other factors that influence the risk adjustment 9 because all their comorbidities are not being 10 coded on. So, we've got a broader issue of,

11 12 should we be just including this as a matter of 13 principle? Should we be not including it because 14 it doesn't change the r-squared very much? And that, I think, has been some of the context in 15 16 which we've seen these measures discussed by the 17 developers where we would have to figure out what 18 we want to do about it. 19 CHAIR CELLA: Thanks, Jack.

Larry, you're up. 21 MEMBER GLANCE: Great. I'm sorry I 22 missed a good 30 minutes of this discussion, but

I'll make a couple of comments, and I'll try to be succinct.

The first one is that, at some level 3 whether or not to include SES is not so much a 4 statistical question; it's a philosophical 5 question. So, if you believe that socially 6 7 disadvantaged patients are more likely to have 8 worse outcomes and to incur higher costs, and you 9 believe that institutions/hospitals that care for these people are being potentially financially 10 11 disadvantaged with these performance measures 12 that do not account for SES, then you end up hurting those more vulnerable institutions that 13 14 are taking care of the most vulnerable Then philosophically, I think it 15 populations. 16 makes sense that, when that sociodemographic 17 information is available, that it should be 18 included in the risk adjustment, period. So, 19 that's the first point.

The second point is that I agree that the standard approach that CMS and some of the other measure developers have used is they'll put

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SES in the model and they'll look at overall 1 2 model performance, and they say, it doesn't change. And then, what they'll do is, again, 3 they'll put SES in the model, if they choose, SES 4 will move out, and then, they'll compare hospital 5 rankings overall and they'll say, it doesn't 6 7 change. It doesn't matter. We're not doing it. 8 I think maybe a more pragmatic 9 approach, and one that we could maybe discuss, would be to say, okay, you know, if you have 2500 10 11 hospitals, it probably isn't going to make much 12 of a difference overall for that population of 13 2500 different hospitals. But if you were to 14 limit your comparison to, say, safety-net 15 hospitals, those hospitals that, say, have more 16 than the top 10 percentile or quartile in terms 17 of their proportion of socially disadvantaged 18 patients, and then, see how much of an effect 19 including SES has on the rankings for that 20 particular group of hospitals. And then, if it 21 has a significant impact, then you ought to include it. 22

1	The problem is I think it would be
2	hard to come up with a cutoff for how much the
3	rankings have to change. But I think if we could
4	sort of maybe talk about that a little bit, that
5	might be one way to get around that.
6	But, again, philosophically, there
7	really is no cost to the measure developer to
8	including sociodemographic risk factors if
9	they're already in the data. And I think,
10	although people have debated back and forth
11	whether you should include them or not include
12	them and I'm not going to get into that whole
13	discussion I think most people, at least what
14	I'm hearing, are falling into the camp that,
15	yeah, you ought to include them.
16	So, why not, as a group, why shouldn't
17	the NQF say, look, if you have that data element
18	and certainly CMS does you ought to put it
19	in the model, period?
20	Thank you.
21	CHAIR CELLA: What a rich discussion
22	that's been. I don't see any oh, now I see

another -- I see Paul's up. So go ahead, Paul. 1 2 CHAIR NERENZ: And then Sherrie. MEMBER KURLANSKY: There is a 3 4 quantitative metric that you could use called the 5 Net Reclassification Index, which does have certain parameters attached to it that you could 6 7 actually see what would be the impact in terms of 8 reclassification by including it in the model, 9 which may be more meaningful than how it changes the C-statistic, which frequently is minimal, 10 because the C-statistic deals with the overall 11 12 population, but not necessarily with the impact on individual sites. 13 14 CHAIR CELLA: Elaborating on Larry's 15 point. Thank you, Paul. 16 Sherrie? We can't hear you, Sherrie. Did you call into the 833 number? It seems to 17 18 me you need to call the 833 number to be able to 19 be heard. Why don't we wait and see if Sherrie's 20 21 going to maybe redial? She sent a note saying she's back on the call, but maybe came in through 22

the other number.

2	Quite a rich discussion. I see
3	Christie and Paul have hands raised. I think
4	those are recycled raised hands. So let's check.
5	Christie, do you have a comment?
6	MEMBER TEIGLAND: I just had one quick
7	other comment. And that was that I also saw a
8	couple of measures this cycle where they made
9	just the opposite argument for including some
10	clinical factors that didn't show statistical
11	significance in the model, but they let them in
12	purely for face validity, which we know has been
13	done for a long time.
14	CHAIR CELLA: Yeah
15	MEMBER TEIGLAND: So I like to you
16	know, when you talk out of both sides of your
17	mouth kind of thing.
18	CHAIR CELLA: Well, I think it goes
19	back to, I think it was Eric's point that, you
20	know, at the end of the day, there's not much
21	difference between social risk adjustment and
22	clinical risk adjustment, and they are correlated

risk factors, at least from a statistical 1 2 perspective. So it's hard to make the case that one's more important than the other. 3 I still don't see Sherrie back. 4 Okav. 5 She says she called the 833 number and "unmuted my line, but still can't be heard." 6 Sherrie, try hitting 7 MS. WILBON: See if that gets you on. 8 star-1. I still don't hear her. 9 CHAIR CELLA: I assume she heard you saying hit star-1. 10 11 Let's go to Daniel, and then we'll see 12 if Sherrie has found her way in. 13 Go ahead, Dan. 14 MEMBER DEUTSCHER: Just a couple of 15 notes. First, as a general perspective, I think 16 at least from my perspective, I'd like to see 17 developers first test for SES factors, and is 18 actually currently expected. Now we do have 19 sometimes -- I've seen, you know, with my real 20 experience on this panel, some cases where they 21 just say, "We don't have any SES data." 22 So I think we also need to address

this situation. So what do we do about that? 1 Is 2 that okay? Because that's a really easy way to get around that, just say, "We don't have the 3 4 data." So are we expecting or will NQF be expecting in a certain amount of time for every 5 measure developer to get SES data and test for 6 That's one question. 7 it?

8 Another thing I think is that, once an 9 SES factor has been identified as significant, 10 whether it contributes more or less to the 11 predictive power of the model, I can't think of 12 very good reasons not to include it in the model. 13 And I just want to give an example.

14There are studies that show that an15SES factor or grade is significant, that it's no16longer significant once treatments are adjusted17for. So I think that's a case where developers18should really be careful about including an SES19factor that goes away once treatments are20adjusted for.

21 And there could be multiple reasons22 for that. Maybe low-SES patients get worse

treatment for some reason that's not really 1 2 dependent on the overall resources. Maybe it's just the selection of treatments that's 3 4 different. And there are studies that show that. 5 But, in that case, I would expect the developers to provide evidence to support that, 6 not just throw out a philosophical argument 7 8 that's not supported by evidence. 9 Those were my two comments. 10 CHAIR CELLA: Thank you. Thank you, Daniel. We're going to check back with Sherrie 11 12 again, who's going to try to speak. Go ahead, Sherrie. 13 14 Can you hear me now? MEMBER KAPLAN: 15 CHAIR CELLA: Yes, there you are. 16 MEMBER KAPLAN: Sorry about that, 17 Dave. I think they entered me as a non-18 presenter. 19 I just wanted to back up and agree 20 completely with Larry about the need to sort of 21 -- the face validity question, if you will, of including socioeconomic status data where it's 22

available in the data source. And that is, there's evidence from a number of studies, some of them are older, that academic medical centers and public hospitals are disproportionately represented in the penalty arena for adjusted compensation by CMS.

7 So I think -- you know, and some of 8 the argument is well, we don't have -- some of 9 the case mix of variables should adjust for all 10 the arguments that poor people are sicker, but, 11 in fact, there's a lot of evidence that -- for 12 example, the Area Deprivation Index in our local 13 situation moves hospitals around in terms of the 14 distribution. So I think that, with just a blanket you need empirical evidence 15 16 collection, you know, does the empirical evidence 17 support it, in this day and age probably isn't 18 adequate. 19 I mean, there's a fair amount of

20 opinion out there that this should and does 21 matter just from a philosophical standpoint. And 22 I think that warrants at least watch, you know,

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look at the adjustment, see if it is costly, and there's probably no reason not to, if possible, do it.

4 CHAIR CELLA: This is Dave C. again. 5 A quick note that we're being reminded, and I don't think this applies to Sherrie, in 6 7 particular, but the use of a speakerphone is not 8 encouraged because it's harder to get a good 9 quality tape recording. So if you can avoid using a speakerphone when you're speaking, please 10 11 do.

12 The other thing I wanted to say is 13 that I think this has been a fascinating and very 14 rich discussion from several people who have 15 thought deeply about this topic.

And the note to NQF I think is that I think it's a fair summary to say that there is a lot more support for including social risk adjustment than for not including it, even if the delta in the r-squared is not substantially changed, although I don't think that's everyone's opinion, but I think I heard more in favor of

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including it, at least on philosophical grounds 1 2 and also even on statistical grounds in terms of having a common, you know, similar standing with 3 clinical risk factor adjustment. 4 So I think it's a fair summary to say 5 that the majority of the Committee does endorse 6 NQF going back to look at this, as Apryl said, in 7 a larger context and maybe letting us know at our 8 9 next meeting where you are with that. Understanding that Dave N. raised this 10 not to start a revolution, but it did stimulate 11 12 quite a discussion. And so with knowledge that 13 Dave's motive was really to get guidance on how 14 to respond now to these submissions, it does raise the larger policy issue. And it's good to 15 16 know NQF is paying attention to it and will be 17 revisiting this with the standing committees and 18 internally. 19 Is that a fair summary? 20 MS. WILBON: Sure. Hi, Dave. It's 21 Ashlie. I think that was a great summary. And I did also just want to note that, 22

you know, I think there are things that we can be 1 2 doing at NQF, to Dave's point about not starting a revolution, to make sure that both developers 3 and committee members, and NQF staff, really 4 understand what the current policy is under the 5 trial. 6 7 And so I think we can do more on our 8 end to make sure that that's communicated and to 9 make sure that the policy is accurately kind of carried out and applied in the measure 10 evaluations at the standing committee discussion 11 12 as well. So thank you for that summary and agree 13 -- we agree. 14 CHAIR CELLA: And I think -- you know, it's probably not appropriate for me to volunteer 15 16 people, but, you know, you heard from at least a 17 dozen people who have obviously thought a lot 18 about this and can be helpful, I think, to you in 19 going forward with your thinking about it. 20 In the meantime, I would ask everyone 21 to keep this discussion and the earlier discussions from the morning in mind as we do go 22

through the submissions that we have to vote on as the meeting progresses.

So we're still -- sorry, go ahead. 3 MS. WILBON: I was going to say, Dave 4 5 N., really quickly, did you already start an outline for this topic? I know you had mentioned 6 7 that you had started taking some notes and had 8 some ideas about a paper. Is there something 9 that you already have in mind? And should folks reach out if they are interested in helping you 10 with that? 11 12 CHAIR NERENZ: Yes, that's right. Ι 13 was motivated just to put some things on paper as 14 I was doing some of the reviews of measures that I thought needed some kind of discussion made 15 16 about inadequate risk adjustment. And so maybe 17 if it's just a process issue, if people want to 18 let me know if they're interested in being part 19 of the writing group, I can send around at least 20 what I've got, getting started. 21 I wanted to hold it pending this 22 discussion this morning to just see where people

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are coming from and who seemed engaged in the 1 2 issue, and if there was a general direction where we were going. So we can pick it up from there, 3 if there are folks who are interested. 4 MS. WILBON: Thanks. 5 That's helpful. 6 Thank you. CHAIR CELLA: Okay. Well, let's 7 8 proceed on to the next topic on the agenda, if 9 you can advance to the next slide. It's on cost, cost measure evaluation challenges. 10 11 And I think Jack and Jennifer were 12 tagged for teeing this up and helping to set up a 13 discussion. Jack and Jennifer, do you want to 14 walk us through this? Dave, I'm going to give 15 MS. WILBON: 16 just a quick tee-up, and then I'll have Jack and 17 Jen, and actually Bijan, share some thoughts. 18 CHAIR CELLA: Sure. 19 MS. WILBON: They were part of a recent discussion with the Cost and Efficiency 20 21 Standing Committee. 22 CHAIR CELLA: Perfect.

MS. WILBON: But I tagged Jack in particular because he emailed these issues. So definitely would appreciate his input on expanding on some of these questions that are here on the slide.

But I did just want to give a little 6 7 bit of context. Obviously, cost measures come to 8 the Scientific Methods Panel for evaluation. We 9 got six this cycle. We are anticipating seeing at least a handful of measures every cycle going 10 11 I think CMS is working on developing forward. 12 several measures that will be submitted to NQF 13 over the next several cycles. So this will be 14 kind of a mainstay in our portfolio going 15 forward.

And so I think it is certainly important to have some principles that underpin our evaluations for these to make sure there's a common understanding of how we're approaching the evaluation for these. And I think that the Cost and Efficiency Standing Committee is grappling with some of the same issues. Many of them are

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economists and methodologists as well as clinicians.

And I think we, understanding that, we 3 4 actually put together a call just a couple of 5 weeks ago with them to discuss some of the challenges, particularly in evaluating validity, 6 7 based on some of the concerns that were raised in 8 the spring around the validity testing for some 9 of those measures. So we had, I think, a really great 10 11 discussion with the Cost and Efficiency 12 Committee. And in addition to the issues listed 13 here, I just want to kind of offer an opportunity 14 for Bijan and Jen and Jack to share some of their takeaways from that discussion and maybe 15 16 summarize some of the issues here on the slide 17 for us. 18 MEMBER PERLOFF: Great. Jack? 19 MEMBER NEEDLEMAN: Okay. So I'm just 20 talking about the evaluating exclusions issue. 21 We've got two bullet points on this page, just the evaluating exclusions issue. 22

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1	We've seen something in the
2	submissions that I do not recall seeing before.
3	You know, we've got a number of these submissions
4	where there's an index event, and then we're
5	going to look at all the things that happened
6	three months, six months, I think we've got one
7	that's nine months, out. And sort of attribute
8	that to the provider at the incident event. And
9	I'm not arguing about that logic. That's a whole
10	other subject.
11	But what they said in the
12	specifications of a number of these is we have
13	excluded certain downstream events that the
14	committee, our Technical Expert Panel, and the
15	CMS docs judge outside of the control of the
16	incident provider. It might be one of them
17	was planned readmission, which makes a lot of
18	sense.
19	But the issue that I had, as a
20	reviewer of these things, is I had no idea how
21	the process of identifying the costs for
22	exclusion as outside of control and/or otherwise

predictable were being done. Was there a 1 2 systematic review of possible things? Did they say yes to this one and no to that one, and we 3 4 did not see the noes? Did they -- is it an ad 5 hoc process where somebody says well, I think this could happen and we ought to exclude it? 6 7 And only the ones where somebody said this could 8 happen, we ought to exclude it, sort of got on 9 the agenda for discussion.

And none of that is clear in the 10 11 documentation we've gotten. So it's hard to 12 evaluate whether the exclusions look reasonable, but I don't know what they decided has not been 13 14 excluded or how systematic that review is. So I don't know how good the exclusion process is, and 15 16 that was the concern I was raising.

17 MEMBER PERLOFF: I would raise a 18 different exclusion issue, sticking with this 19 concept of the episode or bundle of care. Jack 20 is mentioning sort of the exclusions within the 21 construct, things that are not counted when 22 you're thinking about the cost or the quality of

care.

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2	But another type of exclusion is
3	episodes themselves that get dropped from
4	analysis. And we have seen measures where
5	something like less than 10 percent of the
6	originally-triggered cases remain in the final
7	measure. And we see some where it's small, 5 or
8	10 percent dropout, and some where it's
9	tremendous. And again, not much understanding of
10	what is left on the cutting room floor when you
11	have that degree of dramatic exclusions. So just
12	a different take, the same theme.
13	CHAIR CELLA: This is Dave C. I mean,
14	I confess that I was, you know, when I looked at
15	the exclusions, I kind of had my clinical
16	trialist hat on and thought in terms of, you
17	know, did this exclusion seem reasonable based
18	upon the kind of underlying rules that I might
19	use for deciding whether or not an exclusion from
20	eligibility in a clinical trial or excluding from
21	an outcome determination in the trial made sense.
22	And so, you know, it kind of brought

me to that provider control issue, if it seemed 1 2 like a cost that was legitimately -- either it wasn't a major cost or was something that was 3 4 outside of the provider control. It seemed reasonable. 5 But I agree, I never saw it spelled 6 7 I was using other sort of internal models. out. This is Jack again. 8 MEMBER NEEDLEMAN: 9 If I can just -- I totally agree with you that the exclusions we've seen, to me as a non-10 clinician, have all made reasonable sense. 11 It's more of how systematic is this review -- and how, 12 13 you know, what didn't get excluded. Again, it's 14 a matter of how the process is done, which -already mentioned. The trials that we've seen 15 16 all look reasonable. 17 CHAIR CELLA: Right. Yes, yes. So 18 you're not actually concerned about a specific 19 case per se, but the process. 20 And Paul has got his hand up. So echoing Dave's 21 MEMBER KURLANSKY: 22 sort of clinical trials hat, I am just wondering

if thinking in terms like a CONSORT diagram, if 1 2 maybe -- I didn't actually have to review any one of these. But it seems to me that if you had a 3 4 concept of what was the total population that was 5 potentially theoretically at risk, and then having them demonstrate each exclusion, what 6 7 percentage or what number were there -- excluded 8 with a reason, and then what was the final study, 9 you know, in sort of the format of a CONSORT diagram which you would do for a clinical trial, 10 11 it might, to Jack's point, it might make things a 12 lot clearer as to what you're doing. 13 Then you could make a better judgment 14 as to whether or not the exclusion seemed reasonable or not or even if the extent of the 15 16 exclusion seemed reasonable. But the process 17 would be a lot clearer. 18 CHAIR CELLA: Good suggestion. Any 19 other comments or questions on the evaluating 20 exclusions component of this? 21 Larry? 22 MEMBER GLANCE: So in just listening

to this discussion, and I did not evaluate any 1 2 cost measures, when I saw on the agenda that we were going to be looking at exclusions, I assumed 3 4 that what we were going to be looking at is if 5 you have outliers in terms of cost and how to deal with those. Are we saying that extreme 6 outliers of costs are being excluded from the 7 8 risk adjustment model, or are they being excluded 9 from the population -- the patient sample that's 10 -- whose cost performance is being evaluated? 11 One or both? Or none? 12 What are we exactly talking about with 13 respect to the exclusions? Could you make it a 14 little bit more concrete for me? 15 MEMBER PERLOFF: On the high-cost 16 cases, what we tend to see is winsorization. The 17 high-cost outliers aren't excluded. They're 18 truncated and sort of capped at the 99th 19 percentile or the 95th percentile. So that would 20 tend to be the issue there. It doesn't drive the 21 case to be dropped. 22 We're talking about, I think, two

kinds of exclusions. One, in counting up the costs of producing a certain kind of care, or measuring the kind of utilization, some kinds of 4 utilization costs are just excluded on theoretical grounds.

We couldn't control the costs. 6 Physicians should not be held responsible for a 7 8 patient who has a car accident on day 60 after 9 That really is beyond anyone's knee surgery. control and should be excluded. 10

11 CHAIR CELLA: Good example, yeah. 12 MEMBER PERLOFF: And so, yes, anyway, 13 I think that's, Jack, if I've got it right, those are the internal exclusions. 14

Yes, that's right. 15 MEMBER NEEDLEMAN: 16 The measure -- the definition is exclusion of unrelated expenses. And in none of the cases was 17 18 the car accident three months after the surgery 19 included as one of the excluded cases, the 20 excluded expenses, nor did it exclude the case. 21 So I'm looking. I've got to go back 22 to the -- in my notes, I did not document what

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the exclusions, examples of the exclusions, and
 I'd have to go back to the original submission to
 go see what they did.

4 One of the -- and the appendices that 5 they reference were actually not in our documentation. So there we are. 6 The language 7 showed up in, among other measures, 3564, 8 Medicare Spending per Beneficiary, post-acute 9 measure for home health, as an example. 10 MEMBER PERLOFF: Another type of --11 (Simultaneous speaking.) 12 -- go ahead, yeah. MEMBER PERLOFF: 13 CHAIR CELLA: And then Larry after 14 that. I just was going to 15 MEMBER PERLOFF: 16 say the other type of exclusion in the skilled 17 nursing facility stage, for example, that 18 concerns me is cases that get dropped. So let's 19 say you have a skilled nursing facility stay, and 20 there is a transfer to a new facility or some other kind of similar event. Those cases as a 21 22 whole will be dropped.

21
And to me, a concern is whether that's
introducing bias into the sample of cases that
are left. Is it really a valid measure of
skilled nursing stay costs, for example, if I've
excluded half of all cases constructed using the
logic?
So back to I think, Larry, you were
asking was it high cost. There are other things
besides cost that lead to cases being dropped,
characteristics of the episode itself besides
being an outlier.
CHAIR CELLA: Larry?
MEMBER PERLOFF: Sorry. I just wanted
to
CHAIR CELLA: Sure. Thanks. That was
Jen, right?
MEMBER PERLOFF: Yeah, that was Jen.
CHAIR CELLA: Yeah. Okay. Thanks.
Larry?
MEMBER GLANCE: And that was exactly
the question that I had in terms of maybe some
examples of where there was concern about the

cases being inappropriately excluded. 1 You can 2 deal with exclusions by just including them as risk factors. So, you know, transferring -- a 3 hospital transfer in, instead of excluding those, 4 you may just want to put it in as a risk factor 5 in your risk adjustment model. 6 7 And what I'm hearing, it doesn't sound 8 like what you're dealing with is all that 9 different from exclusion in other types of models. Am I missing something? Other types of 10 11 measures, rather? 12 MEMBER NEEDLEMAN: Yes. What you're 13 missing from me is a concern that I have no idea 14 how things get on the agenda for considering 15 being excluded as an unrelated cost, and 16 therefore, how systematic the process is or how 17 random this is in terms of the validity of the 18 measure. 19 If you're going to start saying we're 20 going to exclude unrelated costs, then you need 21 to tell me how you're making decisions to consider whether costs are related or unrelated. 22
And that's not in the documentation at all, and 1 2 it's not there how systematic it is. MEMBER GLANCE: Got it. 3 Thank you. I would raise a MEMBER PERLOFF: 4 5 separate issue, which in cost measures there is tremendous variance, right? The outliers are 6 7 extreme. And dropping cases really helps a measure with reliability and validity. If you 8 9 narrow the set of cases to be more homogeneous 10 and similar, you're going to have a better-11 performing cost measure in terms of the things we've been talking about throughout this day. 12 13 But, in the process of narrowing that 14 scope, you are leaving a lot of cases behind. And there's -- my concern is little attention 15 16 given to what's left out and what that remaining 17 set truly represents. 18 If we have 17 percent of cases as SNF 19 care in the country used to assess resource use 20 for SNF care, are we really -- is that really a 21 valid measure? This is a validity question for me in a lot of ways. So I just wanted to raise a 22

different point than the one that Jack's making, 1 2 which is, also, obviously, important. And I think other measures, obviously, 3 4 have these problems as well, but, for me, cost 5 measures are very challenging as freestanding, individual episodes of care. They don't lend 6 7 themselves well to being standalone, highly reliable, highly valid measures. 8 9 CHAIR CELLA: This is Dave C. I'm sort of torn between whether we're requesting 10 11 guidance or whether we're nominating ourselves to 12 help with this algorithm, whether a CONSORT 13 diagram or some sort of explicit request for an 14 explicit articulation of the basis for exclusion. One of my thoughts 15 MEMBER PERLOFF: 16 when we met with the standing committee was that 17 it would be helpful to do a white paper on some 18 of the unique features and challenges of 19 reliability and validity of cost measures. So I 20 was hoping to nominate just as sort of a white 21 paper topic which could include diagrammatic 22 examples like we were talking about as one

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1 dimension.

3 that we would like developers to be aware of. 4 I'm not sure there's a short-term action. 5 But, Jack? Bijan? Others? 6 MEMBER NEEDLEMAN: I would just like 7 more documentation of the process by which costs	
5 But, Jack? Bijan? Others? 6 MEMBER NEEDLEMAN: I would just like 7 more documentation of the process by which costs	
6 MEMBER NEEDLEMAN: I would just like 7 more documentation of the process by which costs	
7 more documentation of the process by which costs	
8 or, you know, services are nominated as unrelate	f
9 to care and how they're evaluated, and a little	
10 bit of whether a decision has been made to not	
11 exclude some costs, just to get a better feel fo	r
12 the process here. It's part of my assessment of	
13 whether the process for putting the measure	
14 together has been valid.	
15 CHAIR CELLA: That is Dave C. again.	
16 I'm sorry if I missed this. Is there a standing	
17 committee for cost measures?	
18 MS. WILBON: Yes, there is. This is	
19 Ashlie. Yes.	
20 CHAIR CELLA: And Bijan and Jen and	
21 Jack are on it?	
22 MS. WILBON: Bijan and Jack are. Je	
	n

we invited as a guest of honor to our webinar a
 couple of weeks ago, yeah.

CHAIR CELLA: So maybe this Committee could weigh in on endorsing the proposal to that standing committee to please do that white paper. It sounds like it's more their purview than ours. But we would appreciate the guidance. Is that fair?

9 MS. WILBON: Hi. This is Ashlie. Ι 10 actually think it's probably a crossover. Τ 11 think there are some issues that they are 12 grappling with methodologically that they 13 actually would like guidance from the Methods 14 Panel on.

Some were around, I think the main 15 16 issue that we discussed on the webinar a couple 17 of weeks ago was around validity testing, and 18 particularly for claims-based cost measures and 19 how, you know, developers should be thinking 20 about picking comparators and whether or not 21 there is any kind of systematic bias or error 22 created by using another measure of comparing an

administrative claims-based cost measure to 1 2 another claims-based cost measure to demonstrate validity, and kind of what types of validity 3 4 they're actually demonstrating by using that 5 approach. So I think there's definitely some 6 7 methodological questions that have come up at the 8 committee level that I think they are seeking 9 some broader guidance from a group like the Methods Panel. 10 11 So, Jen, please feel free to add or 12 clarify my explanation if there's -- I'm sure you 13 can probably explain it much more --14 No, no, I think MEMBER PERLOFF: that's perfect. 15 CHAIR NERENZ: What do people think 16 17 about maybe some kind of joint committee or 18 subcommittee that would have representation from 19 the Cost Standing Committee and the SMP? And 20 identify what are the four or five issues and, if 21 not a white paper, at least write down some of 22 your recommendations that we can then discuss.

Ĩ	2:
1	MS. WILBON: This is Ashlie. I think
2	that would be great. And I certainly would be
3	happy to help gather folks across those
4	committees and bring you guys together, so that
5	there's a group that's focused on that.
6	CHAIR NERENZ: Sorry about this. Jack
7	and Jen and Bijan well, I guess you said Jack
8	and Bijan are members of that standing committee?
9	MS. WILBON: Yes, that's correct.
10	MEMBER BORAH: That's right.
11	CHAIR NERENZ: I think one of you or
12	both of you would be logical leaders of this
13	because you have a foot in both committees, if
14	you would be willing to, I don't know, chair such
15	a subcommittee to get the issues down on paper
16	and convene people that are willing to weigh in
17	on the requests that they have of us and that we
18	have of them. Because it sounds like the
19	requests are going both ways. Is that
20	reasonable?
21	MEMBER PERLOFF: Hear, hear.
22	MEMBER BORAH: Yeah, this is Bijan.

1	I'd be happy to.
2	CHAIR NERENZ: Well, that would be
3	great.
4	MEMBER NEEDLEMAN: Sure.
5	CHAIR NERENZ: So, Ashlie, should we
6	leave this with NQF staff to coordinate a
7	gathering of, you know, I don't know what the
8	number is, but six to eight people or so to come
9	up with identifying the issues and then drafting
10	some position?
11	MS. WILBON: Sure, sure. We can
12	certainly work on getting folks together for
13	that. No problem.
14	CHAIR NERENZ: And then we can decide
15	later whether this is something that we can
16	circulate through email discussion or for the
17	next meeting, depending on its urgency.
18	MS. WILBON: Yes. That sounds good.
19	CHAIR NERENZ: Okay. I don't see any
20	other hands up. Are there any other thoughts on
21	the topic? Or were
22	MS. WILBON: Oh, Dave, sorry, just

real quick, I just wanted to know if -- Jack, did 1 2 you want to just provide, before we move on, because we're ahead of schedule and we can break 3 early and give folks a longer break. 4 I am 5 sensitive to the start time of Measure Evaluation since we've already coordinated that with the 6 7 developer. So I'd like to stick to our schedule for Measure Evaluation. 8 9 But, Jack, if you want to just 10 quickly, since we have a few extra minutes, just explain the second bullet around the risk 11

12 adjustment? And then if folks have questions, we 13 can, but just understanding that we are -- that 14 can be a subtopic of the paper, if folks were 15 interested in having more in-depth discussion.

16 MEMBER NEEDLEMAN: Sure. The second 17 bullet, oh, this is the tailoring issue. So what 18 we've seen in particularly the CMS cost measures 19 is -- and to some extent in some of the other 20 measures as well -- is they have migrated to a 21 highly stylized, fairly standard way of 22 approaching the risk adjuster. You know,

1 hierarchical HCCs, some specific clinical 2 services, some interactions there. But, then, 3 they're applying -- and it's always a lookback, 4 right?

Sometimes they include the diagnosis 5 or the condition that creates the incident event, 6 7 sometimes not. But the other elements of the risk adjuster are always a lookback based upon 8 9 review of the full records from the patients. So we wind up with one of the sources of exclusion 10 11 is we don't have a full year of data before the 12 incident event.

But there's not a lot of tailoring. 13 14 And one of the -- and you keep seeing this language when they're doing the risk adjustment 15 16 on a million patients, or a hundred thousand 17 patients or several hundred thousand patients, 18 that we don't want to add interactions, and we 19 don't want to do this or that, because we're 20 concerned about overfitting.

And even their model with 200
variables is not overfit on 100,000 or 200,000

There may be specific issues of low 1 patients. 2 cell counts, but it doesn't look like that. And so there's a tendency to not want to do a lot of 3 tailoring to the specific service that's being 4 5 examined or the specific providers that are being examined. And the question is whether we should 6 7 expect more tailoring of the risk adjuster to the patients and care circumstances. 8

9 And in the case of the Medicare spending per beneficiary, in on example, they 10 11 have month-to-month estimates which they average, 12 but they don't take into account the hit by the bus or the new cancer diagnosis during the period 13 14 in which things are being located. They don't think about why did patients get into rehab and 15 16 do we need to make sure we've got specific 17 measures. So it's kind of the variance in rehab, 18 how people get into rehab, that leads to 19 differences in cost downstream from the initial rehab circumstances. 20

21 And that's the question of how much 22 tailoring we should be expecting versus just

saying they're using the standard risk adjuster. 1 2 We know this. Sometimes it explains 30 percent of the variance, and sometimes it explains 11, 3 and we shouldn't be worrying about what they 4 could do to push the 11 percent of variance up to 5 a higher number. 6 Those were the issues that sort of 7 occurred to me as I was looking across the 8 9 measures we've been getting as opposed to individual specific measures. 10 Thanks, Jack. 11 CHAIR CELLA: I see 12 that Gene raised his hand, maybe even before you 13 started speaking. And then Eric. 14 MEMBER NUCCIO: Yes, I was just concerned that we're not going to get a chance to 15 16 talk about risk adjustment. The problem that I 17 saw, and I was part of the cost measure review 18 team, was that there appeared to be a fair amount 19 of what I would call cut and paste that went on 20 across the four measures, the mean spending per 21 beneficiary, that were presented. And perhaps the problem is simply that the developer was not 22

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very careful in terms of this cut-and-paste methodology.

The one that really upset me had to do 3 4 with home health, the mean spending per 5 beneficiary for home health care. In that description, they say that the data for the 6 7 patient is being taken from the MDS instrument. 8 I can assure you, having spent 20 years doing 9 home health analysis, that no patient in home health has been evaluated using the MDS. 10 They 11 use the OASIS instrument. And the items are not 12 the same on those two instruments. And so to claim that the model that 13 14 they're using for the home health mean spending 15 per beneficiary that takes into consideration the 16 clinical condition of the home health patient 17 using MDS is completely bogus. It just can't 18 happen because those data don't exist. So that 19 obviously upset me. 20 The other piece that I was concerned

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about, and it didn't have to do specifically with

the risk adjustment, was it was not clear what

the meaning of the "mean spending per beneficiary value" was supposed to be. They, at the end of their presentation, showed that the data that they generated using their little models were normally distributed. And it looked, you know, like a typical normal distribution.

7 Yet, when they were going to be 8 reporting the results, the results were U-shaped. 9 That is, the lowest percentage of patients or units of performance, whether it's a SNF or a 10 11 home health or an IRF or a long-term care 12 facility, were U-shaped. That is, there were 13 fewest people, percentage of agencies or 14 facilities that were in the middle, and the 15 largest percentages were either below the normal, 16 below expectations or above expectations. 17 And I found it very confusing because

18 how this setup -- what the criteria that were 19 used to transform the normal distribution into a 20 U-shaped distribution were not quite clear. And 21 I'll end it there.

CHAIR CELLA: Thanks, Gene. Eric?

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Hi. This is an 1 MEMBER WEINHANDL: 2 interesting topic. So I was on the subgroup that did not, to my knowledge or memory, did not 3 evaluate any cost measures. So I'm definitely 4 not speaking to anything that's in front of the 5 panel this cycle, at least in front of my 6 7 subgroup. I will say that this has been an 8 9 interesting thing I've observed in watching some of these Medicare cost measures being developed, 10 and not so much through the NQF forum, but, you 11 know, particularly through a variety of the 12 13 payment mechanisms and models that have been 14 proposed, especially from the Medicare and

15 Medicaid Innovation Center, CMMI.

Historically, I've been accustomed to seeing a lot of cost measures being developed by academic groups that are working in contract with the government, with CMS, and so they might be Yale, might be University of Michigan. Some of these big contractors do a lot of measure development.

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1	Typically speaking, my impression has
2	always been that they are tailoring to risk
3	adjustment schemes, to the disease stage, or to
4	the application that they are evaluating. What I
5	have noticed with the Center for Innovation is
6	that they are, generally speaking, and I'm making
7	a lot of generalizations, they're gravitating
8	towards this blanket use of the HCC risk score.
9	And that the HCC risk score has got
10	different components, right? There's a component
11	for a general Medicare beneficiary. There's one
12	for ESRD. There are ones for people who are a
13	full year prior to eligibility, less than a full
14	year. So there's some level of tailoring to
15	different subsets or phenotypes.
16	But the bottom line is that they're
17	taking this generalized risk score, which was
18	developed for evaluating cost expectations, and
19	it was developed on the fee-for-service data and
20	is typically used for risk-adjusted Medicare
21	Advantage data. But then they're using it in all
22	sorts of applications from general to specific.

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1	And interestingly enough, I even
2	encountered an example specific to my disease
3	dialysis, where the Innovation Center had
4	actually proposed a payment model last summer
5	where the outcome was home dialysis utilization.
6	So we're actually talking about a medical outcome
7	being risk adjusted with the HCC risk score. And
8	I think to myself, well, now this is really
9	daring because this isn't even economic outcome
10	anymore.
11	It seems to me that the question, from
12	my perspective, comes down to a validity
13	question. And so I don't mean to become overly
14	polemical about this. You've got a risk score
15	that has been developed for a specific
16	application, say the HCC risk score. It can be
17	used, as any covariate can be used, in a variety
18	of analyses and risk adjustment models.
19	You know, the child risk score, the
20	Elixhauser scores, or adaptations of Elixhauser,
21	are used in widespread scenarios. We know that
22	those scores weren't necessarily perfectly

intended for each specific application, but
 they're used widely.

So I don't mean to say that this 3 4 should be treated any differently, but I do think 5 that it comes down to a question of validity. Does this risk score that was not tailored for 6 your application provide appropriate resolution? 7 8 And to my mind, the answer is yes or no, 9 depending on what the nature of the economic outcome is. 10 11 If it's a general outcome, like total 12 all cost spending across Parts A and B, I'm okay with it in general. You know, it would be good 13 14 to see evidence before I say I'm okay specifically, but I'm okay in general. 15 16 When it comes to very specific 17 instances, like episode payments of care, now I 18 think the stakes are higher, and I think that you 19 do want to have some awareness of what was 20 happening before that episode began, what 21 triggered that episode. And my concern then, because of these 22

generalized risk scores not being tailored to the application, are going to explain a lot less of the variation. And as a result, the measure is going to be a lot less valid.

5 So I think it comes down to, if I were 6 to really boil it down, for me, it would be, yes, 7 we should expect tailoring if we're evaluating a 8 very sort of short-term, highly-specific kind of 9 cost endpoint. If it's all costs over a one-year 10 time period, then I'm expecting less tailoring.

11 CHAIR CELLA: Thank you, Eric.12 Christie?

13 MEMBER TEIGLAND: Yeah, this is a 14 measure that we are going to discuss tomorrow that didn't pass. But I just want to point out 15 16 inconsistency in using HCC risk models and all of 17 the ICD codes in those models to risk adjust this 18 measure, but then because they wanted to apply it 19 to both Medicare fee-for-service and Medicare 20 Advantage, they elected to only use diagnoses 21 from the discharge claim for a patient, which we 22 all know is in no way going to document every

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chronic condition that patient has.

2	And then it wasn't even clear if
3	they're actually using history for Medicare fee-
4	for-service patients because they have it, but
5	they're not using it for Medicare Advantage
6	because they don't have it, because they included
7	some adjustment factors for Medicare Advantage.
8	But just the whole point of you
9	developed the model using this huge set of data
10	that assumes that you're going to be accounting
11	for chronic conditions that patients have when
12	you risk adjust, but then when you limit that to
13	whatever diagnoses that were deemed important on
14	that discharge claim, that patient could very
15	well have multiple other chronic conditions that
16	aren't captured. And so then, you know, the
17	results are going to be highly skewed.
18	So, yeah, the measure didn't pass, but
19	just this whole approach of using different data
20	to develop the model, the risk-adjusted model,
21	than you're using to actually calculate the
22	measure seems completely inappropriate. So there

should be some kind of, yeah, rule against that. Maybe there is.

CHAIR CELLA: Well, thank you, 3 4 Christie. I don't see other hands up. Wait. 5 Larry just raised his hand. Go ahead, Larry. Just a really quick 6 MEMBER GLANCE: 7 follow-up question to Jack and Christie. When 8 they're using a CMS HCC model in their cost 9 models, and I understand that it was developed in a different dataset, are they estimating new 10 11 coefficients for the CMS HCC models for the 12 individual categories or are they re-estimating a 13 single coefficient for the entire score based on 14 the old coefficients? I mean, they must be doing some kind of customization. Can you --15 16 MEMBER NEEDLEMAN: Yes. The 17 customization is in terms of whether they're 18 including or excluding certain covariates. 19 They're then taking the data, and they're running 20 the regressions with all the covariates that 21 they're including. And you get covariates, you 22 know, you get measure-specific coefficients for

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each measure. So the risk adjustment is being
 done there.

Yeah, so they are 3 MEMBER GLANCE: 4 customizing the model. And that's a fairly 5 standard approach. I mean, certainly, the CMS HCC model is much, much richer than more 6 traditional models like the Elixhauser 7 8 comorbidity algorithm that's used repeatedly in 9 the outcomes literature. 10 So can you explain to me why you feel that their approach is not sufficient? 11 I mean, 12 it's a very, very rich model with lots of 13 different --14 MEMBER PERLOFF: Yes. It's because the model was developed, I think appropriately, 15 16 as you said, using all of the ICD-10s for the 17 past year of history for that patient. But then 18 when they calculate the measure, in this case 19 they were only using ICDs from a discharge, from 20 an inpatient claim, from an inpatient discharge 21 claim. That in no way is going to capture all 22 the ICD diagnoses for that patient for the past

12 months, right? That was the biggest 1 2 problem --The interesting thing 3 MEMBER GLANCE: is that the CMS HCC model goes back and uses the 4 5 carrier data as well. So it uses not just inpatient, but also outpatient --6 7 MEMBER PERLOFF: That's right. That's 8 That's right. It uses a history, a oneright. 9 year history, of claims to calculate the HCC risk 10 score, yes. 11 MEMBER GLANCE: So what is the major 12 limitation of using the CMS HCC model for cost --13 MEMBER NEEDLEMAN: Okay. So we looked 14 at measures in this last cycle, and I haven't got the full list in front of me, and I apologize, by 15 16 name, but we looked at measures for home health, 17 patients who had been admitted to home health, 18 patients who had been admitted to SNF, patients 19 who had been admitted to rehab. And there were a 20 couple of others. 21 They don't always include the incident 22 diagnosis that brought the patient in. Sometimes

they do; sometimes they don't. But there's no 1 2 thinking about what -- the exclusions are an effort to think about what could happen to these 3 4 patients downstream that are costs that we would want to exclude. 5 But the risk adjustment model, and as 6 I said, I'm not sure those are inclusive enough, 7 8 but the risk adjustment model doesn't sort of 9 always capture all the things that are unique to the patient's circumstances that brought them 10 11 into rehab or brought them into a SNF that might 12 affect downstream costs and utilization. 13 And it's this lookback, and it sort of 14 ignores -- there's information of the fact this 15 patient went into a SNF. And patients go into 16 SNFs for different reasons. So it's not always 17 clear to me that they have fully captured the 18 circumstances that brought the patient into care that may affect downstream costs. That's my

19 that may affect downstream costs. That's my 20 concern, and it's a concern that's driven by the 21 fact that the models are being standardized, even 22 if the coefficients are different. The models

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are being standardized.

2 And the question is should there be 3 more tailoring. And I don't have an answer to 4 that. I raised it because I'm torn and uncertain 5 about this.

MEMBER GLANCE: Isn't there something 6 7 about the way the CMS HCC models are created that 8 the categories are hierarchical categories? And 9 so they do look at the full set of ICD codes, 10 both inpatient and outpatient, and they group 11 them in such a way that the ones that are most 12 likely associated with higher costs are given 13 more importance?

14 MEMBER NEEDLEMAN: Yes, but that's exactly right, and that's fairly general. 15 So now 16 we've had a patient who has had a joint 17 replacement and wound up in rehab or wound up in 18 a skilled nursing facility which is providing 19 rehab services. But if the other things that are 20 in that hierarchy are not directly related, you 21 know, in some sense, they get classified out because of something other than the joint 22

replaced. The fact that the condition that
 created the incident event was joint replacement
 sort of gets lost.

MEMBER GLANCE: Okay. Thanks.

CHAIR CELLA: Okay. So this is Dave 5 6 C. again. So this issue on risk adjustment as 7 well as its exclusions and other topics that have 8 been brought up by the standing committee, will 9 be placed with the subcommittee that anyone can volunteer to be considered for, and we'll do that 10 11 through NQF. And Ashlie will set that up after the meeting, presumably. 12

We have hit the time where we're no longer ahead of schedule, but we're still on schedule. And it's time to go to public comment, and then we'll take a break.

17 I'm not sure how to open up for public
18 comment, but maybe the operator is listening.
19 OPERATOR: And if you would like to
20 ask a question or make a comment, simply press

star then the number 1 on your telephone keypad.

MS. WILBON: Thank you. Those who

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1 would like to make a comment can also enter your 2 comment into the chat box, and we'll make sure it is read or responded to by the Methods Panel. 3 4 Thank you. 5 CHAIR CELLA: Okay. So, star-1 or type a note into the chat box, lower left of your 6 7 screen. 8 And if you're on the MS. WILBON: 9 webinar, you can raise your hand, and we'll acknowledge you that way, too. At least we'll 10 11 know that you have a question. 12 And again, in order to ask **OPERATOR:** 13 an audio question, simply press star then the 14 number 1 on your telephone keypad. And at this time, there are no audio 15 16 questions. Thank you. 17 CHAIR CELLA: I don't see 18 anything in the chat room. I don't see any hands 19 raised, either. 20 MS. WILBON: Okay. Great. Thanks, 21 Dave Cella, for leading us through that 22 discussion. Again, very interesting and

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1	thoughtful, and we're looking forward to getting
2	some folks together to write some papers and dive
3	a little bit deeper into these topics and share
4	some guidance going forward.
5	So we are due for our second break.
6	It is another hour, and we will reconvene at 3:30
7	p.m. Eastern Time to conclude our meeting with
8	discussion of two measures.
9	Measure 3559, hospital-level, risk-
10	standardized improvement rate in inpatient-
11	reported outcomes following elective primary
12	total hip and/or total knee arthroplasty, by Yale
13	CORE/CMS.
14	And the other measure is 0715,
15	standardized adverse event ratio for children
16	less than 18 years of age undergoing cardiac
17	catheterization, by Boston Children's Hospital.
18	We expect that the developers will be
19	joining us at that time, and we'll come back to
20	discuss those two measures until the end. And
21	that will conclude our day one.
22	So barring any questions at this

1 point, we will go ahead and break and reconvene 2 at 3:30. CHAIR CELLA: Ashlie, this is Dave C. 3 Just a note that Colette Pittson 4 again. 5 (phonetic) has typed in a comment. It doesn't 6 require a response, but just to let people know there is a comment that has been added. 7 8 And, Dave N., can you just hang on for 9 a minute? MEMBER KAPLAN: This is Sherrie. 10 Can I ask one quick question? 11 12 CHAIR CELLA: Sure. MEMBER KAPLAN: Given the difficulties 13 14 in redialing in, is it better to hang up or stay 15 on the line? 16 CHAIR CELLA: You can stay on the line. 17 18 MEMBER KAPLAN: Okay. Thanks. 19 CHAIR CELLA: You can stay on. Just if you stay on, just 20 MS. WILBON: 21 make sure that your phone is muted, please. 22 (Laughter.)

1	MEMBER KAPLAN: Yes. Got it.
2	MS. WILBON: Yes.
3	MEMBER KAPLAN: Okay. Thank you.
4	MS. WILBON: Yes, you're welcome to
5	stay on and stay on the webinar as well. Thank
6	you.
7	CHAIR CELLA: Okay. Bye, everyone.
8	(Whereupon, the above-entitled matter
9	went off the record at 2:29 p.m. and resumed at
10	3:30 p.m.)
11	MS. WILBON: Hi, everyone, it's Ashlie
12	Wilbon from NQF again. Welcome back to our third
13	and final session of the day. This session will
14	be focused on reevaluating two measures by
15	Subgroup 1 that were submitted this cycle. And
16	we're going to dive in here real shortly.
17	We are working through a couple of
18	technical for folks trying to get on the phone,
19	so we'll continue to do that. We do have a
20	little bit of slides to go through, and we're
21	going to do a voting test as well for those of
22	you in Subgroup 1 who will be voting. So a

couple of administrative things before we dive in.

I also just wanted to check in to see 3 4 if the developers were on the phone from Yale 5 CORE and CMS? If you want to speak, you will need to hit star one. And you can also chat us 6 7 through the chat boxes. Please let us know if you've having any trouble getting through on the 8 9 audio. 10 I don't hear anyone. I see Lisa Suter on the webinar. Lisa, can you raise your hand if 11 12 you see me -- I mean if you hear me, sorry. Oh, 13 I see a note from Victoria, you guys are on. Are 14 you dialed into the phone number? PARTICIPANT: Some people have been 15 16 joined this way. 17 MS. WILBON: Can you just chat us and 18 let us know if you're dialed into the phone 19 So you won't be able to speak if you're number. 20 just dialed in through that. 21 So we'll go ahead and get started, and 22 we'll have our teams work with them, the

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background, to make sure we can hear them and they'll be able to participate in the discussion. Just a couple of notes, as I mentioned. The process we'll be using for measure discussion will be the same as we used last cycle, so just a quick refresher.

7 We'll have an NQF staff person who 8 will introduce the measure, myself or Sam will be 9 doing that today. And we'll have then the lead discussants to summarize some of the key concerns 10 11 that were outlined in the discussion guide as 12 well as the PAs that were submitted by the subgroup. And then we will invite other subgroup 13 14 members to provide comments.

We'll then open it up for developers 15 16 to give a couple minutes of initial response. At 17 that time, we'll ask for the developers to 18 provide a summary of their response, which has 19 been included in the discussion guide in Appendix 20 And then we will open it up to the full panel в. 21 for discussion.

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So again, all members can -- all

members of this panel can discuss the measure, 1 2 but we'll only be collecting the final vote from the subgroup. Any questions about that? 3 And we will, as staff, be noting any folks who will need 4 5 to be recused from the discussion, and that we have everyone on the line and staff can establish 6 quorum before we vote and discuss. 7 8 And Ashlie, just one CHAIR NERENZ:

9 additional small point, Dave Nerenz here. I'll 10 take care of watching the hands up and calling 11 out people. I know Sherrie and Joe are leading 12 the discussion, but they may not be able to see 13 that function, so I'll take care of that for 14 them.

Okay. Thank you for 15 MS. WILBON: 16 that. The voting is going to be done via our 17 Poll Everywhere software, which Hannah just sent 18 an email to all of the Subgroup 1 members to make 19 sure the instructions were at the top of your So if you all could kind of direct 20 email. 21 yourselves to your email and make sure you find 22 that.

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1	There's a link in there for you to
2	click and make sure that you can get into the
3	voting software. You may not see anything right
4	now, but we'll be running a test here shortly to
5	make sure that everyone can vote and that the
6	software is working, and it's ready for the time
7	in the discussion that we'll be ready to vote.
8	Just also noting that we will over the
9	next the rest of today and the remainder of
10	the meeting tomorrow, our discussion today will
11	be focused on measures that were consensus-not-
12	reached, and measures where they did not pass but
13	have submitted the developers have submitted
14	additional information for the Methods Panel to
15	consider prior to submitting a final vote on the
16	measure.
17	So we will not be discussing all
18	measures. Again, just seven measures that will
19	be discussed as part of this meeting. The
20	remainder of the measures that are not being
21	discussed have all passed based on the initial
22	preliminary analysis and will not be and have

not been pulled for discussion and will not be re-adjudicated over this call.

Those measures, by virtue of not being 3 pulled for discussion by the Methods Panel 4 5 members, have passed by consent calendar by the Methods Panel, and the vote submitted for the 6 7 preliminary analysis will stand as the final vote 8 for reliability and validity for the measures. 9 That is until the standing committee evaluation. 10 And just a note here that we will be considering transitioning to a full panel vote 11 next cycle. If you recall, last cycle we did the 12 shadow vote and found that there was actually 13 14 quite a bit of consistency among subgroup members and those members who weren't assigned to the 15 16 measure the subgroup members. 17 So we're looking into that, and it's 18 a process change that we're looking into 19 potentially making in the future. But for now,

21 definitely encourage members of the panel who are 22 not on the subgroup to try tune into the

it will just be the subgroup.

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So I would

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discussion.

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2	Again, some of the issues are
3	overarching. And even though you were not a part
4	of the subgroup, we would still like to hear any
5	input that you have on the measure based on your
6	review of the discussion guide and listening to
7	the discussion.
8	So with that, I'm going to hand it
9	over to Hannah to do a voting test for subgroup
10	members, and we'll make we'll move into the
11	measure. I'm going to hand it over to Sam after
12	that to get started. And in the meantime, we'll
13	work on making sure the developers are able
14	speak.
15	MS. INGBER: Okay. Thank you, Ashlie.
16	This is Hannah, can everyone hear me?
17	CHAIR CELLA: We can.
18	MS. INGBER: Wonderful. Okay, so
19	we'll be doing a voting test first. I'll be
20	opening the test vote now. If you have the link
21	open on your desktop or your phone, you should
22	see the question: during your morning commute,

what is your preferred method of transportation? 1 2 Okay, so I see six votes. So before we move forward, I'd like to confirm that --3 4 which Subgroup 1 members are on the line. I'm 5 going to read through your names, if you could 6 just reply and let us know if you're here. 7 Daniel? 8 Yes, I'm here. MEMBER DEUTSCHER: 9 MS. INGBER: Dave Cella. 10 CHAIR CELLA: Here. 11 MS. INGBER: Matt Austin. 12 MEMBER AUSTIN: Here. 13 MS. INGBER: John Bott. 14 MEMBER BOTT: Here. 15 Joe Hyder. Okay, Joe's MS. INGBER: 16 not in. Patrick Romano? 17 DR ROMANO: Here. 18 MS. INGBER: Thank you. Sherrie? 19 MEMBER KAPLAN: Here. 20 MS. INGBER: And Terry. 21 MEMBER WARHOLAK: Here. 22 Oh, Mike MS. INGBER: Michael Stoto?
1 is not available at this time actually. And 2 Larry. MEMBER GLANCE: 3 Here. 4 MS. INGBER: Okay. Wonderful. Thank 5 you, everyone. So we should be getting eight-6 something. 7 CHAIR CELLA: This is Dave Cella, I 8 just have a quick question. So when it says 9 clear last response, if you click that, does that mean it registered the response, or it clears it 10 11 and didn't register? 12 MS. INGBER: That means it clears it 13 and it didn't register. So don't clear your last 14 response. 15 So when you vote it just CHAIR CELLA: 16 -- the vote just stays up on the screen. It 17 doesn't clear. 18 MS. INGBER: That's right. 19 CHAIR CELLA: Is that right? 20 MS. INGBER: It will only change once I shift it on the back end. 21 22 CHAIR CELLA: Okay. Thank you.

1 I'm registering nine MS. INGBER: 2 But is there -- did Joe or Mike join us? votes. I'm not hearing any response. 3 4 CHAIR CELLA: This is Chicago. Maybe 5 somebody voted twice. Hannah, maybe try doing 6 MS. WILBON: 7 another test, then --8 Okay. Okay, yes. MS. INGBER: I'm 9 going to clear the responses, and we'll ask you to fill in your vote again. 10 11 Hi, sorry for that delay. I'm still 12 registering nine votes. The team is just going 13 to take a minute just to adjudicate this. 14 DR. ROMANO: This is Patrick. I might be the guilty party. So if --15 16 MS. INGBER: Okay. 17 DR. ROMANO: It doesn't prevent me 18 from -- in other words I'm on my phone just as a 19 backup, in addition to being on the laptop. But it didn't seem to block the second vote. 20 So is 21 that -- that's the way the system works, it 22 allows two votes?

I	2:
1	MS. INGBER: Yes. That is possible.
2	DR. ROMANO: Oh, okay, I'll do that
3	again.
4	MS. INGBER: Okay, maybe we should try
5	one more time. Oh, go ahead. Oh yeah, that is
6	confusing. Sorry about that. Okay, we'll try
7	one more time, and we'll get we'll hope for
8	eight. Thank you for your cooperation.
9	MS. BALESTRACCI: Hi, this is Katie
10	Balestracci. Can you hear me?
11	MS. INGBER: Yes, we can.
12	MS. BALESTRACCI: Wonderful, I am on.
13	Thank you, hi. I will be the lead discussant for
14	Yale CORE for this measure. Thank you for your
15	patience, I was having trouble being heard.
16	PARTICIPANT: Thank you for joining
17	us. Apologies for the difficulty.
18	MS. INGBER: Okay, I'm registering
19	five votes now.
20	MS. WILBON: Hannah, can you tell who
21	the votes are from? Like if you got a double
22	vote from someone, would you be able to tell who

1 it was, or? 2 MS. INGBER: No, unfortunately not. Waiting on one more vote. Okay, we have eight 3 4 votes now. Thank you so much for your 5 cooperation and your patience with that. I'll hand it over to Sam. 6 7 MEMBER SIMON: Excellent. Thank you 8 so much, Hannah. I'm glad that we've got our 9 testing up and going, and hello friends and colleagues. It's been a little while since I've 10 11 had the pleasure to be with the Scientific 12 Methods Panel. We've -- Ashlie has been riding solo 13 14 for a bit here, and it's undoubtedly to my detriment. I don't get to interact with you 15 16 nearly as much as I'd like to, so big thanks to 17 Ashlie for inviting me to join you today to 18 introduce this measure. 19 Just a quick reminder in order of 20 operations. I'm going to introduce the measure. 21 Lead discussants will then summarize the key concerns. We'll invite the subgroup members to 22

comment, and then we'll hand it over to the 1 2 developer to do two to three minutes of initial response. And then we'll open it up to the full 3 4 panel. 5 Once we've gotten through that, we'll of course move to voting. And then we'll move on 6 7 to our next measure. 8 And just to let, to remind everyone 9 where we're starting from, this is Measure NQF 3559, hospital-level risk standardized 10 11 improvement rate in patient-reported outcomes 12 following elective primary total hip and/or total knee arthroplasty. So the initial results of 13 14 this is that the measure passed under liability, but consensus was not reached on validity. 15 16 So when we hand it over to our lead 17 discussants, Sherrie and Joe, we'll ask them to 18 focus primarily on the validity concerns that 19 were expressed by the panels who reviewed this 20 measure. 21 Now, as was mentioned, the developer for this measure is Yale CORE. And you'll find 22

inside of your discussion guide a summary of the 1 2 issues that were causes for concern amongst the panelists. 3

Now, big thanks to Yale CORE for 4 5 putting together a very robust response to the concerns that were identified by the panel. 6 That was attached to your meeting materials as well, 7 and I hope that you have all reviewed that. 8 But 9 I imagine that we'll be going through that in some detail. 10

11 Just as a couple of highlights about 12 the measure, the testing that was conducted --13 excuse me just one second. The testing that was 14 conducted for reliability was both at the measure score and the data-element level. So looking at 15 16 the test-retest reliability of the hip 17 dysfunction and osteoarthritis outcome score for 18 joint replacement or HOOS, JR., as well as the 19 knee injury and osteoarthritis outcome score for 20 joint replacement, KOOS, JR., as it were. 21 They also did assess consistency, and those produced some pretty good results overall, 22

hence the panel not identifying too many problems with liability. Signal to noise analysis was conducted at the score level.

I won't go to the main concerns associated with reliability as those were the past reliability, and those are largely addressed by the developer. But we can wade into those during discussion if the panel wishes to do so. Now, on validity, as I mentioned,

10 consensus was not reached. This was, as is
11 appropriate for all PRO-PMs, this measure was
12 tested at both the data element and score levels
13 for validity. Looking at responsiveness,
14 external validity, and floor and ceiling effects
15 for both the HOOS, JR., and KOOS, JR.
16 instruments.

I won't go through the results in too much detail because I think our lead discussants will likely want to get into that themselves. So at this point, I'll hand it over to Sherrie and Joe to lead our discussion.

MEMBER KAPLAN: Who wants to go first?

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MEMBER HYDER: You can arm wrestle on
 that one, Sherrie. As you chimed in, why don't
 you go ahead.

4 MEMBER KAPLAN: Oh, dear. Okay, so 5 one of the first questions I had for the measure developer and for NOF was it -- this is created 6 7 as a composite score, and I am always concerned 8 that I'm getting NQF's definitional things 9 incorrect. Because when you're creating a composite across multiple items that are still 10 11 the same construct, does NQF count that as a 12 composite? In this case, knee and hip function.

MS. WILBON: Yeah, this is Ashlie. I
think that's a good question. It's actually a
question that we have that I think Dave Cella
brought to our attention and is actually at the
bottom of the slide about whether or not this
measure qualifies as a composite.

19 I think, and Sam, I'm going to ask for 20 your help a little bit on this, because I think 21 we have had this question come up before with 22 programs that have multiple items. And I -- do

we also sometimes classify them as both or can it
 be both? Or, I'm going to lean on you a little
 bit for this at this point, Sam.

MEMBER SIMON: That's really tricky 4 question, I wish I had a better answer for you. 5 And I can't think of examples of where we've had 6 7 multiple items that could potentially roll up into a single score that I've used -- I've used, 8 9 as in this case, to effort scoring instrument. 10 So I unfortunately don't have a good answer. Well, here's why it's 11 MEMBER KAPLAN:

12 relevant. Because, and it would be a little, it 13 would -- for people like me, it would be weird to 14 have data-element reliability.

For example, in these multi-item 15 16 things that are supposed to assess an underlying 17 construct like knee function or hip function, so 18 you wouldn't go after, that would -- you wouldn't 19 go after data element and reliability anyway. 20 And so you're only doing score-level reliability. 21 And then this, there's the patient and 22 the hospital or whatever facility level,

reliability questions too. And that was of concern when I was thinking about the reliability piece of this. You know, what happened to the across patient -- across items within patient 4 part of the -- in the denominator.

And so when you're thinking those 6 things through, now that, because we haven't had 7 8 that discussion yet and it would be unfair to 9 apply those new, you know, criteria around those 10 things. But if we're creating composites, that piece of the error term, when you're aggregating 11 12 it up to the next unit, it becomes very relevant 13 for the error term and how you're comparing 14 things to things like validity variables.

So that's probably, if we can't answer 15 16 for this round, then we have to just ignore it. 17 But that's something probably we should put in a 18 parking lot and come back to in future 19 discussions.

20 So having said that, there is concern 21 raised, and I'm reading this from the notes from 22 others and the compiled notes on concerns raised

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by the S&P on validity. One is attribution, and it's relevant to this business about well, where is the error variance and where is the real twoscore variation.

5 Attributing joint function, changes 6 differences in joint functions at a hospital 7 versus rehab services, verus something that can 8 happen in the interval as long as nine months to 9 a year following surgery.

So which piece of the variance belongs 10 11 to the hospital in terms of attribution, versus 12 whatever else they got after the surgery with 13 that long of a time interval. So that's one 14 concern that was raised. Shall I go on, or do you want -- shall I just blast through these and 15 16 then have, ask the developer to respond, or do you want to do them one by one? 17

18 MS. WILBON: Sure, Sherrie, this is 19 Ashlie. Go ahead and we'll see if Joe has 20 anything to add, and then we can open it up to 21 the developer.

MEMBER KAPLAN: Okay, there's a

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concern raised that suggests the exclusion of staged procedures made up to 43% of the procedures. And the measure should include, from unstaged procedures. I'm not exactly clear what that refers to, but, and it wasn't, I didn't bring that one up. But that was another concern raised.

The exclusion analysis noted that data 8 9 weren't provided in the same way that there was -- a concept diagram would have helped on how much 10 the exclusions affected the performance scores. 11 12 There were questions raised about the 25-case volume threshold and what that based on, and what 13 14 happens when a facility falls below the 25-case recommendation. Were they excluded or did you do 15 16 some other kind of analysis on those data, and 17 did you examine the inclusion/exclusion of those 18 20, you know, the smaller volume hospitals. 19 Another concern that came up was about 20 risk adjustment. The model was including 21 hospitals wasn't used for reliability, validity,

and missing data, for example. And I'm not

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reading this one right. Hospitals with low 1 2 caseloads were not recommended from the measure. Did the developers -- oh, did the developers do a 3 sensitivity analysis, which is related to the 4 issue I just read, that tests the impact of 5 including hospitals from risk adjustment, the 6 7 risk adjustment development sample. 8 And then another concern was 9 meaningful differences. There was some question about how much of the variation could be --10 establish meaningful differences between 11 12 hospitals in the top quartile for example. 13 And finally, there's an issue about 14 missing data. Two people raised concerns about missing data, and that only the complete data 15 16 were analyzed without accounting for what's 17 likely very, fairly extensive missingness. And 18 whether that's actually missing at random or 19 missing not at random. And so that's kind of the 20 qist. 21 And I got the -- it says measure 22 developer response in the piece I'm looking, but

1 I didn't get the robust response that Sam was 2 talking about, so I don't know where that lives. But apologies for not having read that in 3 4 advance. 5 One other question, one other comment 6 is the data-element validity presented the first 7 of studies in the literature at the patient 8 But again, I'm not concerned about that level. 9 because this is supposed to be s composite 10 measure. 11 The end. 12 MEMBER SIMON: Ok, Joe, did you have 13 anything else that you would like to add? 14 MS. WILBON: Hi, Sam, I think we're trying to figure out if Joe was on or not. 15 Τ 16 thought I heard him, but Hannah was saying she 17 thought he was not on. So if that's the case, 18 then we can open it up to other subgroup members. 19 MEMBER SIMON: Okay now, so let's go 20 ahead and open it up. 21 CHAIR CELLA: Okay, well, this is Dave Cella. 22 Maybe I'll start then. I'm one of the

subgroup members. And Sherrie really focused on 1 2 the measure, measure validity and wasn't concerned about data element. But I'm actually 3 4 quite concerned about the data element, and maybe I can explain why. 5 So, and so I'm wondering if I should 6 7 talk in the weeds or up some 30,000 feet. Now, 8 let me start at 30,000 feet and then get into a little bit of the weeds. 9 At the data-element level, a little 10 11 background for those of you who don't know the 12 HOOS and KOOS very well. The HOOS and KOOS, JR, were developed kind of off the grid of the 13 14 developers of the HOOS and the KOOS as (telephonic interference). They combined pain 15 16 and function into one measure, so, and they do 17 that I guess to have one score and a short 18 measure. 19 And by doing that, given that this is 20 a performance measure that really relies upon 21 patient self-report, by doing that, they conflate pain and function. And in some -- in many cases, 22

particularly with knees, the recovery is 1 2 different for pain as it is for function. And although they used a rush 3 4 measurement technique to create (telephonic 5 interference) that would hold together well at least in the sample they tested, that's not 6 necessarily how they'll perform later. 7 8 So there'll be a lot of error 9 introduced. And it's a short measure with a 10 pretty good sized ceiling effect, so it's not 11 clear that it'll work very well for people that 12 come in at the relatively high function or low 13 pain level. Again, mixing the two. 14 So one of the things that the HOOS and KOOS developers did in collaboration with the 15 16 late Barbara Gandek was they went ahead and 17 developed short versions of the HOOS and the KOOS 18 that keep pain and function separate. But those 19 short versions were developed and published after 20 CMS had allowed the JR to qualify for bundle 21 payment. So JR kind of got in the hopper. But there are these, I would think 22

1 from a PRO person's perspective, better measures 2 that are available, and actually in the fourth 3 data set, that the developers could use to allow 4 pain and function to remain separately measured 5 with still short measures. The reason they went 6 with the very short measure was because the TEP 7 recommended it.

But there's, and another, you know, 8 9 maybe less important issue but I'll mention it is that the JR versions, the ones that are being 10 proposed, are really only using orthopedics and 11 12 only in the subset of orthopedics. Not using 13 rheumatology, for example, where there are 14 clinical quality measures that rely on the same issues of pain and function in the hips and knees 15 16 for osteoarthritis.

17 So I think there's a real strong case 18 to be made for reconsidering using these 12-item 19 versions that are, you know, they take two 20 minutes per person as opposed to one minute per 21 person, so it's not that much more of a burden. 22 And I'm not sure how much the TEP was included, was asked about using the 12 versus the six-toseven item JR version.

But one of the other benefits, and 3 this is getting a little bit into the weeds, and 4 5 I'll remind everyone about my conflict, that at the beginning of the meeting, I am on the board 6 7 of a nonprofit, PROMIS Health Organization. But one of the other benefits of having pain and 8 9 function separately measured at the patient level is you can then allow the orthopedic community 10 flexibility in what they use. 11 12 They can use the 12-item version or

13 the full HOOS and KOOS. They could use a PROMIS 14 measure. And many of them have already converted 15 over to PROMIS measures because they don't have 16 that problem with the ceiling effect.

17 So you know, I think it's a good 18 submission and I came down it on low on validity 19 because I think there's a much more valid way to 20 get information from patients about pain and 21 function, reduce ceiling effects, and leave more 22 assessment available to the community, so that

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they can use the 12 or they can use PROMIS, or 1 2 anything that can be linked. WOMAC, including WOMAC, that could be linked to these pain and 3 4 physical function measures. We'll make a happier orthopedic 5 community, make for better registry connectivity, 6 7 and better understanding down the road. Otherwise, what's going to happen is 8 9 that everyone will converge on the JR mixing pain and function together and this opportunity will 10 So that's why I came in where I came in 11 be lost. 12 on this. There are other, you know, minor 13 comments I might chime in with based upon where 14 the discussion goes, but I'll leave it at that. 15 MEMBER SIMON: Thanks, Dave. I've qot 16 Matt, Larry, and Sherrie in that order. And I almost will check with Sherrie as the discussion 17 18 leader if you want to stay at the spot in the 19 queue or if you have some immediate response. 20 MEMBER KAPLAN: Well, I kind of --21 this is Sherrie, I kind of do have an immediate response, because it seemed like, Dave, you were 22

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raising some separate, some separable issues.
 One is dimensionality within the hip and knee
 osteoarthritis outcomes measures.

So there's dimensionality because for 4 5 example, the knee includes a stiffness dimension, that's a single item, that's its stiffness, plus 6 7 pain and daily function. And the dimensions are 8 differentially, you know, represented with item 9 content. But are you raising a concern -- I was kind of under the impression that we were 10 11 evaluating what we're seeing, not what we could 12 see.

13 And that's a question for NQF, are we 14 evaluating the measure as we're staring at it, or 15 are we evaluating it in a larger context of how, 16 what would you choose if you were, you know, 17 opting for the ideal measure for, of hip and knee 18 function post-intervention and recovery. 19 Go ahead, Ashlie, it's all right. 20 MS. WILBON: No, no, no, sorry, I was

just going to say we're evaluating the measure asis and as it has been presented to us.

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1	MEMBER KAPLAN: Okay, and then so my
2	question back to Dave Cella is are you raising
3	concerns about multi-dimensionality within the
4	knee survey and whether those have been, are
5	accurate for reflecting in terms of content
6	validity, reflecting all the content. Is that
7	the concern?
8	Or is it because if you shorten
9	some of these measures as we did for the SF-12,
10	for example, you destroy the internal
11	dimensionality, but you still have a, have
12	construct validity at the overall score level.
13	I'm a little bit confused about
14	CHAIR CELLA: Yeah, I, my vote was low
15	on validity, and it was four reasons, really, one
16	of which was this missed opportunity. But three
17	reasons that I gave before that are the concerns
18	about the missing data, the proxy reporting
19	issue, and the ceiling effect of the data
20	element.
21	MEMBER KAPLAN: Okay, great, I just
22	wanted some clarity. Thank you.

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1	CHAIR CELLA: Yeah.
2	MEMBER SIMON: Okay, Matt.
3	MEMBER AUSTIN: Yeah, good afternoon,
4	everyone. So I have maybe a couple of questions
5	for maybe NQF staff more than the measure
6	developer. And that's just to sort of interpret
7	maybe two sort of rules or guidelines.
8	One is for the validity testing, they
9	provided those measures, score validity testing
10	and data-element validity testing. If we're
11	comfortable with one but not with the other, how
12	should we proceed?
13	And the second question is when we
14	talk about data-element validity testing and
15	needing to look at all critical data elements,
16	does NQF have a definition in what's included and
17	not included as a critical data element?
18	MS. WILBON: Hi, Matt, this is Ashlie.
19	So given the different types of for your first
20	question on the different types of validity
21	testing, I would say, you know, if there is a
22	concern with one kind of, one of the kinds of

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validity testing, that you should incorporate 1 2 that into your evaluation, similar as you would of considering, you know, all the various 3 components of validity, you know, risk 4 adjustment, inclusion, missing data. 5 All of those components are also kind 6 7 of subsets or subsections of validity. So we, 8 you know, we don't have any specific guidance on 9 how those should be weighed, but you certainly should take into consideration how all those 10 11 different components kind of, you know, weigh 12 against each other and whether or not that 13 concern is significant enough to impact your 14 vote, you know, one way or the other. 15 MEMBER AUSTIN: Okay. 16 MS. WILBON: So the second question 17 around critical data elements, I was actually 18 looking for the specific language. But it's 19 essentially, I mean, we consider, you know, the 20 critical data elements, those data elements 21 required to compute the measure, so essentially all of them would be critical. But definitely 22

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the numerator data element.

2	And I'm sorry, I can't quote it off
3	the top of my head, but give me a second to find
4	it and I can find it for you.
5	We don't have any specific
6	requirements on, you know, if they did five of
7	the six or, you know, how we, you know, we
8	certainly have submissions where, you know,
9	they've done, you know, maybe five of the ten
10	data elements and those ten reviewers have found
11	that to be sufficient.
12	I think the word critical is somewhat
13	subjective and our language is not quite
14	definitive on that, although we do provide some
15	examples in our description of how we define
16	critical data elements. And I'll find that
17	language for you in just a second, and I can
18	share that fact with the group.
19	MEMBER AUSTIN: Okay, that'd be
20	helpful. I just want to make sure I'm being fair
21	in how I'm applying that term, critical. Okay,
22	thank you.

1	MS. WILBON: Sure, thank you.
2	MEMBER SIMON: Okay, Larry's up.
3	MEMBER GLANCE: Hi, everybody. So the
4	caveat here is patient-reported outcome measures
5	are not something that I know an awful lot about.
6	And I'm sure Sherrie will point that out at some
7	point. Hi, Sherrie.
8	But a couple thoughts. One, when I
9	looked at this measure, it struck me that I
10	think this is a CMS measure, correct?
11	MS. WILBON: Yes, I believe Yale was
12	contacted by CMS.
13	MEMBER GLANCE: Right. So it struck
14	me that if you look at the measures that are
15	currently being used in the comprehensive joint
16	replacement program by CMS, that I think the only
17	outcome measure that they have currently is the
18	risk standardized complication rate.
19	And I think that when I evaluate
20	measures, a couple things that I look at, and I
21	know this is not typically what we, you know, the
22	typical schema. But I look at things like how

much of a need do we have for a measure like this.

And my understanding of most of the 3 4 episode-based payment, the bundled care programs 5 that CMS has, as well as the accountable care, 6 the qual metrics that'll be used for ACOs, I 7 don't know of very many, if any, patient-reported 8 So there's a barely a need for outcome measures. 9 this kind of a measure in my mind. The second thing that I think of when 10 11 I evaluate a measure is, you know, we talk a lot 12 about cutoff values, criteria that we would like to be able to use. And I think that's kind of 13 14 hard. 15 But one of the things I do is I sort 16 of compare our measures when I'm evaluating 17 compared to all the other measures that I've 18 looked at for the last couple years, both on this 19 Methods Panel, as well as the standing committee 20 that I used to serve on. 21 And so I look at the quality of the 22 measurement. I know that that's sort of a gut-

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level thing, but to me that's important because I 1 2 just sort of put it into context. So when I looked at this measure 3 again, it occurred to me that there's a need for 4 5 this type of a measure in the performance metrics that are being used by CMS. Because what we need 6 7 to look not just at complication -- and costs and 8 process measures, we also need to look at patient 9 reported outcome measures. And secondly, I looked at the quality 10 11 of the measure, and I kind of thought it was at 12 least as good if not better than the majority of the measures that I've looked at. And I think 13 14 the one that consensus not reached was on validity, and I'll sort of limit my specific 15 16 comments on validity. 17 So even though this is a composite 18 measure, it boils down to it's an all-or-none 19 So it's a, essentially ends up being a measure. 20 logistic regression model. And they used the

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standard approach to looking at the validity of

the prediction model in a validation data set,

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and they found reasonably good discrimination 1 2 with a P-value of 0.69. Not terrific, but it's not uncommon to see C-stats in that area for 3 4 models for any kind of, anything other than 5 mortality. Mortality models typically have Cstatistics that are better. But other models 6 that are not mortality models, and this is not 7 8 unusual. 9 And then the calibration, they looked at calibration using calibration plots, and those 10 seemed pretty good. And they also used another 11 12 standard approach as well, and the calibration there was good as well in the validation data. 13 14 So to me, at least that the scorelevel validity seemed to be good. And I think we 15 16 were all agreed that score-level reliability was 17 okay. So that was the reason that I voted to 18 pass this measure. And again, I don't think it 19 really matters whether it's a high or moderate. 20 But in my mind it's sort of a binary decision, 21 and I voted pass for those reasons. 22 MEMBER SIMON: No hands up. Back to

1 Sherrie and Joe again.

2	MEMBER KAPLAN: I always have to be
3	careful that I don't hit the off button while I'm
4	trying to hit the unmute button. So, yeah, I
5	think the big issue I think for me is the missing
6	data. And I think Dave, at least Dave Cella,
7	raised this question, that more than 50% of
8	hospitals with more than 25 eligible patients and
9	about 70% of all hospitals had missing either PRO
10	and/or risk variable data.
11	And so despite their propensity for
12	analysis where they compared those with and
13	without missing data, there still remains concern
14	about a pretty substantial bias in the data
15	presented. And so that was, that I think is a,
16	remains a big concern of mine.
17	And then I was also concerned that
18	there's the association with the risk-
19	standardized complication rate was the NQF 1550
20	was described in the text as a correlation. But
21	the data presented were, figure 1, for example,
22	had a box plot. So, and it wasn't clear the, I

may have missed it, but it wasn't clear the 1 2 analysis that generated these data was provided in detail. 3

And so there's considerable 4 5 variability at the mean and a plot of the association of sort of a pass/fail of each one of 6 7 these measures at the hospital level would have 8 been really helpful, along with the standard 9 error bar. Even in the 123-hospital sample, if we could just have seen the magnitude of the 10 11 error there, it would have helped sort of figure 12 out how hospitals compare to each other and how 13 this might be used or not used.

14 And again, I did miss the response 15 from the measure developer. So if that was 16 addressed in that response, I apologize.

17 CHAIR CELLA: This is Dave Cella 18 again. I think we're supposed to turn to the 19 developer since there are no more comments. But 20 just to say that my, you know, I share the 21 concern about missing data. I also think there shouldn't be proxy reports used. 22

But the other thing is the orthopedic community is really getting on board with patient -reported outcome data. So I'm optimistic that in the future there will be better quality data collection, because at present there is compared to what, to the data that were analyzed for this submission.

One of the problems is that, you know, 8 9 what's being used isn't just this one particular 10 set of questions. And this one particular set of questions is not going to be easily be mapped to 11 12 others. Whereas a different choice that could be 13 done with the same data that were used here in 14 the FORCE-TJR registry could be linked to other things that are being mentored now. 15

So it's, you know, maybe a somewhat out-of-order suggestion to the developers that a change in the actual element could bode very well for a good participation rate in the orthopedic community and we move that missing data problem downstream. That otherwise I think we'll still be there because people are committed to other

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measurements.

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2	MS. WILBON: Thanks, Dave. Yes, let's
3	open it up to the developer. And I did want to
4	just point out, because I think perhaps there was
5	a question, the developer's response is included
6	in Appendix B of the discussion guide. It starts
7	on page 38.
8	We would ask the developers, if you
9	could, you know, summarize your responses in
10	Appendix D. I think many of the subgroup members
11	reviewed it, but I think some may have not had an
12	opportunity. So if you could do that, that would
13	be very helpful.
14	MEMBER KAPLAN: Actually, Ashlie,
15	could I also ask that the developer speak to the
16	issue of attribution to the hospital, given the
17	time window following surgery is a fairly broad
18	nine to twelve months, is quite wide. And that
19	could have a lot to do with rehab and other
20	things. Can they also address that, thanks.
21	MS. WILBON: Sure, thank you.
22	
	MS. BALESTRACCI: Hello, this is Katie

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Balestracci from Yale CORE, can you hear me? 1 2 MS. WILBON: We can, thank you. MS. BALESTRACCI: Wonderful. So thank 3 you for this opportunity to speak. I would like 4 to start by just giving the context with which 5 this measure was developed, specifically in terms 6 7 of stakeholder input. This measure was developed, testing 8 9 results were presented to, and a great deal of input was provided by, our technical expert 10 panel. We had a technical working group that has 11 12 worked with us over the life of the development 13 of this measure. There were stakeholders versus 14 public comments. During the creation of the CJR model 15 16 under CMMI, which was the comprehensive care for 17 joint replacement model, which was the mechanism 18 by which these patient-reported outcome data were 19 collected and submitted, required and developed a 20 great deal of input from our TEP, but also from 21 the hip and knee societies in terms of data to be 22 collected, data elements to be included for risk

adjustment, and the PROM survey instruments used. 1 2 I noted earlier a question by one of the panel members about the choice of PROMs. 3 There was a great deal of discussion early on 4 5 from the TEP about different PROMs. There was an evaluation of -- including the WOMAC, including 6 7 HOOS and KOOS the full version, etc. So these 8 decisions, the decisions around PROMs, the 9 decisions around the data elements chosen went through a particularly rigorous stakeholder 10 examination evaluation. And we received a great 11 12 deal of input.

Likewise, there is for this measure a 13 14 particularly important feedback and input from patients. Not only did we have patients on our 15 16 technical expert panel, but we engaged a patient 17 working group that would allow us to get input 18 specifically from a larger number of individuals 19 who have undergone either a total hip or a total 20 knee arthroplasty, and in several cases multiple 21 such procedures. So I did want to put this in 22 that context.

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1	As I listened I've heard a number of
2	different concerns around the validity of this
3	measure. I will say that each one that was
4	mentioned in the last half-hour was addressed in
5	the 12-page response we provided to the panel.
6	But I'm happy to try to quickly address them
7	here. And then ask that, you know, if someone
8	needs even more detail, I'm happy to provide it.
9	I heard concern about attribution of
10	this measure. This is a hospital-level measure
11	because we are hoping with this measure to attain
12	the following goal: To really capture the full
13	spectrum of care and to incentivize collaboration
14	and shared responsibility.
15	I think we note that a surgeon can do
16	a terrific job, but if there is not a
17	coordination of care around other providers
18	within the hospital, around discharge planning,
19	etc., then a patient may not receive the positive
20	outcomes that they are expecting and that their
21	surgeon is expecting.
22	So we are really expecting that this,

as a hospital measure, will allow patients to 1 2 then receive a high quality of care across that spectrum. It is a follow-up. The follow-up 3 post-assessment is a nine to twelve month post-4 5 assessment, because we do want to make sure that patient has had the time for a full recovery, 6 7 whether it's a knee or a hip replacement. And our technical expert panel and 8 9 other consultant experts indicated to us that they thought that follow-up would sufficiently 10 11 cover that. 12 I heard a concern about staged 13 procedures. I will tell you that we are unclear where the 43% number came from in terms of the 14 It is our experience in our data that the 15 panel. 16 number of patients who may have these type of 17 procedures, staged procedures within a year of 18 each other, is about seven percent. We noticed 19 also globally there are some studies coming out 20 of Sweden that mirror this exact percentage. 21 I will say that in our data, 4.17% of 22 the patients with complete PRO and risk-variable
data were removed because of the staged
 procedures. And we did not do a sensitivity
 analysis for this reason.

Our very concern about the staged procedure within a second procedure within a year of the first is that we don't know how to interpret that outcome because of the overlap of the recovery period.

9 I heard a concern about a 25K volume This threshold was chosen because we 10 threshold. 11 expect that in public reporting, such a threshold 12 would be applied, and certainly it is applied in many of the claims-based measure with which this 13 14 measure is intentionally harmonized. So this is not an exclusion, this is in fact a reporting and 15 16 expected or recommended reporting threshold.

I will say that from our data, while 33% of hospitals conducted fewer than 25 elective primary hip or knee procedures, the number of procedures that this represents for the overall number of hip or knee procedures that occurred across the country in hospitals during that

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measurement period is 3.14%.

2 So while hospitals with fewer than 25 procedures appears to be around 33%, it was only 3 three percent of procedures themselves that then 4 did not get included in the measure. 5 I heard a concern about the choice of 6 7 HOOS, JR, and KOOS, JR, and I will simply 8 reiterate what I said as I began speaking, which 9 is that both of these PROMs went through a rigorous examination by our technical expert 10 panel, as well as a public comment period when 11 12 the CJR model was being proposed. And they 13 continued to be the measure that was supported 14 through the development and final testing of this 15 measure. 16 I heard a concern about missing data. 17 In this measure, one of the things that we 18 recognize as developers of a patient-reported 19 outcome-based performance measure is that unlike

20 claims-based measures, the data need to be taken
21 directly from or gathered directly from patients,
22 so that there is a voluntary nature to this.

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1	We have proposed in our responses, and
2	certainly as we continue to consider PRO-PMs,
3	there is certainly ways to improve the response
4	rate. And we believe that the CJR model has
5	really provided a proof of concept of how this
6	can be approached. We do have for this measure,
7	as you note, an approach to response bias.
8	We recognize that as the collection of
9	PRO-PMs increase as hospitals get better about
10	collecting them, as providers get better about
11	collecting them, you know, likely that will never
12	be or hard to get to 100%. So we do believe that
13	that has to be something we pay attention to, and
14	so we did do a statistical approach to address
15	potential response bias.
16	You will note in our results that we
17	did not find a large difference in measure
18	results when we applied this response-biased
19	approach statistically, but we believe it is an
20	important consideration and recommend that that
21	be part of the measure.
22	I will also note that we did, in the

response-biased approach, identify and deal differently with both cases in which no PRO data were provide, and cases in which incomplete data were provided. So addressed both missing and non-response, which are of course two different issues.

7 Let me just address what I think are 8 the two other things that I heard. There is a 9 concern about proxy reporting. We expect in an elective procedure, such as this elective primary 10 11 hip or knee replacement surgery, that proxy 12 responses will be quite low. They were certainly 13 low in the data that we used for the development 14 of this measure.

However, because of the nature of volunteer reporting, we did, and this is part of the requirements around the CJR final rule and data that will be collected, we did allow for proxy responses because it did provide us with additional information for patients undergoing this procedure.

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And lastly, let me address critical

care elements. We also provided some detail in 1 our response when the Scientific Methods Panel 2 noted this concern. We have, as you saw, 3 4 provided the data-element reliability and 5 validity information on the HOOS JR and the KOOS JR. 6 The claims data that are used both to 7 8 identify procedures in the denominator and also are used for some of the risk variable co-9 morbidities are those which are regularly audited 10 11 by CMS. 12 We have other claims-based measures in which we have done medical chart review in order 13 14 to validate this type of data. So there have been -- there are many ways in which we can have 15 16 confidence in these claims data. With reference to the data elements 17 18 that are risk variables in the model that comes 19 from CJR hospitals through the collection of 20 patient-reported outcome data, those particular 21 risk variables were vetted by a thorough literature review by our technical expert panel. 22

We did a medical chart review that 1 2 looked at the reliability and the feasibility of these variables in hospital data collection. 3 So 4 given those inputs as well as continued support 5 from our TEP clinical experts and our patients, we feel confident that those variables are in 6 7 fact valuable choices here. I am going to ask if Lisa Suter has 8 9 anything to add before I conclude my comment. 10 MS. SUTER: Can people hear me? CHAIR CELLA: A little faint but yes. 11 12 Okay, I will turn up my volume. Is that better? CHAIR CELLA: Better, yes. 13 14 MS. SUTER: Great, thank you. First of all, I want to thank you all for the 15 16 opportunity to comment. Katie addressed very I wanted to provide 17 robustly the issues raised. 18 just a little bit more historical context about 19 the concerns with -- I'm getting a lot of 20 feedback and background noise. 21 But I just wanted to let people know that this measure, the CMS embarked on this 22

measure many years ago, even before the 1 2 comprehensive care for joint replacement model. It actually, the initial technical 3 expert panel didn't have a short form version and 4 5 made a decision to go with the HOOS and KOOS full form version. The technical expert panel 6 recommended those, given the other limitations 7 8 and proprietary nature of other surveys at the 9 time. Public comments and orthopedic 10 stakeholder feedback actually were the ones that 11 12 identified the short form versions that were 13 developed at the hospital for specific -- the 14 Hospital for Special Surgery, where they actually created the short form -- the surveys with the 15 16 actual joint replacement patients undergoing 17 joint replacement, as opposed to the HOOS and 18 KOOS, which were developed in knee osteoarthritis 19 patients broadly. 20 And the patients were deeply involved 21 in the development of those short forms. Those 22 short form surveys were brought back to CORE and

CMS with a request that we consider shorter forms to minimize burden. And through a tremendous amount of stakeholder input, as Katie already alluded to, the decision was to move forward with those short form versions.

I want to say in addition to a patient 6 work group and patient technical expert panel 7 8 members and two public comments, we have also had 9 multiple orthopedic societies, including the AAOS and American Academy for Hip and Knee Surgeons 10 11 and the Hip Society and the Knee Society, comment 12 on this measure, provide feedback on this 13 measure, have representatives engaged in this 14 measure.

And each of those organizations, you know, supported the measure moving forward with shorter forms, acknowledging that there are some limitations. But you know, there were individual orthopedic surgeons with communication, with the leadership of those organizations involved in providing advice to us as developers.

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I'm not saying that those societies

endorsed these measures. I would not, you know, be so bold as to say that. But they have engaged in the development and provided us feedback throughout.

So we are very appreciative of all the 5 engagement that the orthopedic community has 6 7 given us throughout the development of this 8 measure, including a summit where the orthopedic 9 community came together and recommended the limited number of high value risk variables to 10 11 collect prospectively as part of the joint 12 replacement model.

13 So I just, it's hard to reflect how 14 much went into building this measure, and you 15 know, I'm sure all measures can be improved, and 16 we are very happy to hear the committee's 17 feedback about how to improve this measure and we 18 want to make it better.

But recognizing that this measure has had a, you know, almost a ten-year arc from its inception through having data collected prospectively through a voluntary model that

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1 incentivized hospitals to collect the data, not 2 require them to participate in, you know, in a 3 proprietary registry or other, you know, 4 treatment-requiring process. 5 But to submit the data in, you know,

in many different ways that allowed them that
flexibility has been a -- it's been a privilege
to be a part of that. And I just wanted to ask
people to have a little additional context to
what went into the development of this measure.
Thank you.

12 CHAIR CELLA: We appreciate that. 13 Just a very important time check here. We're 25 14 minutes to the hour, we have one more measure yet 15 to get in before the scheduled adjournment. 16 Sherrie, do you see a path to getting your group 17 to voting pretty quickly here?

18 MEMBER KAPLAN: I think so. I have 19 two remaining, and it's just a remaining concern, 20 because I have now had a chance to go over the 21 response by the developers and listen to their 22 presentation. I have two remaining concerns.

1	One is attribution, because even
2	though the TEP is a very useful thing to have for
3	face validity terms, it would have helped a lot
4	to have a within versus between facility variance
5	inter-class relation coefficient.
6	That would have helped a lot with the
7	attribution issue, because I think a year out, a
8	lot of things have happened that can contribute
9	to the patient's outcome that may or may not have
10	anything to do with the hospital, including
11	social support and other things and so on.
12	So, and I do remain concerned about
13	missing data, because HCAHPS has been around for
14	a long time and now patients are getting more and
15	more surveys. So you know, using these things on
16	the ground has to be held in context with a 15-
17	30% response rate that HCAHPS remain stuck at.
18	So those are just two remaining
19	concerns, and I don't have anything further to
20	add. I don't know if Dave Cella or Joseph or
21	anybody else has anything remaining.
22	CHAIR CELLA: Well, if I could, this

is Dave, I just want to say I have a lot of respect for the Yale group, and Lisa and Katie in
respect for the Yale group, and Lisa and Katie in
particular. And I've worked with them in other
contexts.
And so, and I understand probably more
than most what it's like to have a seven- or a
ten-year arc of development work. And so, you
know, I said what I said, you know, with that
knowledge and not to take it lightly.
I wouldn't have said anything if it
was just a matter of is it good enough. Yeah,
it's good enough, it's probably going to go fine.
But the downstream implications of not doing what
I think can be done with existing data are
significant, and it's unfortunate. That was
really, you know. And I think the committee just
has to decide if that's what it wants to vote on
or the missing data issue or not.
I just, I think this can be fixed in
a way that keeps it much more open for the
orthopedic community. They're going to be a much

1	And maybe I'll put it to you a
2	different way. Is there, can you see any way
3	two, three years down the road, to be able to
4	say, okay, you don't have to administer the HOOS
5	KOOS, JR. You could administer the 12-item short
6	forms and the, or the PROMIS and approximate the
7	same benefit. And you know, let's link those up.
8	I don't have a lot of optimism that
9	that can work or that it would ever be done. And
10	that'll, you know, it just changes the landscape
11	forever. Although I do, you know, listening to
12	Lisa's description, I can see what happened all
13	along the way and it made sense.
14	But it's a little bit now like, you
15	know, like I'm saying there's a better drug. And
16	are we going to go ahead and say this is the drug
17	that's going to go in the formulary, or are we
18	going to put the better drug in the formulary
19	because it's right there and it can be shipped.
20	So it's, you know, I don't know if
21	that's in or out of scope, frankly, and that's
22	part of why I wanted to have this discussion.

1	This was actually going to be one of the general
2	topics for discussion, but we decided since it
3	was only related to this particular submission
4	that we would have it here in the submission.
5	MS. SUTER: So this is Lisa Suter
6	again. I'll just acknowledge the and I don't
7	know if CMS is on the line. I could not possibly
8	speak for, you know, what is going to happen with
9	this measure two or three years down the road.
10	But all CMS's measures are maintained with
11	contractors that do annual review and update the
12	measure that reflect the, you know, science that
13	is out there.
14	And I think this, you know, I would
15	assume that measure would go into reevaluation on
16	a regular basis as well. I don't know how, you
17	know, it's a lot different to make a code update,
18	you know, when the ICD-10 codes are expanded or
19	changed than it would be to change an entire
20	patient-reported outcome.
21	CHAIR CELLA: Yeah. The only example
22	I have, Lisa, is the PHQ-9, and I can tell you

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1	there it has not been possible to modify. The
2	use of the PHQ-9 is the only measure that
3	qualifies for that particular quality measure,
4	even going through maintenance cycles.
5	It's part of why I am anyway. I
6	think, let's be optimistic that CMS will look at
7	differently than the developer of the PHQ-9
8	measures, but I don't know.
9	MS. WILBON: Hi, this is Ashlie. I'm
10	wondering does Subgroup 1 feel ready to vote? I
11	just want to be respectful of the time, and we
12	have another developer group on the line.
13	I'd like to make sure we have we do
14	due diligence for that measure. If there are any
15	other kind of quick, lingering issues we could
16	mention, or if the subgroup feels ready to vote
17	based on the additional information submitted the
18	developer in the discussion today.
19	MS. BALESTRACCI: Ashlie, I'm so
20	sorry, this is Katie Balestracci from Yale CORE.
21	If I can just note one thing in response to the
22	comment we just heard. There was a concern about

ICD testing or the lack of it. And in fact, the 1 2 measure score is based on an ICD which about 0.25, my analysts are telling me. So we do want 3 to note that in fact we have that data. 4 5 MS. WILBON: Thank you. Okay, Subgroup 1, can we call a vote? 6 MEMBER KAPLAN: 7 I think so. MS. INGBER: Okay, wonderful, thank 8 9 you, everyone. Voting is now open on Measure 3559, hospital-level risk standardized 10 11 improvement rate in patient-reported outcomes 12 following elective primary THA and TKA. 13 Reminder, this is a rating for validity. 14 Okay, I will now share my screen to show the results. Okay, as you can see we had 15 16 five ratings for moderate and three ratings for 17 low. This means the measure passes on validity. 18 MS. WILBON: Thank you, Hannah. So we 19 are running behind. We had scheduled to review 20 another measure during this time, 0715, 21 standardized adverse event ratio for children 22 younger than 18 of age undergoing cardiac

catheterization from Boston Children's Hospital. 1 2 But I know they have holding on the line, and I want to be respectful of folks' time 3 4 and make sure that we give them an opportunity to 5 review, an adequate opportunity to review and present their measure. Is it Lisa, are you 6 7 there? Can you hear us? 8 MS. SUTER: Can you hear me? 9 MS. WILBON: Yes, yes. 10 MS. SUTER: Okay, good. 11 MS. WILBON: Can I just ask, are you 12 guys, I know this is a tough position for us all 13 to be in, and I apologize for running over, would 14 you guys be able to join us tomorrow for a discussion of your measure, or is today, are you 15 16 locked in for today? 17 MS. BERGERSEN: We're happy to do 18 whatever works for the committee. 19 MS. WILBON: Okay. I'd like to, let 20 us take some time as a team and with the co-21 chairs to look at the agenda for tomorrow, and we will get back to you this evening. And we're 22

going to add you to the agenda for tomorrow. 1 2 I just want to make sure there is enough opportunity for the committee to consider 3 4 your measure, as well as for you to give, you 5 know, a response and engage in some discussion, while also being respectful of folks' time and 6 ending our day today at five. 7 8 So I really appreciate your 9 flexibility, and we'll be in touch very shortly after the close of the call to work out a time 10 11 that you guys can join us tomorrow. 12 DR. ROMANO: Ashlie, this is Dr. 13 Romano. I guess there isn't any way to go past 14 five? Because pushing to early tomorrow morning would be 6:00 a.m. on the West Coast. 15 16 MS. WILBON: Right. We did actually move Subgroup 1's measures to the afternoon for 17 18 that reason. So we'll kind of rejigger things 19 around a bit. We have developers who have some 20 kind of restrictions on what time they can 21 attend. And so we'll take a look at things and move things around, and we're definitely keeping 22

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1	that in mind (telephonic interference).
2	Dave and Dave, do you have any other
3	comments or thoughts about that for the group
4	before we wrap up for today?
5	CHAIR NERENZ: No, it's a tough spot.
6	I mean, I feel very badly about asking the
7	developers particularly to adjust schedule, but I
8	also don't want them to feel shortchanged in
9	terms of the opportunity for discussion and for
10	them to talk through some of the responses.
11	So I think all of us will just have to
12	remember tomorrow to keep the discussion focused,
13	keep the comments as brief as possible, because
14	we'll be squeezing in one more thing beyond what
15	we had originally schedule.
16	DR. ROMANO: And this is Patrick
17	again. I just, for the benefit of other folks,
18	the developers provided quite a detailed and
19	lengthy response to the comments on pages 49-59
20	of the discussion guide. So everyone should take
21	a look at that material in advance of our
22	discussion.

1	CHAIR CELLA: Thanks, this is Dave
2	Cella, nothing to add, that sounds good. Let's
3	try to keep the same time parameters, start and
4	end time parameters tomorrow and we can just be
5	efficient.
6	MS. WILBON: Okay, the team will take
7	a look at the agenda and we'll touch base with
8	the co-chairs and with the developers this
9	evening to make sure we're on track for tomorrow.
10	And we're at about ten minutes before the top of
11	the hour, and I think we're going to go ahead and
12	open it up for public comment for a few minutes,
13	and then we'll go ahead and adjourn for the day.
14	And at this time, if you would like to
15	comment, you can enter them into the chat box of
16	the webinar or press star one, although I think
17	we've been having some difficulty with that. But
18	if you're able to raise your hand if you're on
19	the webinar or enter your comment in the chat
20	box, we'll be sure to relay your comment and find
21	a way for you to (telephonic interference).
22	Okay, I think, hearing none, I think

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1	we'll go ahead and adjourn for the day. I did
2	just want to thank everyone for being such
3	troopers and being engaged for such a marathon
4	webinar for today.
5	I do think this having been over
6	webinar I don't think that we lost very much by
7	not being in person. So I really appreciate
8	that, and we look forward to more discussion
9	tomorrow and getting through all the measures.
10	So thanks, everyone, and have a good
11	evening, and we'll talk to you tomorrow morning.
12	(Whereupon, the above-entitled matter
13	went off the record at 4:51 p.m.)
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Α a.m 1:19 5:2 139:9 306:15 **AAOS** 296:9 ability 8:17 37:2 111:2 145:1 170:8 181:6 able 7:2 9:4.17.21 10:8 11:16 12:5,10 24:8,10 27:10 31:12 37:3 39:9 42:21 54:16,22 82:20 96:11,17 105:20 106:8 137:9,17 139:2 144:3 162:11 164:1 194:18 246:19 247:2 248:12 251:13 255:22 278:13 301:3 305:14 308:18 ably 147:1 above-entitled 139:8 245:8 309:12 absence 165:17 166:8 absolutely 136:19 178:3 179:1 abstract 115:20 academic 199:3 230:18 Academy 22:11 296:10 accelerating 80:3 accept 109:20,22 129:9 159:9 184:2 acceptability 57:7 133:20 acceptable 42:12 58:21 66:22 72:1 79:8 91:1 97:19 108:14,16 110:9 117:17 119:2 126:10,19 156:21 acceptance 95:18 accepted 62:7 68:7 access 88:9 177:13 accesses 102:16 accessible 104:5 accident 213:8,18 accommodate 6:12 accommodates 90:10 accommodating 13:4 account 191:12 226:12 accountability 98:3 106:21 107:1 112:19 113:3,5,6 124:17 125:4 135:6,21 accountable 278:5 accounted 170:18 accounting 76:1 235:10 265:16 accurate 11:4 158:14 164:11 273:5 accurately 202:9 accustomed 230:16

achievable 44:7 achieve 81:9 126:10,19 153:13 170:8 172:6 achieving 45:14 acknowledge 89:13 126:6 168:3 171:21 242:10 302:6 acknowledging 296:17 ACOs 278:6 **Act** 181:6 acting 7:17 35:10 134:16 action 49:5 63:19 175:4 219:4 active 8:14 activities 15:15 16:5,15 26:2 actor 180:14 actual 88:12 101:14 148:14 184:22 283:18 295:16 ad 74:15 208:4 Adams 63:1 67:10 74:16 81:6 145:7,11 adaptations 232:20 add 55:20 66:3 74:13 127:2 143:9 144:10 157:19 177:18 187:12 187:13 221:11 225:18 263:20 266:13 294:9 299:20 306:1 308:2 added 37:14 51:2 126:12 174:3 177:17 244:7 adding 171:2 189:1 addition 206:12 254:19 296:6 additional 18:19 19:16 27:5 29:15,18 33:2 35:12 48:5,22 49:18 51:15 55:20 92:7 150:1 248:9 249:14 292:20 298:9 303:17 address 17:3 55:13.17 74:1 196:22 284:20 287:6 291:14 292:7 292:22 addressed 147:1 259:6 282:16 287:4 292:4 294:16 addressing 69:19 109:13 adequate 42:8 54:20 166:19 199:18 305:5 adjectives 70:9 73:1 adjourn 4:22 308:13 309:1 adjournment 298:15

adjudicate 254:13 adjust 78:4 109:11 120:18 151:19 152:4 166:16 199:9 234:17 235:12 307:7 adjusted 75:13 76:1 116:13 151:21 166:16 183:5 185:10 197:16 197:20 199:5 232:7 adjuster 128:17 224:22 225:8 226:7 227:1 adjusters 150:22 adjusting 50:10 76:5 120:17 121:1,12 151:20 172:2 adjustment 4:9 28:6 50:2 55:6 57:9 76:11 116:13,18 117:2,3,9 118:16 119:12 146:7 147:1,9,10,10 148:1 148:11,20 149:21 150:7 151:12 152:16 153:15 154:4,20 155:8,12 156:1,4,5,21 157:1 158:7,11,12 159:7 161:11 162:13 162:14 171:19 183:12 184:9 185:9 187:4,9 190:7.8 191:18 195:21,22 200:1,19 201:4 203:16 212:8 216:6 224:12 225:15 227:16 228:22 231:3 232:18 235:7 237:1 239:6,8 241:6 264:20 265:6,7 275:5 286:1 adjustments 110:19 128:15 149:16 administer 301:4,5 administrative 146:13 182:21 221:1 246:1 admit 145:20 146:15 admitted 238:17,18,19 ado 8:18 adopt 63:12 116:6 advance 98:22 204:9 266:4 307:21 Advantage 180:10 181:5 231:21 234:20 235:5,7 advantaged 68:16 adverse 243:15 304:21 advice 110:22 296:21 affect 129:3 239:12,19 afternoon 13:12 24:13 25:14,17 47:15 54:3,7 137:14 140:14 274:3 306:17

age 199:17 243:16 304:22 agencies 229:13 agenda 6:19 7:10 8:22 16:6 24:16 25:2 26:12 26:16 49:7 56:12 65:3 84:19 101:19 141:16 204:8 208:9 212:2 216:14 305:21 306:1 308:7 aggregating 262:11 agnostic 106:5 120:20 ago 25:21 63:4 64:1,14 81:12 87:9 115:21 120:20 123:5 165:10 170:3 206:5 220:2,17 295:1 Agrawal 3:1 5:19,21 6:2 agree 65:7 74:14 120:2 120:3 143:20 157:6 167:21 172:8 179:4 186:3 191:20 198:19 202:12,13 210:6,9 agreed 280:16 agreement 40:6 62:21 69:13 70:1,7,12 72:9 85:10 agrees 158:19 ahead 69:7 99:3 101:19 124:10 126:22 131:2 139:11 144:9 145:18 155:19 158:2 162:16 165:6 173:5,15 176:5 194:1 196:13 198:12 203:3 214:12 224:3 236:5 241:14 244:1 246:21 255:5 260:3 263:19 266:20 268:16 272:19 301:16 308:11 308:13 309:1 AHRQ-funded 19:21 al 28:9 Alex 2:13 22:7 68:15,21 69:5,7 73:4 85:5 87:5 88:1 100:21,22 138:15,17 139:1,6 141:15,21 algorithm 218:12 237:8 align 49:19 60:12 149:16 alignment 113:10 160:21 aligns 51:10 all-or- 48:13 all-or-none 279:18 Allan 63:3 allow 49:13 117:18 160:19 269:3 270:10

286:17 288:1 292:18 allowed 100:11 154:8 162:9 268:20 298:6 allows 11:14 174:12 254:22 alluded 144:11 296:4 alphabetical 68:13 alternative 104:19 115:22 ambiguous 50:20 ambivalence 168:19 America 23:20 American 22:10 296:10 amount 79:15 85:10 197:5 199:19 227:18 296:3 analog 22:5 analyses 27:7 97:3,12 142:15 143:21 232:18 analysis 29:12 68:1 74:17 78:12,18 80:7 94:15 99:9 101:13 102:2 142:22 148:8 153:20 154:2 160:4 167:19 209:4 228:9 249:22 250:7 259:2 264:8.16 265:4 281:12 282:2 289:3 **analyst** 14:6 analysts 304:3 analyzed 67:10 94:12 265:16 283:6 analyzing 68:3 and/or 133:8 207:22 243:12 257:12 281:10 anesthesia 120:14 annotated 24:16 annual 302:11 answer 73:21 88:14 89:2 93:16,19 106:15 109:7 121:17 143:22 144:2 233:8 240:3 261:5,10 262:15 answers 153:6 anticipate 133:13 anticipating 205:9 anybody 299:21 anymore 109:10 232:10 anyone's 213:9 anyway 108:7 213:12 261:19 303:5 apart 152:1 apartment 23:13 apologies 15:10 17:6 34:3 107:2 139:2 255:17 266:3 apologize 72:11 238:15 282:16 305:13

apparent 156:22 apparently 157:13 appeal 82:16 appear 76:3 166:12 appeared 227:18 appearing 115:18 appears 62:14 83:8 84:18 155:8 290:3 appendices 214:4 Appendix 247:19 284:6 284:10 application 83:22 111:11 112:2 113:3 124:17 145:4 162:12 231:4 232:16 233:1,7 234:2 applications 102:8 109:21 110:1 112:19 125:4 231:22 applied 38:12 52:15 54:2 112:3 202:10 289:12,12 291:18 applies 46:11 73:2 145:2 200:6 apply 38:16 48:8 60:11 65:9 70:21 111:5 150:7 234:18 262:9 **applying** 90:16 124:22 130:12 225:3 276:21 appreciate 6:7 18:16 21:4,9 23:17 57:16 69:9 95:10 96:5 163:4 205:3 220:7 298:12 306:8 309:7 appreciative 297:5 **approach** 7:4 38:11,14 109:9,10 118:17 119:3 127:20 143:10 145:8,11 191:21 192:9 221:5 235:19 237:5,11 279:21 280:12 291:7,14,19 292:1 approached 291:6 approaching 205:19 224:22 appropriate 38:21 42:6 84:10 128:12 135:7 136:8 154:21 202:15 233:7 259:11 appropriately 144:17 178:17 237:15 approval 111:4 approve 111:19 approving 122:15 approximate 301:6 **APRIL** 1:14 **Apryl** 130:18,19 131:19

132:1 134:11,15 162:20,21 164:6 174:16 175:10 201:7 arbitrary 67:20 70:10 arc 297:20 300:7 area 102:18 129:6 146:9 171:13 199:12 280:3 areas 148:20 arena 199:5 arguing 207:9 argument 182:3,6 195:9 198:7 199:8 arguments 118:20 199:10 **arm** 260:1 arthroplasty 243:12 257:13 286:20 article 62:19 63:1,7 67:14,19 69:16 98:14 148:4 articles 71:22 articulation 218:14 **Ashlie** 3:2 5:4,21 7:12 7:14 34:1 56:1 93:15 105:4 112:8 124:11 131:21 134:18 136:6 136:14,18 138:3,8 139:7 140:2 147:11 150:2,5 159:14 162:1 163:17 164:1 165:10 175:10 201:21 219:19 220:9 222:1 223:5 241:11 244:3 245:11 248:8 251:15 256:13 256:17 260:13 263:19 272:19 274:18 284:14 303:9,19 306:12 Ashlie's 120:6 asked 15:14 66:13 99:20 152:9 153:19 171:4 175:1 270:1 asking 46:20 55:8 88:8 131:5 155:5 172:3.11 182:13 215:8 307:6 asks 11:7 aspects 149:5 assess 130:16 165:12 168:7 217:19 258:21 261:16 assessed 168:20 assessing 159:6 assessment 120:22 158:14,15 167:20 174:4 219:12 270:22 288:5 assessments 130:7 **assign** 91:22

assigned 103:16 250:15 assigning 93:4 assistance 169:8 associated 98:8 153:12 183:1,2 240:12 259:5 association 52:9 152:13 183:6,8 184:4 281:18 282:6 assume 73:2 196:10 302:15 assumed 212:3 assumes 145:8,9 235:10 assumption 104:11 110:4 145:10 assure 228:8 asterisk 113:18 asterisks 114:6 attached 194:6 258:7 attachments 27:4 attain 287:11 attend 9:16 24:8 26:18 306:21 attending 7:8,13 8:7 attention 51:16 77:4 85:22 137:5 146:3 201:16 217:15 260:16 291:13 attribute 207:7 attributing 77:18 263:5 attribution 263:1,11 284:16 287:9 299:1,7 audiences 94:2 audio 96:17 242:13,15 246:9 audited 293:10 Austin 2:3 17:15,16 33:14 34:20 139:5 252:11,12 274:3 275:15 276:19 authors 115:20 automatically 37:10 80:15 availability 171:12 available 14:7 191:17 199:1 253:1 269:2 270:22 average 73:22 89:15 128:13 226:11 averaging 87:11,12 89:18 avoid 200:9 aware 219:3 awareness 233:19 awesome 35:16 53:17 awful 189:11 277:5

В	185:15 187:19	biostat 183:20	brief 13:15 16:21 26:4
B 99:15 103:9 136:5	basis 62:3 121:12	biostats 179:3 181:12	26:13 36:5 47:2
233:12 247:20 284:6	158:20 162:6,13	186:10	307:13
ack 7:3,13 17:5 20:20	163:8 176:19 218:14	bit 15:2 21:20 27:11	briefly 61:14 150:18
30:13 32:7 33:19 34:5	302:16	32:8 34:22,22 42:16	bring 30:13 34:5 36:22
34:9,12,15,16 36:17	bathroom 76:21 120:10	49:11,17 61:12 65:20	40:20 41:6 60:9 158:1
40:3,20 43:12 56:5	Bayesian 90:19	73:8 76:18 80:10,19	164:2 176:14 178:18
62:2,9 69:16 77:16	bear 14:16 46:8	83:16 85:9 93:18 98:5	183:14 222:4 264:6
81:4 84:4 85:4 87:18	becoming 31:13	101:22 116:5 122:2	bringing 63:15 173:21
92:22 93:7 94:7 96:15	began 233:20 290:8	131:5 136:7 144:3	brings 178:8
98:11,18 117:12	beginning 124:5 270:6	145:14 147:18,21	broad 117:3 174:19
120:5 123:12 124:5	begins 182:17	160:9 163:19 165:21	284:17
128:4,20 136:14	believe 15:22 16:22	169:2 174:8 187:22	broader 40:22 174:20
137:11,16,20,22	18:15 24:7 71:19	193:4 205:7 212:14	190:11 221:9
138:1 139:15,15	72:17 87:22 92:4 97:1	219:10 243:3 245:20	broadly 163:19 295:19
140:10 141:8 148:8	154:20 157:20 191:6	250:14 256:14 260:20	brought 153:22 209:22
157:22 162:10 169:2	191:9 277:11 291:4	261:3 267:9 270:4	238:22 239:10,11,18
169:17 173:13 174:12	291:12,19	273:13 294:18 301:14	241:8 260:16 295:22
186:16 193:10 194:22	believed 41:3	306:19	bucket 161:5
195:19 196:4 198:11	belong 166:6	bite 9:4	building 297:14
198:19 201:7 213:21	belongs 263:10	bitterly 90:1	bullet 38:21 49:16
214:2 215:7 238:4	beneficiary 214:8	black-and-white 181:16	132:7,8 179:22
243:19 245:12 253:21	226:10 227:21 228:5	blanket 95:18 199:15	206:21 224:11,17
262:18 273:2 280:22	228:15 229:1 231:11	231:8	bullets 38:10
295:22 305:22	benefit 301:7 307:17	blast 263:15	bunch 128:3 129:20
background 11:13 12:9	benefits 270:3,8	bleed 58:1	bundle 208:19 268:20
23:12 27:8 28:8 51:11	BERGERSEN 3:6	bleeds 58:8	bundled 278:4
95:5 98:13 153:3,17	305:17	block 84:18 92:15	burden 44:9 269:21
163:4 247:1 267:11	best 6:9 9:22 10:13	254:20	296:2
294:20	12:12 49:20,22 50:22	blocks 9:2	bus 226:13
ackgrounds 148:19	54:21 68:19 72:8	board 17:9 124:2 152:7	business 263:2
ackup 13:9 254:19	149:10	270:6 283:2	button 43:9,9 281:3,4
ad 147:16	better 56:21,21 58:3	boards 130:9	Bye 245:7
badly 307:6	86:2 93:17,22 108:22	bode 283:18	
balance 189:5	110:3 140:7 145:6	bodies 105:22	C
palanced 116:14	147:17,18,19 176:13	bogus 170:21 228:17	C 35:18 55:19,22 65:21
Balestracci 3:6 255:9	211:13 219:11 244:14	boil 234:6	98:17,20 138:11
255:10,12 284:22	261:5 269:1 271:6,7	boils 279:18	161:21 175:9 200:4
285:1,3 303:19,20	279:12 280:6 283:4	bold 297:2	209:13 218:9 219:15
bandwidth 6:13	291:9,10 294:12,13	Borah 2:3 17:20,21	241:6 244:3
bar 31:11 282:9	297:18 301:15,18	222:10,22	C- 280:5
Barbara 268:16	better- 217:10	Boston 3:6 243:17	C-O-N-T-E-N-T-S 4:1
barely 278:8	beyond 213:9 307:14	305:1	C-statistic 166:12,15
Darring 243:22	bias 76:12 109:19	Bott 2:4 18:3,4,5 252:13	194:10,11
barning 243.22 base 76:6 308:7	166:22 170:4 215:2	252:14	C-stats 280:3
based 47:6 48:11 52:12	220:21 281:14 291:7	bottom 81:21 136:15	C.F 98:14
59:13 68:3 74:17	291:15	170:5 231:16 260:17	Caitlin 3:4 14:6
112:13 113:12 125:1	biased 152:5	bounds 82:7	calculate 38:20 86:4,18
131:10 155:11 156:22	biasing 76:11	box 10:2 46:7 71:1	86:21 235:21 237:18
158:17 168:14 169:18	big 77:22 105:2 117:5	96:12 242:2,6 281:22	238:9
	177:21 230:21 256:16	308:15,20	calculated 87:21
206:7 209:17 225:8 236:13 249:21 251:5	258:4 281:5,16	boxes 246:7	calculation 109:2
	biggest 238:1	brain 179:4	calculations 38:13
264:13 271:13 303:17	Bijan 2:3 17:19 18:2	break 9:10 132:6 137:7	calendar 250:5
304:2	204:17 206:14 219:5	137:15 224:3,4	calibration 50:9 165:15
basic 134:10	219:20,22 222:7,8,22	241:16 243:5 244:1	166:9 167:8 280:9,10
basically 22:4 27:22	binary 179:11 280:20	breakdown 29:20	280:10,12
37:22 51:10 89:12,20	biological 136:17 137:6	breaks 9:2	call 10:13,21 14:13
104:22 119:3 151:6			

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61:18.22 63:14 64:6 64:20 65:22 117:14 128:7 135:18 144:6 157:20 164:8 171:6 176:7 194:17,18,22 206:4 227:19 250:2 304:6 306:10 called 62:7 194:4 196:5 caller 172:9 calling 18:14 248:10 calls 79:7 151:5 camp 193:14 cancer 226:13 candidate 153:21 capacity 189:9 capped 212:18 capture 237:21 239:9 287:12 captured 235:16 239:17 capturing 144:14,19 car 213:8,18 cardiac 116:20 243:16 304:22 Cardiovascular 4:15 cards 103:19 care 18:20 23:20 116:21,21 117:1 151:16,18 152:2,5 171:12 177:12,13 180:9 189:17 191:9 191:14 208:19 209:1 213:2 217:19,20 218:6 219:9 226:8 228:5 229:11 233:17 239:18 248:10.13 278:4,5 285:16 287:13,17 288:2 293:1 295:2 careful 43:8 51:7 154:1 164:6 197:18 228:1 281:3 carefully 71:4 78:13 131:16 carried 202:10 carrier 238:5 carries 80:15 carry 55:1 64:21 65:5 case 13:9 24:9 68:20 76:2 79:2 99:10 104:1 117:22 187:22 196:2 197:17 198:5 199:9 210:19 212:21 213:20 226:9 237:18 260:12 261:9 266:17 269:17 caseloads 265:2 cases 66:18 94:11 117:1 124:6 126:9,17 144:12 151:14 153:3

166:11 171:7 196:20 209:6 212:16 213:17 213:19 214:18,21 215:2,5,9 216:1 217:7 217:9,14,18 267:22 286:20 292:2,3 cast 92:19 catch 10:15 39:3,10 49:22 catching 10:18 categorical 70:1,13 categories 100:15 132:16 185:17 236:12 240:8.8 catheterization 243:17 305:1 caused 87:8 causes 258:2 caveat 277:4 ceiling 259:14 268:10 270:16,21 273:19 cell 226:2 Center 230:15 231:5 232:3 centers 116:21 199:3 **Century** 181:6 CEO 3:1 5:18 certain 50:4 65:14 73:12 78:17 86:18,19 103:16 104:20 109:5 109:20 122:21 123:7 127:7 133:20 135:21 143:10,10 150:11 168:18 170:4 175:1 181:7 194:6 197:5 207:13 213:2 236:18 certainly 5:8 24:5 30:19 31:3,6,7,21 34:11 36:17 40:19,21 41:5 46:6 50:15 52:13 100:10 105:12 121:9 127:19 146:3 148:7 148:12,17,21 149:9 149:19 156:2,17 159:20 160:7 161:8 161:16 163:2 168:1 193:18 205:16 222:2 223:12 237:5 275:9 276:8 289:12 291:2,3 292:12 cetera 59:2,2 83:14 110:19 165:16 chaired 170:2 chairs 7:22 149:21 305:21 challenge 102:3 104:10 110:3 113:14 121:15 136:7

challenges 53:7 55:16 179:18 204:10 206:6 218:18 challenging 7:11 104:9 110:15 218:5 chance 61:15 95:1 227:15 298:20 change 42:22 56:6,10 88:20 105:3 107:10 152:7 162:4,7 164:7 168:6 171:1 174:19 175:7 185:11 187:14 187:15,18 190:14 192:3,7 193:3 250:18 253:20 283:18 302:19 changed 37:7,11 47:18 120:16 151:6,7 200:21 302:19 changes 118:12 163:10 163:22 187:17 189:20 194:9 263:5 301:10 changing 27:17 channel 156:16 characteristics 146:11 156:14 157:9 165:14 215:10 characterization 68:6 characterize 141:18 charged 72:7 chart 293:13 294:1 chat 9:19 10:2.19.20 14:7 46:7 71:1 96:12 112:9 242:2,6,18 246:6,7,17 308:15,19 **CHDA** 2:19 **check** 7:19 9:5 35:3 195:4 198:11 246:3 271:17 298:13 checking 24:8 Chicago 254:4 child 232:19 child-reported 20:3 children 243:15 304:21 Children's 3:6 243:17 305:1 chime 134:20 271:13 chimed 260:2 choice 283:12 286:3 290:6 choices 294:7 choose 81:21 153:7,9 154:5 192:4 272:16 choosing 115:12 choreograph 98:21 **chosen** 286:9 289:10 **Christie** 2:15 22:19 173:4,5,6,9,14 175:21 176:1,5 178:19

188:10 195:3,5 234:12 236:4,7 Christie's 174:11 chronic 235:1,11,15 circulate 223:16 circumstances 5:12 226:8,20 239:10,18 cited 63:2 CJR 285:15 290:12 291:4 292:17 293:19 claim 228:13 234:21 235:14 237:20,21 claims 174:1 238:9 293:7.16 claims-based 220:18 221:1,2 289:13 290:20 293:12 clarification 57:3 136:1 159:5 clarifications 51:1 clarifies 157:6 clarify 221:12 clarifying 57:15 clarity 12:9 181:19 273:22 Clark 134:13.15.16 162:20 164:9,14,18 164:21 classic 109:8 115:13 classifications 67:20 classified 240:21 classifier 70:2,13 classify 261:1 clear 11:16 12:5 39:5 39:17 50:12 63:11 64:6 65:2 69:18 80:21 160:9 208:10 228:22 229:20 235:2 239:17 253:9,13,17 254:9 264:4 268:11 281:22 282:1 clearer 211:12,17 clearest 152:4 clearly 11:15 63:19 95:16 100:4 122:13 122:18 165:20 186:3 clears 253:10,12 click 249:2 253:9 **clinical** 30:1 47:7,7 50:5 50:14 148:15 149:5 151:11 155:1 156:7 156:14 167:2 172:21 195:10,22 201:4 209:15,20 210:22 211:10 225:1 228:16 269:14 294:5 clinician 22:4 210:11 clinicians 8:14 82:2

297:16 206:2 99:5 105:6 120:5 close 92:16 94:8 306:10 128:4 130:19 135:2 closer 89:21 147:21 135:15 153:6 163:8 **CMMI** 230:15 285:16 163:12 170:4 173:13 CMS 22:2 118:19 175:14,19 193:2 120:16 123:7 152:21 205:7 221:7 223:8 188:15 191:21 193:18 243:19 260:21 262:18 222:13 199:6 205:11 207:15 268:12 224:18 230:19 236:8 comes 13:10 62:17 236:11 237:5 238:4 63:14 68:12 91:12 238:12 240:7 246:5 149:6 175:19 182:19 268:20 277:10,12,16 232:12 233:5,16 278:5 279:6 293:11 234:5 293:18 96:16 294:22 296:1 302:7 comfortable 67:17 274:11 303:6 CMS's 302:10 coming 6:12 27:18 296:19 **co-**7:21 36:1 293:9 31:14 34:12,16 36:3 305:20 53:4 56:4 58:15 93:3 122:3 128:20 137:11 co-chair 2:2,2 151:2 co-chairs 1:19 10:11 188:15 204:1 288:19 300:21 15:5 38:1 54:15 308:8 **comment** 4:11,17 10:20 10:21 33:13 70:22 coalescing 32:1 Coast 15:1 21:8,19 59:8 75:6,19 81:16 96:13 108:5 306:15 116:9,10 126:14 143:2 152:19 154:14 **code** 88:5,12,13 102:18 302:17 162:19 167:4 168:11 coded 190:10 169:1 195:5,7 241:15 codes 234:17 240:9 241:18,20 242:1,2 302:18 244:5,7 257:1 266:5 coding 190:5.6 290:11 294:9,16 coefficient 79:1,3 87:15 296:11 303:22 308:12 236:13 299:5 308:15,19,20 coefficients 79:15 **commented** 188:10 192:14 236:11,14,22 239:22 comments 50:14.17 coanitively 59:9 73:7 74:13 97:3 **Colette** 244:4 117:13 144:6 149:19 169:14 collaboration 268:15 150:1 167:13 174:14 287:13 191:1 198:9 211:19 colleagues 256:10 247:14 271:13 279:16 collect 297:11 298:1 282:19 285:14 295:10 collected 285:19,22 296:8 307:3,13,19 292:18 297:21 commit 95:12 collecting 248:2 291:10 committed 283:22 291:11 committee 4:13.15 6:4 collection 183:19 23:6 25:7 30:18 31:9 199:16 283:5 291:8 31:12,15,22 32:20,22 293:19 294:3 32:22 37:3,17 41:3 collectively 130:1 50:17 155:6 159:11 combination 32:12 160:2 162:15 163:16 100:1 126:18 164:19 167:3 201:6 combined 160:4 267:15 202:4,11 204:21 combines 29:9 205:21 206:12 207:14 combining 14:12 80:2 218:16 219:17 220:3 231:10 come 7:6 17:12 20:20 220:5 221:8,17,19 222:8 241:8 250:9 30:21 33:19 34:15 278:19 300:16 305:18 44:14 53:11,15,21 62:12,15 64:7,10 306:3 86:13 87:16 96:15 committee's 40:17

committees 33:8 37:10 38:6 40:3 135:3,11 148:16 149:1,11,12 160:15 161:2,19 162:9 201:17 222:4 common 25:12 32:1 80:11 82:15 88:4 201:3 205:19 commonly 61:6 72:5 communicate 10:3 communicated 202:8 communication 20:19 **community** 116:22 270:10,22 271:6 283:2,20 297:6,9 commute 251:22 **comorbid** 182:6,15 comorbidities 190:9 comorbidity 237:8 comparators 220:20 compare 102:15 116:20 192:5 278:16 282:12 compared 278:17 281:12 283:5 comparing 99:15 121:9 121:9 220:22 262:13 **comparison** 121:4,6,13 comparisons 81:7 compelling 107:17 compensation 120:17 121:1 199:6 competence 103:14 compiled 262:22 complained 90:1 complete 35:7,14 170:1 265:15 288:22 **completely** 70:9 72:13 73:1 74:14,15 167:9 198:20 228:17 235:22 **complex** 54:19 complicated 181:10 complicating 179:7 complication 277:18 279:7 281:19 component 211:20 components 48:18 231:10 275:4,6,11 composite 29:22 48:12 48:13,17,21 49:2 78:3 132:21 260:7,10,12

260:18 266:9 279:17 composites 78:15 262:10 comprehensive 277:15 285:16 295:2 compromise 127:4 compromised 168:16 compromising 109:18 compute 275:21 computer 88:12 conceivable 93:10 concentrate 183:10 concentrating 146:12 concept 52:7 106:9 185:21 186:3 208:19 211:4 264:10 291:5 conceptual 70:14 101:1 152:10 153:4 163:8 176:18 concern 51:6 84:2 159:10 162:17,18 173:19 189:7 208:16 215:1,22 216:13 217:15 233:22 239:20 239:20 258:2 262:2 262:20 263:14 264:1 264:6.19 265:8 272:9 273:7 274:22 275:13 281:13,16 282:21 287:9 288:12 289:4,9 290:6,16 292:9 293:3 298:19 303:22 concerned 85:20 120:9 120:15 180:4 189:12 210:18 225:20 227:15 228:20 260:7 266:8 267:3,4 281:17 299:12 concerns 50:8 90:11 155:7 159:10 206:7 214:18 247:10 256:22 257:18 258:6 259:4 262:22 265:14 273:3 273:17 287:2 294:19 298:22 299:19 conclude 25:22 243:7 243:21 294:9 conclusion 99:12 **concrete** 212:14 condition 225:6 228:16 235:1 241:1 conditions 114:7 127:7 182:7 235:11,15 conducted 42:1 258:12 258:14 259:3 289:18 conducting 13:1 conference 61:18 151:4 confess 209:14

confidence 106:19 293:16 confident 294:6 **confirm** 252:3 conflate 267:21 conflict 16:18 17:1,2 270:5 conflicts 15:9 16:8 18:11 20:9 21:16 23:22 24:17 confounding 145:1 166:21 confused 79:12 120:6 273:13 confusing 49:17 229:17 255:6 connected 96:8 134:12 138:6 173:10 connection 59:21 156:18 183:7 connectivity 271:6 consensus 29:4,10,14 31:5,14,20 32:15 37:9 42:17 45:14,18 53:15 69:12 105:21 257:15 259:10 279:14 consensus-not-249:11 **consent** 250:5 consequence 166:4 consequences 129:19 consider 60:21 75:8 80:7 105:3 115:14 118:14 119:11 121:3 122:9 125:8 135:3 161:13 162:4.7 163:16 164:6 216:22 249:15 275:19 291:2 296:1 306:3 considerable 282:4 consideration 29:16 37:15 38:6 50:18 103:13 113:19 165:13 165:17 228:15 275:10 291:20 considerations 4:10 105:18 185:20 considered 32:4,5 37:19 42:15 44:6,10 72:5 79:10.18 84:14 88:11 111:9 166:19 241:10 considering 43:2 44:16 45:3 58:6 149:12 216:14 250:11 275:3 consistency 77:9 158:5 250:14 258:21 consistent 31:8,13 37:12 54:1

consistently 117:21 182:22 **CONSORT** 211:1,9 218:12 constant 151:16 constraints 6:13 construct 49:3 208:21 260:11 261:17 273:12 constructed 142:18 215:5 consultant 19:20 288:9 consulting 16:4 consumer 73:14 102:16 contacted 277:12 content 86:15 137:12 272:9 273:5,6 context 27:12 29:17 51:22 54:14 55:20 62:20 69:20 70:12,19 71:4,13 72:6,10,13,21 73:2 77:1 83:3,12 84:9 85:6 97:21 106:22 110:17,18 113:7 122:5 164:12 165:9 175:14,20 190:15 201:8 205:7 272:15 279:2 285:5 286:22 294:18 298:9 299:16 context- 80:12 context-dependent 180:3 contexts 70:15 71:8 73:3 300:4 contextual 85:11 continuation 140:15 **continue** 35:9 43:3 56:17 88:2 98:11,22 245:19 291:2 continued 290:13 294:4 continuous 179:17 183:1 contract 22:2 230:18 contractors 230:21 302:11 contribute 299:8 contributes 197:10 contributing 12:2 **contribution** 188:6,7,22 189:19 control 102:4 103:21 111:3 126:7 152:3 171:6,11 179:22 180:2,16,17 181:2,4 181:19,20 187:5 207:15,22 210:1,4 213:6,10 controlled 180:12

convene 222:16 convened 151:1 convenience 35:15 converge 271:9 conversation 130:5 136.12converted 270:14 convey 150:14,15 convince 116:12 cooperation 255:8 256:5 coordinate 223:6 coordinated 224:6 coordination 287:17 core 3:6,7 47:13 155:5 158:9 173:22 246:5 255:14 257:22 258:4 285:1 295:22 303:20 CORE/CMS 243:13 **correct** 46:14 69:2 150:15 172:4 222:9 277:10 correctly 38:19 67:14 82:19 correlated 183:19 195:22 **correlation** 69:3 79:2 87:15 281:20 correspond 102:19 103:1 cost 4:10 47:8 81:20 176:17 177:1,1,22 187:6 193:7 204:9,10 204:20 205:7,20 206:11 208:22 210:2 210:3 212:2,5,10 215:8,9 216:15 217:5 217:11 218:4,19 219:17 220:18 221:1 221:2,19 224:18 226:19 227:17 230:4 230:10,17 231:18 233:12 234:9 236:8 238:12 costly 200:1 costs 177:10 191:8 207:21 212:7 213:2,4 213:6 215:4 216:20 216:22 219:7,11 234:9 239:4,12,19 240:12 279:7 count 159:8 260:11 counted 208:21 counting 213:1 country 217:19 289:22 counts 226:2 couple 8:21 9:2 11:7 13:22 14:22 16:10

25:21 41:14,17 56:12 60:18 63:3 74:13 86:9 99:6 115:5 121:19 138:22 150:9 151:8 153:19 159:15,19 187:10 190:2 191:1 195:8 196:14 206:4 220:2,16 238:20 245:17 246:1 247:3 247:16 258:11 274:4 277:8,20 278:18 coupled 150:11 course 9:7 83:17 146:5 165:18 177:17 257:6 292:5 court 11:3 152:21 covariate 232:17 covariates 75:12 236:18,20,21 cover 104:6 288:11 covered 56:1 141:11 COVID 157:22 **CPHQ** 2:8,17 create 7:10 268:4 created 27:20 220:22 240:7 241:2 260:6 295:15 creates 225:6 creating 260:9 262:10 creation 285:15 criteria 26:8 27:17 38:16 45:12 60:10.12 62:5 65:14 74:16 93:4 97:22 100:14 116:3 135:11,22 136:5 149:4 169:18,18 175:1,2 185:9 229:18 262:9 278:12 criterion 50:11 168:21 critical 274:15,17 275:17,20,22 276:12 276:16,21 292:22 critically 75:9 182:11 cross 122:14 crossover 220:10 crystallized 59:22 CSAC 124:2 152:7 Cures 181:6 curious 33:17 current 47:12,19 58:6 59:13 60:12,19 72:8 97:22 106:17 149:16 163:20 202:5 currently 48:19 65:1 105:16 110:12 174:22 175:6 196:18 277:15 277:17 customization 236:15

236:17 customizing 237:4 **cut** 94:22 117:15 227:19 cut-and-paste 228:1 cut-off 92:21 cutoff 193:2 278:12 cutting 145:5 209:10 cycle 6:16 13:7 15:19 18:12 25:10 26:7 28:11,14,16,22 30:9 32:8 33:7 34:8,17 35:13 37:2,15 40:12 43:3 48:11 53:9,11 56:11 59:22 61:22 63:8 86:1 94:14 100:12 102:11 124:6 146:16 150:9 153:18 195:8 205:9,10 230:6 238:14 245:15 247:5 250:12,12 cycles 30:8 34:12 37:6 53:11,19 61:19 87:9 205:13 303:4 D **D** 284:10 daily 272:7 **Dan** 196:13 Daniel 2:4 18:8.13.14 94:7,10 124:10,11 125:22 126:2,13 196:11 198:11 252:7 Daniel's 131:4 daring 232:9 data-element 258:15 261:14 266:6 267:10 274:10,14 293:4 database 91:13 146:13 databases 182:22 dataset 236:10 date 57:11 Dave 1:19,19 2:2,2 8:3 8:3,6,12 15:6,8,10 17:6,8,14 35:18,18 46:21 55:19,19,22 56:2 59:15 61:7 65:21 69:7 81:3 93:14 96:10 96:18 98:17,18,20,20 112:7 122:12 125:11 136:20 138:10,10,11 139:6,22 143:1 147:13 149:19,22 150:5 155:4 156:15 161:21 162:17 170:2 174:15 175:9 185:4 198:17 200:4 201:10 201:20 203:4 204:15

209:13 218:9 219:15 223:22 241:5 242:21 244:3,8 248:9 252:9 253:7 260:15 266:21 271:15,22 273:2 281:6,6 282:17 284:2 299:20 300:1 307:2,2 308:1 Dave's 201:13 202:2 210:21 Daves 98:11 **David** 68:10 80:4,8 92:13 day 4:19,20 7:1 9:7 20:17 25:22 26:4 100:13 115:9 153:1 195:20 199:17 213:8 217:12 243:21 245:13 306:7 308:13 309:1 days 13:22 20:16 23:2 24:11 25:21 de 187:20 deal 67:2 90:7 91:1 124:9 171:22 212:6 216:2 285:9.20 286:4 286:12 292:1 dealing 156:19 187:4 216:8 deals 194:11 dealt 144:16 dear 260:4 debated 193:10 Debrief 4:19 decent 178:15 decide 35:11 158:6 223:14 300:17 decided 178:6 208:13 302:2 decides 171:14 deciding 209:19 decision 19:21 44:19 99:19 171:5 181:16 182:15 219:10 280:20 295:5 296:4 decisions 45:6 56:6 133:19 148:13 149:15 175:4 216:21 286:8,8 286:9 declare 62:12 decreasing 31:6 deemed 162:12 235:13 deeper 15:3 243:3 deeply 84:22 95:15 200:15 295:20 define 276:15 defined 48:12 74:3 defining 62:7 64:1 definitely 30:16 126:5

179:9 181:11 205:3 221:6 230:4 250:21 275:22 306:22 definition 64:3 67:21 213:16 274:16 definitional 260:8 definitions 60:19 64:15 definitive 276:14 definitively 167:17 degree 141:12 183:4 209:11 delay 8:9 254:11 delta 184:19 200:20 delve 84:22 demonstrate 38:12 97:15 112:4,5 125:6 172:18 211:6 221:2 demonstrated 140:18 demonstrating 97:18 97:20 221:4 denominator 78:17,20 78:22 179:10 262:5 293:8 department 24:3 depend 79:9 dependent 80:13 145:1 198:2 depending 33:10 35:10 180:8,13 185:16 223:17 233:9 depends 73:10,15 77:10 79:19 86:14 89:18 104:14,15 131:13 depression 153:11 Deprivation 199:12 describe 62:16 described 281:20 describing 51:18 description 38:14 52:7 228:6 276:15 301:12 designed 25:5 desirable 185:21 desktop 251:21 despite 5:16 281:11 destroy 273:10 detail 37:21 51:18 52:6 80:20 87:18,18 98:14 101:20 149:4 160:3 258:10 259:18 282:3 287:8 293:1 detailed 86:16 181:3 307:18 details 32:8 88:9 94:4 114:7 124:1 161:8 detect 133:3 134:6 detected 146:22 detecting 97:17 132:12

132:14.14 detection 102:9 103:1 146:3,20 detects 133:2 determinants 165:19 166:5,6 determination 50:8 101:9 209:21 determine 169:15 detriment 256:15 Deutscher 2:4 18:9,10 94:9 126:1,15 127:21 196:14 252:8 develop 22:2 111:16 235:20 developed 230:10,17 231:18,19 232:15 235:9 236:9 237:15 267:13 268:17,19 285:6,8,19 295:13,18 developer 22:1 33:5 44:9 46:15 48:7 82:16 87:10 91:18 108:20 133:1 142:6 146:2,19 154:4 156:11 171:7 171:15 181:1 193:7 197:6 224:7 227:22 257:2,21 259:7 260:6 263:16,21 265:22 274:6 282:15,19 284:3,15 303:7,12,18 developer's 284:5 developers 5:11 6:11 6:13 27:6,22 28:3 44:4 50:22 51:15 56:10,19 62:16 66:6 66:11,14 67:3 81:20 82:6 107:14 118:22 124:7 126:11,20,22 127:11 130:10 131:5 131:12 133:16 149:14 152:9 161:18 170:17 171:7 175:1 190:17 191:22 196:17 197:17 198:6 202:3 219:3 220:19 243:18 246:4 247:15,17 249:13 251:13 265:3,3 267:14 268:15 269:3 283:17 284:8 290:18 296:21 298:21 306:19 307:7,18 308:8 developing 55:7 205:11 development 16:4 19:22 22:12 24:1 58:5 230:22 265:7 285:12 290:14 292:13 295:21 297:3,7 298:10 300:7

316

diabetes 20:4 153:11 182:9 diagnoses 234:20 235:13 237:22 diagnosis 225:5 226:13 238:22 diagram 211:1,10 218:13 264:10 diagrammatic 218:21 dial 12:5 137:22 174:12 dialed 11:4 246:14,18 246:20 dialing 15:1 21:9,20 108:6 139:15 dialogue 6:22 dialysis 23:21 24:3 232:3,5 dichotomous 183:1 diem 190:4 difference 64:14 93:6 170:15,18 176:22 184:17 192:12 195:21 291:17 differences 45:21 61:5 76:2.6 77:15 132:15 132:15 133:4.4 151:20 226:19 263:6 265:9.11 different 38:18 62:21 63:9 65:10,11,12 66:20 71:8,9,10 72:13 72:16,19 73:2 74:18 74:19,20 75:17 77:7 77:17 78:9,10 82:6 83:21 86:21,22 87:1 101:3,4 119:19 121:4 125:15,15 131:9 133:1 135:4,16,17 136:3 171:3 180:11 182:14 188:9 192:13 198:4 208:18 209:12 216:9 218:1 231:10 231:15 235:19 236:10 237:13 239:16.22 268:2 274:19,20 275:11 283:12 286:5 287:2 292:5 298:6 301:2 302:17 differential 151:18 153:16 differentially 272:8 differentiating 41:18 differently 60:2 145:15 151:13 233:4 292:2 303:7 difficult 69:14 110:20 115:12 126:7 146:14 difficulties 244:13

difficulty 255:17 308:17 digest 125:9 digestible 94:1 dilemma 106:3 diligence 303:14 dimension 219:1 272:5 dimensionality 272:2,4 273:11 dimensions 272:7 direct 248:20 direction 65:2 106:1 119:19 204:2 directive 171:17 directly 88:14 97:5 172:6 240:20 290:21 290:21 director 13:7 directors 17:9 disadvantaged 191:7 191:11 192:17 disagree 40:10 76:18 114:21 119:18 disagreement 79:13 80:10,21 discharge 234:21 235:14 237:19,20 287:18 disclose 15:9,21 16:17 17:22 19:3,8,16 21:6 22:6,17,22 23:5,10 disclosed 18:19 disclosure 14:13,15,16 15:12,16 170:1 disclosures 4:2 14:21 16:14.19 17:17 18:5 18:11 21:12 discover 132:13 discrepancy 41:3 discriminate 77:22 discrimination 165:15 167:9 280:1 discuss 21:1 25:8 38:3 50:16 57:22 58:1 69:9 166:10 178:12 192:9 206:5 221:22 234:14 243:20 248:1,7 discussant 255:13 discussants 247:10 256:21 257:17 259:18 discussed 24:2 32:10 47:22 51:7 107:13 143:17 190:16 220:16 249:19,21 discussing 18:1 23:1 29:17 178:10 249:17 discussions 9:14 11:6 16:1 17:13 26:9 27:12 45:12 54:5,8 56:4,9

56:18 61:19 96:19 136:21 137:3,13,14 143:8 144:4 174:20 202:22 262:19 discussors 138:22 disease 231:3 232:2 disingenuous 104:3 **disposition** 30:7 40:15 disproportionately 199:4 distant 140:3 distinction 71:5 93:11 134:8 165:22 182:8 182:17 183:15 distinctions 43:17 122:19 172:12 distinctive 182:12 distinctly 58:8 distinguish 111:16 distort 162:2 distributed 229:5 distributing 35:5 distribution 70:3,5 72:15 82:21 99:16 101:8 103:16 142:9 199:14 229:6.19.20 distributions 52:4 dive 54:18 60:17 243:2 245:16 246:1 **Divecchia** 3:3 13:19 13:20 dividing 67:15 diving 137:13 docs 207:15 doctor 78:21.21 doctors 77:18 document 27:20 51:14 62:3,10 66:12 213:22 234:22 documentation 66:8 67:9 208:11 214:6 217:1 219:7 documents 51:11 doing 12:11 36:20 66:12 69:15 81:11 95:12 99:13 109:18 128:17 158:12,13 163:12,21 184:15 192:7 202:2 203:14 211:12 225:15 228:8 236:14 247:9 251:19 254:6 261:20 267:19 267:21 300:13 double 255:21 doubt 182:21 downstream 93:6 187:5 187:7 188:3,4 207:13 226:19 239:4,12,19

283:21 300:13 dozen 202:17 dozens 71:22 Dr 252:17 254:14,17 255:2 306:12,12 307:16 drafting 223:9 dramatic 209:11 draw 85:22 draws 146:3 drive 116:16 212:20 driven 158:11 189:21 239:20 drives 189:7 dropout 209:8 dropped 113:21 209:3 212:21 214:18,22 215:9 dropping 217:7 drug 182:7 301:15,16 301:18 dual 184:11,12 dual- 181:14 dual-eligibility 183:6 dual-eligible 177:2 due 61:4 243:5 303:14 dysfunction 258:17 Е earlier 40:4 81:17 96:18 99:6 101:18 109:5 143:6 144:11 202:21 286:2 earliest 35:15 early 21:9 25:14 129:10 140:14 224:4 286:4 306:14 easiest 179:14 easily 108:19 182:6 283:11 Eastern 243:7 easy 87:2,2 181:21 197:2 eat 9:4 echo 8:13 167:14 echoing 11:14 210:21 economic 232:9 233:9 economists 206:1 edge 145:5 EdM 2:6 effect 192:18 268:10 270:16 273:19 effects 259:14 270:21 efficiency 77:20 204:20 205:21 206:11 efficient 8:10 45:2 308:5 effort 239:3 261:9

efforts 22:12 eight 223:8 255:8 256:3 eight- 253:5 either 29:5 47:10,20,20 58:4 59:6 104:11,17 104:18 132:20 142:6 154:9 156:6 167:17 188:18 210:2 229:15 242:19 281:9 286:19 Elaborating 194:14 elected 169:5 234:20 elective 243:11 257:12 289:18 292:10,10 304:12 element 41:16,21 47:10 47:20 48:1,3,8 49:10 60:20 65:14,15 69:21 71:5,7,13 75:8,10 79:11 85:7,8 193:17 259:12 261:19 267:3 267:4 273:20 274:17 276:1 283:18 elements 27:13 42:14 55:12 60:22 74:3 128:22 174:4 225:7 274:15 275:17,20,20 276:10,16 285:22 286:9 293:1,17 eligibility 181:15 209:20 231:13 eligible 32:20 33:10 37:18,19 38:5,8 41:21 281:8 Elixhauser 232:20,20 237:7 eloquently 112:18 email 14:7 25:20 35:6 61:13 96:2 148:2,9 223:16 248:18,20,21 emailed 25:6 97:4 138:17 205:2 emails 12:16 embarked 294:22 emerged 66:6,17 emergency 24:3 emphasis 59:18 empiric 74:17 empirical 46:13 67:22 152:12 153:5 199:15 199:16 employee 23:19 employer 16:13 24:4 empowered 167:4 **en** 184:8 enable 162:15 encompass 42:5 encounter 102:2 encountered 232:2

encounters 73:14 74:7 131:13 encourage 127:10 184:7 185:14 250:21 encouraged 200:8 ended 29:3 40:16 endorsable 104:18 endorse 104:12 112:12 128:16 129:1 201:6 endorsed 93:9 104:20 104:21 113:17 121:21 123:11 124:16 129:20 129:21 133:15 297:1 endorsement 6:9,16 7:5 32:5 41:4 44:6,10 46:12,12 51:9 98:1 105:13 106:4 107:5 110:5 114:1,3,4,8,11 114:15 123:13 126:4 129:10,14 134:21 135:3,17,17,19,20 163:19 endorsements 113:13 124:22 130:11 endorsing 90:9 122:15 133:12 220:4 endpoint 234:9 ends 279:19 enforce 172:17 engage 306:5 engaged 204:1 286:16 296:13 297:2 309:3 engagement 18:16 297:6 enhance 88:5 108:21 enhancements 117:14 119:13 enrolled 179:13 ensure 7:4 149:11 ensuring 149:14 entail 55:11 enter 242:1 308:15,19 entered 198:17 entire 102:7 236:13 302:19 entirely 83:21 103:22 entities 61:5 envision 93:2 epi 179:2 183:22 186:10 epidemiologist 186:6 episode 208:19 215:10 233:17,20,21 episode-based 278:4 episodes 81:22 209:3 218:6 equal 170:7 equation 170:12,13,22 Eric 2:18 23:17,19

76:16 81:1 82:11 84:15 99:5 100:21 101:16 123:5 145:17 145:18 175:22 178:21 186:5,11 227:13 229:22 234:11 Eric's 195:19 Erics 186:10 erratic 118:2 error 78:1 80:5 220:21 262:11,13 263:3 268:8 282:9,11 especially 40:4 78:14 230:14 ESRD 231:12 essence 75:11 84:17 essential 71:6 151:8 essentially 11:10 69:10 82:20 83:4 84:9 92:20 102:22 104:16 107:14 124:7 144:17 154:12 275:19,21 279:19 establish 25:12 78:8 116:2 248:6 265:11 establishing 58:22 estimate 76:12 103:11 103:12,14 123:9,10 estimates 226:11 estimating 120:4 121:8 236:10 estimation 109:9 estimators 118:16 119:1 et 28:9 59:2,2 83:14 110:19 165:15 ethical 182:15 **EUGENE** 2:10 evaluate 25:13 37:3 58:15 76:9 83:2 101:12 116:7 160:5 208:12 212:1 230:4 277:19 278:11 evaluated 28:18 32:9 59:13 60:11 70:10,20 72:18 97:7 101:5 102:8 146:1 152:3 176:16 180:8,14 212:10 219:9 228:10 evaluating 4:10 31:13 54:3 57:6 113:2 142:4 161:19 167:7 206:6 206:20,22 211:19 231:4,18 234:7 272:11,14,15,21 278:16 evaluation 4:12 5:7 24:4 25:3,4,9 26:9 27:15,17,20 30:6 39:1

42:5 51:12 53:8 54:7 61:20 88:6,21 102:17 125:17 137:14 146:21 148:10 184:6 204:10 205:8,20 224:5,8 250:9 275:2 286:6,11 evaluations 25:17,19 26:1,6 32:16 37:5 114:14 148:3 202:11 205:18 evaluators 85:13 134:1 evening 305:22 308:9 309:11 event 207:4,8 214:21 225:6,12 241:2 243:15 304:21 events 81:21 207:13 eventually 44:21 56:19 182:13 everybody 13:20 84:16 145:13 152:20 277:3 everyone's 200:21 evidence 133:3 134:3 142:15,16,20 156:9 166:1 198:6,8 199:2 199:11,15,16 233:14 evolve 56:18 evolves 56:16 exact 112:10 183:15 288:20 exactly 62:8 87:19 112:17 120:7 132:10 135:10 151:10 169:16 212:12 215:20 240:15 264:4 exaggerating 144:18 examination 286:11 290:10 examine 264:17 examined 226:5,6 **example** 41:19 46:15 51:21 58:22 65:8 71:12 77:19 78:18 79:11 87:14 94:15 97:17 108:22 121:8 132:12 145:7 150:8 169:4 171:21 176:15 179:12 180:6 197:13 199:12 213:11 214:9 214:17 215:4 226:10 232:2 261:15 264:22 265:12 269:13 272:5 273:10 281:21 302:21 examples 94:14 122:18 170:10 214:1 215:22 218:22 261:6 276:15 excellent 6:2 171:8 256:7

excess 170:11 excited 14:2 exclude 171:5 208:6,8 213:20 216:20 219:11 239:5 excluded 207:13 208:14 210:13 211:7 212:7,8,17 213:4,10 213:19,20 215:5 216:1,15 264:15 excluding 166:4 209:20 216:4 236:18 **exclusion** 151:12 207:22 208:15,18 209:2,17,19 211:6,14 211:16 213:16 214:16 216:9 218:14 225:10 264:1,8 289:15 exclusions 206:20,22 208:12,20 209:11,15 210:10 211:20 212:3 212:13 213:1,14 214:1,1 216:2 239:2 241:7 264:11 excuse 8:5 157:10 169:10 258:13 exemplified 59:22 60:5 exist 175:6 228:18 existence 27:21 30:16 existing 43:4 59:12 300:14 exogenous 182:1 expanded 302:18 expanding 205:4 expect 52:9,10 53:15 65:16 118:3 172:21 198:5 226:7 234:7 243:18 289:11 292:9 expectation 80:18 expectations 80:12 229:16,16 231:18 expected 102:20,20,21 158:10,11,15 159:8 196:18 289:16 expecting 26:17 197:4 197:5 226:22 234:10 287:20,21,22 expenses 213:17,20 experience 4:13 196:20 288:15 experiential 34:13 expert 5:4 207:14 285:10 286:16 288:8 290:10 293:22 295:4 295:6 296:7 expertise 148:20 experts 100:10 151:2,4 154:18 288:9 294:5

expire 35:11 expiring 35:19 explain 181:14 221:13 224:11 234:2 237:10 267:5 explains 227:2,3 explanation 221:12 explanatory 91:20 explicit 90:17 91:4 127:17 218:13,14 explicitly 98:8 expose 186:12 expressed 28:2 257:19 extend 35:9 131:4 extending 142:14 extensive 148:2 265:17 extensively 75:21 131:17 extent 129:5 130:10 140:15 144:22 146:2 211:15 224:19 external 26:2 94:2 173:21 259:14 extra 224:10 extract 146:14 extreme 82:21 97:17 99:18 117:2 132:12 142:11 212:6 217:7 extremely 66:9 94:11 94:17 110:15,20 extremes 132:14 133:2 eye 149:8 F Fabian 2:5 18:17,18 face 41:22 46:15 47:21 195:12 198:21 299:3 facets 82:14 facilitate 54:6 facilities 83:14 102:7 102:17 103:15 146:1 177:9 188:17,17 189:16 190:1 229:14 facility 24:4 83:20 102:14 146:9,12 177:3,4 214:17,19,20 229:12 240:18 261:22 264:14 299:4 fact 6:4 37:17 70:16 90:3 102:5 103:21 162:14 165:12 171:8 171:21 179:7 189:21 199:11 239:14,21 241:1 276:18 289:15 294:7 304:1,4

factor 152:13 153:8

170:14 171:2,10

154:22 155:1 165:18

Neal R. Gross and Co., Inc.

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172:19 179:11 181:15 181:22 182:16,16 183:11 197:9,15,19 201:4 216:5 factors 50:4,5,14,15 75:18 148:14,15,19 149:9,13 150:4,8,11 150:20 151:10,11 153:10,21 154:3 156:8,11 161:12 162:5 166:8 169:5 170:3,7,10,12,20,22 171:18 172:1,7,21 173:20 174:3,21 175:2 176:19 177:12 179:8,16 181:8,14 182:13,20 183:9,13 183:16,20 184:3,9 188:3,6,8 190:8 193:8 195:10 196:1,17 216:3 235:7 facts 30:14 fail 63:21 64:10 154:9 failure 182:8 faint 147:15 294:11 fair 166:10 199:19 200:17 201:5.19 220:8 227:18 276:20 fairly 107:9 119:4,4 148:2 224:21 237:4 240:15 265:17 284:17 fall 30:22 35:2 falling 193:14 falls 38:20 132:9 264:14 falselv 144:13 familiar 12:14,17 14:19 36:9 41:11 46:1 fantastic 134:7 136:12 FAPhA 2:17 far 62:4 80:9,11,20 81:1 92:18 133:21 178:4 Farquhar 2:5 19:1,2,3 fascinating 200:13 fashion 118:2 185:18 fast 36:15 faster 54:8 favor 200:22 feasibility 294:2 feasible 127:15,20 185:19 feature 9:20 10:8 features 144:19 218:18 fee- 235:3 fee-for-service 231:19 234:19 feedback 40:2,20 130:15 148:18 149:1 286:14 294:20 295:11

296:12 297:3,17 feel 9:11,19 10:4,19 14:8 47:1 129:7 135:13 143:16 174:6 219:11 221:11 237:10 294:6 303:10 307:6,8 feeling 6:14 feels 303:16 feet 267:7.8 felt 161:9 fewer 289:18 290:2 fewest 229:13 field 145:6 figure 190:17 266:15 281:21 282:11 filing 30:11 fill 254:10 filter 94:4 final 37:22 43:20 98:4 169:1 209:6 211:8 245:13 248:2 249:15 250:7 290:14 292:17 finalize 47:16 finally 72:11 172:8 183:22 265:13 finances 169:8 financially 191:10 find 11:22 160:7 168:8 168:9,13 180:2 182:10,13,22 183:4 248:21 257:22 276:3 276:4,16 291:17 308:20 finding 58:8 178:1 findings 42:14 fine 56:1 120:12 185:10 300:12 finish 186:6 finishing 137:12 first 40:13 57:22 68:13 93:17 105:6 115:7 116:9,12 117:9 119:8 126:3,11,20 127:4,5 132:8 140:13 191:3 191:19 196:15,17 251:19 259:22 260:5 266:6 274:19 289:6 294:14 fit 135:10 177:7 fits 165:19 five 29:6,11 48:2 132:5 140:8 221:20 255:19 276:6,9 304:16 306:7 306:14 fix 140:5 fixed 300:19 flavor 69:22 flavors 125:15

flawed 168:9.10 flexibility 270:11 298:7 306:9 flexible 13:3 flip 59:6 floor 143:15 209:10 259:14 Flouton 3:4 14:5,6 fluctuation 30:17 fluctuations 119:5 fluffy 53:1 flying 128:2 FNP-C 3:2 focus 50:8 93:13 122:17 147:9 257:18 focused 61:3 146:20 189:18 222:5 245:14 249:11 267:1 307:12 focusing 114:13 folks 8:13 9:3 10:14 13:4 21:20 29:1 35:4 35:11,17 55:8 65:3 88:18 89:13 90:1 92:15 139:13,17 140:21 187:15 189:5 190:2 203:9 204:4 222:3 223:12 224:4 224:12,14 243:2 245:18 248:4 307:17 folks' 305:3 306:6 follow 15:3 84:21 86:8 92:1 follow-up 236:7 288:3,3 288:10 following 31:11 34:17 243:11 257:12 263:9 284:17 287:12 304:12 food 180:5,6 181:8 foot 222:13 for-service 235:4 forbidden 122:13 Force 27:14 **FORCE-TJR** 283:14 forever 105:9 301:11 forget 96:9 179:20 form 15:12 27:4 295:4,6 295:12,15,22 296:5 format 211:9 former 59:13 forms 18:20 125:15 142:7,21 295:21 296:1,17 301:6 formula 51:20 formulary 301:17,18 formulas 38:13 formulation 142:17,19 forth 28:4 52:10 53:18 68:4 72:10,20 129:12

188:11 193:10 forum 1:4 230:11 forward 5:15 6:8 13:22 41:2,6,10 44:13,17 45:10 53:2 55:1 63:15 64:21 65:5 72:7 95:16 100:16 105:17 106:7 121:2 127:5 136:22 137:11 154:17 202:19 205:11,15 243:1,4 252:3 296:4,16 309:8 forward- 56:15 58:4 forward-looking 58:19 59:4,19 found 10:2 67:11 70:21 98:16 114:3 176:19 196:12 229:17 250:13 276:10 280:1 foundation 17:10 28:13 four 32:19 38:10 92:2 221:20 227:20 273:15 fourth 269:2 frame 117:16 118:7 frames 118:11 framework 88:8 165:20 framing 154:17 174:17 frankly 301:21 free 9:11,19 10:4,19 14:8 47:2 221:11 freestanding 218:5 frequently 31:15 194:10 Fresenius 23:19 friends 256:9 front 8:15 34:4 40:15 53:2 56:7 58:7 65:18 86:13 100:19 102:11 107:12 150:6 230:5,6 238:15 frustration 159:20 163:22 full 32:5 42:22 92:18 225:9,11 231:13,13 238:15 240:9 247:20 250:11 257:3 270:13 286:7 287:12 288:6 295:5 fully 123:17 239:17 function 4:13 68:12 248:13 260:12 261:17 261:17 263:5 267:16 267:22 268:2,12,18 269:4,15 270:9,21 271:4,10 272:7,18 functional 78:15 functioning 71:18 functions 263:6 fundamental 151:16

fundamentally 167:22 funded 163:7 funny 165:22 further 8:9,18 33:3 65:2 96:4 118:11 123:20 161:6 299:19 future 26:10 33:15 34:6 53:18 54:14 58:6,16 83:22 93:1 113:1 122:4,9,10 132:1 133:11 137:4,4 144:4 250:19 262:18 283:4 G game 120:16 166:10 Gandek 268:16 gather 222:3 gathered 151:3 290:21 gathering 223:7 geared 145:12 gears 34:21 Gene 21:10.14 131:20 132:2 148:4 165:7 169:21 173:2 227:12 229:22 general 15:14 57:19 65:9 73:22 80:18 84:8 128:10,14 132:17 142:19 150:7 175:16 187:4 196:15 204:2 231:11,22 233:11,13 233:15 240:15 302:1 generalizations 231:7 generalized 231:17 234:1 generally 53:20 129:7 147:11 231:6 generate 88:13 generated 229:4 282:2 generation 71:9 gently 117:12 genuinely 180:11 Geppert 2:6 19:6,7 39:20,22 88:17 getting 20:13 46:6 53:3 66:8,19 137:1,2 143:11 158:14 176:12 203:20 223:12 227:9 243:1 246:8 253:5 260:8 270:4 283:2 294:19 298:16 299:14 309:9 **Giblin** 7:17 gist 265:20 give 5:19 7:21 8:3 9:3 25:6,7 26:13 28:13 32:8 36:5 51:19 71:22 86:19 120:13 130:15

134:6 137:22 139:16 139:18 148:22 157:15 160:3,4 197:13 204:15 205:6 224:4 247:16 276:3 305:4 306:4 given 5:11 12:3 53:13 54:17 63:8 91:21 97:21 100:14.16 112:12,18 129:13 132:4 148:19 184:14 190:2,3 217:16 240:12 244:13 267:19 274:19 284:16 294:4 295:7 297:7 gives 44:4 giving 6:10,11 99:14 285:5 glad 256:8 Glance 2:6 19:10,11,14 56:22 57:2 74:12 94:20 114:19 115:3 190:21 211:22 215:20 217:3 236:6 237:3 238:3.11 240:6 241:4 253:3 277:3.13 globally 288:19 goal 56:8 287:12 gotten 6:15 129:21 208:11 257:5 governing 130:9 government 230:19 grab 9:4 grade 197:15 gradient 179:17 gradients 183:2 grading 83:13 grants 16:4 graph 31:11 grappling 205:21 220:12 gravitating 231:7 greater 45:16 74:16 75:2 102:20 109:4 grid 267:13 grips 64:11 ground 67:21 101:22 299:16 grounds 50:10,19,21 154:10 201:1,2 213:5 group 16:11 19:22 29:1 29:15 44:15 45:7 57:5 69:11 74:22 81:7 85:14 93:3 151:2 168:17 192:20 193:16 203:19 221:9 222:5 240:10 276:18 285:11 286:17 296:7 298:16

300:2.22 303:12 307:3 groups 67:1 118:18 177:22 230:18 guess 80:22 92:13 103:19 122:7 125:12 159:2 168:5 174:11 176:8 179:19,22 182:18 222:7 267:17 306:13 guest 220:1 guidance 4:9 6:10 7:3 25:5 26:9 27:16.20 46:10 51:12,15 53:18 54:1 55:14 58:5,16 59:13,14 72:1 83:3 106:8 108:12 110:8 122:3 125:2 127:18 130:8 149:10,17 161:17 175:18 201:13 218:11 220:7,13 221:9 243:4 275:8 quide 26:21 155:16 247:11,19 251:6 258:1 284:6 307:20 auideline 80:14 85:1 guidelines 63:11 274:7 guilty 254:15 gun 101:18 qut 93:21 gut- 278:22 н half 28:17,19,20 65:6 77:10 140:14 215:5 half-hour 287:4 hand 5:18 10:8,9,13,16 33:12,16 39:20 43:5 57:1 61:7 65:22 68:12 78:2 91:7 92:12 94:20 98:10,18 100:2 103:5 107:18 124:10 130:19 139:21 145:17 149:19 149:22 151:22 155:19 157:13 173:4,15 186:13,17,19 210:20 227:12 236:5 242:9 246:11 251:8,11 256:6 257:1,16 259:20 308:18 handful 205:10 handle 100:18 159:12 159:13 hands 140:8 143:18 144:2 195:3,4 223:20 236:4 242:18 248:10 280:22 hang 35:21 137:17

138:6 139:14 244:8 244:14 Hannah 3:3 14:2 248:17 251:9,16 254:6 255:20 256:8 266:16 304:18 happen 133:17 208:6,8 228:18 239:3 263:8 271:8 302:8 happened 87:9 207:5 262:3 299:8 301:12 happening 95:17 233:20 happens 154:14 264:14 happier 271:5 300:22 happy 5:8,14 61:8 138:20 159:12 222:3 223:1 287:6,8 297:16 305:17 hard 12:20,22 58:2 59:7 123:17 193:2 196:2 208:11 278:14 291:12 297:13 harder 58:9,9 153:13 200:8 harmonized 289:14 Harris 138:15 hat 209:16 210:22 hate 94:22 HCAHPS 299:13,17 **HCC** 231:8,9 232:7,16 234:16 236:8,11 237:6 238:4,9,12 240:7 HCCs 225:1 he'll 13:10 157:22 head 276:3 headed 57:5 headphones 12:6 heads 49:12 headset 12:6 140:5 health 17:9 94:15 171:12 180:9 214:9 228:4,5,9,10,14,16 229:11 238:16,17 270:7 healthcare 102:13 hear 5:22 6:1 11:15 14:3 16:8 19:11 23:11 91:8 107:21 130:8 134:13 147:14 155:7 157:16,18 159:16 174:13 176:2,4,7 194:16 196:9 198:14 222:21,21 246:10,12 247:1 251:4,16 255:10 285:1 294:10 297:16 305:7,8

heard 16:9 95:20 186:9 186:11 194:19 196:6 196:10 200:22 202:16 255:15 266:16 287:1 287:9 288:12 289:9 290:6,16 292:8 303:22 hearing 30:11 80:11,20 144:1 193:14 216:7 254:3 308:22 heart 182:8 heated 118:20 Heet 63:7 held 213:7 299:16 Helen 120:19 hello 13:15,18 18:4,10 139:16 256:9 284:22 help 12:8 14:8 54:6,10 54:12 58:14 87:21 89:8 101:1 130:15 141:1 155:16 169:13 218:12 222:3 260:20 helped 264:10 282:11 299:3,6 helpful 36:12 45:8 52:5 82:6 85:12 91:16 98:16 107:7 113:8 161:20 164:5 165:2 202:18 204:5 218:17 276:20 282:8 284:13 helping 13:10 203:10 204:12 helps 11:20 46:19 217:7 hi 13:19 17:21 19:7,13 19:14,20 20:8,22 21:11,11,16 22:21 34:2 39:21,22 57:2 73:6 74:12 76:17 85:3 85:19 87:6 93:14 112:7 134:13,15 140:21 162:21 169:22 178:22 201:20 220:9 230:1 245:11 254:11 255:9,13 266:14 274:18 277:3,7 303:9 hierarchical 225:1 240:8 hierarchy 240:20 high 41:18 42:3 44:3,18 64:2,15,20 87:7 93:1 93:5 94:11,12,18 111:9 112:1 115:3 117:6 144:14 215:8 268:12 280:19 288:2 297:10 high-cost 212:15,17 high-volume 188:18

high/moderate 43:12 higher 54:9 65:12 86:19 177:3,5,10 188:11 189:2 191:8 227:6 233:18 240:12 highest 41:20 46:16 112:14 113:4 129:7 129:17 130:4,13 highlighted 142:5 highlights 258:11 highly 75:10 122:13 218:7,8 224:21 235:17 highly-specific 234:8 hinted 99:6 hip 71:17 243:12 257:12 258:16 260:12 261:17 272:2,17 285:21 286:19 288:7 289:19,21 292:11 296:10,11 hips 269:15 historical 294:18 Historically 230:16 history 155:3 235:3 237:17 238:8.9 hit 136:15 196:10 226:12 241:13 246:6 281:3,4 hits 38:9 hitting 196:7 hoc 74:15 208:5 hold 84:16,22 203:21 268:5 holding 305:2 holds 157:7 hole 120:4 holistically 164:4 home 176:14 178:9,19 180:5,5,13 214:9 228:4,5,9,9,14,16 229:11 232:5 238:16 238:17 homeless 172:1 homelessness 150:21 172:4 homogeneous 217:9 honor 220:1 HOOS 71:16 258:18 259:15 267:12,12,14 268:14,17 270:13 286:7 290:7 293:5 295:5,17 301:4 hope 168:6 255:7 258:8 hopefully 46:19 51:3 53:2 98:16 107:19 113:8 137:1,9 hoping 27:10 65:19

175:18 218:20 287:11 hopper 268:21 hospital 3:6 87:13,14 121:6 192:5 216:4 243:17 261:22 263:6 263:11 282:7 284:16 287:18 288:1 294:3 295:13,14 299:10 305:1 hospital-level 243:9 257:10 287:10 304:10 hospitalization 102:13 103:7 hospitals 76:3 116:22 145:22 171:21 192:11 192:13,15,15,20 199:4,13 264:18,21 265:1,6,12 281:8,9 282:12 289:18,22 290:2 291:9 293:19 298:1 host 6:15,20 hour 65:6 136:15 137:7 157:21 243:6 298:14 308:11 hours 165:10 Howe 98:14 huge 235:9 hundred 170:11,21 225:16,17 hundreds 71:22 hurt 177:12 hurting 191:13 Hyder 2:7 19:18 252:15 260:1 hypothesis 70:7,7 ICD 234:17 237:22 240:9 304:1,2 ICD-10 302:18 ICD-10s 237:16 ICDs 237:19 idea 12:2 56:3 73:9 76:20 77:2 82:9 96:14 98:6 123:16 124:16 135:20 140:1 156:19 167:6 186:4 207:20 216:13 ideal 272:17 ideas 137:2 203:8 identification 142:11 identified 24:14,20 25:9 53:7 93:8 126:11,20 197:9 258:6 295:12 identify 82:20 99:18 111:15 126:22 169:7 169:12 221:20 292:1

293:8 identifying 207:21 223:9 259:1 ignore 170:19 171:16 262:16 ignores 239:14 ignoring 128:8 imagine 180:4,7 181:10 258:9 imbalance 189:14 immediate 271:19,21 immediately 84:21 129:5 impact 68:4 91:4 121:20 168:1 170:7 177:13 192:21 194:7 194:12 265:5 275:13 impacts 168:4 impaired 59:9 implement 33:6 174:22 implemented 37:1 implication 144:20 implications 300:13 implying 112:12 importance 240:13 important 14:20 27:1 69:10 75:8.10 77:14 80:7 115:8 133:3 135:13 148:18 155:22 186:3 196:3 205:17 218:2 235:13 269:9 279:1 286:14 291:20 298:13 imprecision 80:1 impression 231:1 272:10 impressive 99:11 improve 177:7 291:3 297:17 improved 297:15 improvement 120:19 120:22 135:7 136:2 243:10 257:11 304:11 in-depth 224:15 in-person 13:1 inadequate 52:17 116:17 167:20 168:9 168:10,14 169:19,19 203:16 inadvertently 33:16 138:16 inappropriate 38:11 235:22 inappropriately 216:1 incentivize 287:13 incentivized 298:1 inception 297:21 incident 207:8,16 225:6

225:12 238:21 241:2 **inclined** 136:14 include 48:14 127:12 139:1 153:8 154:5 171:5 175:2 178:4 184:2 191:4 192:22 193:11,11,15 197:12 218:21 225:5 238:21 264:3 included 41:8 51:17 82:3 148:14 150:22 152:16 155:9 168:20 171:18 172:20,22 188:3 191:18 213:19 235:6 247:19 269:22 274:16,17 284:5 285:22 290:5 includes 27:3 272:5 including 67:5 70:5 128:8 137:6 148:15 154:18 155:7,16 162:5 164:18 165:15 167:8 189:3 190:12 190:13 192:19 193:8 194:8 195:9 197:18 198:22 200:18.19 201:1 216:2 236:18 236:21 264:20 265:6 271:2 286:6,6 296:9 297:8 299:10 inclusion 50:3.4 151:11 161:11.11 275:5 inclusion/exclusion 264:17 inclusive 38:17 239:7 incomplete 50:20 292:3 inconsistency 234:16 incorporate 45:11 275:1 incorrect 38:13 260:9 **increase** 291:9 increased 90:13 increases 170:10 increasingly 118:18 incredibly 66:14 incur 191:8 independent 183:5 independently 76:9 index 194:5 199:12 207:4 indicate 127:11 indicated 288:9 indicating 162:3 indicators 10:12 individual 16:11 83:5 89:17 90:2 101:10 102:6 121:9 171:2 194:13 218:6 227:10

236:12 296:18 individually 130:1 132:20 170:22 individuals 166:7 286:18 inflate 89:4,6 inflated 157:2 inflating 89:7 influence 84:13 190:8 influences 152:1 information 15:22 26:17 27:1,4,5 29:16 29:17 38:19 51:21 85:12 86:16,16 90:2 125:14,16 128:12 133:1 134:7 191:17 239:14 249:14 270:20 292:20 293:5 303:17 infrastructure 106:10 **Ingber** 3:3 14:1,2 251:15,18 252:9,11 252:13,15,18,20,22 253:4,12,18,20 254:1 254:8,16 255:1,4,11 255:18 256:2 304:8 inherent 90:14 inherently 89:14 91:1 initial 39:6 44:2,11 46:11,12,16 148:5 226:19 247:16 249:21 257:2,13 295:3 initially 29:11 32:15 initiated 40:13 injury 258:19 Innovation 230:15 231:5 232:3 inpatient 237:20,20 238:6 240:10 inpatient- 243:10 input 143:15 147:5 205:3 251:5 285:7,10 285:20 286:12,14,17 296:3 inputs 294:4 inside 258:1 insofar 102:1 instances 233:17 institutions 171:12 191:13 institutions/hospitals 191:9 instructions 248:19 instrument 71:14,17,21 72:2,7 228:7,11 261:9 instrument-based 49:8 instruments 228:12 259:16 286:1 insufficient 38:15

integrity 123:17 intended 53:21 83:12 233.1 intentionally 289:14 inter- 62:20 inter-class 299:5 inter-provider 144:13 Inter-rater 77:8 inter-unit 84:4,6 108:9 108:20 110:2 115:13 115:16 119:9 142:8 144:12 interact 256:15 interacting 10:1 interactions 225:2,18 interclass 79:2 87:14 interest 4:2 14:16 15:12 15:17,20 16:18 17:1 18:6 20:10 21:17 23:22 36:18 43:16 84:3 170:1 interested 16:3,14 55:9 83:13 96:4 146:4 203:10,18 204:4 224:15 interesting 5:15 6:21 53:3 68:11 82:14 109:6 115:17 145:20 230:2,9 238:3 242:22 interestingly 232:1 interests 14:13 16:12 interference 267:15 268:5 307:1 308:21 interject 10:21 intermediate 30:1 47:7 internal 77:9 210:7 213:14 273:10 internally 6:19 160:8 201:18 interpret 274:6 289:7 Interpretation 4:6 interpreted 46:18 97:10 interpreting 97:6 interrelated 183:19 interrupting 11:22 interval 263:8,13 introduce 11:19 247:8 256:18,20 introduced 174:2 268:9 introducing 109:19 215:2introduction 13:15 Introductions 4:2 invalid 159:7 invalidates 154:12 invite 65:3 247:13 256:22 invited 220:1

inviting 130:14 256:17 invoked 180:20 involved 20:22 149:20 295:20 296:20 **IRF** 229:11 **Israel** 18:15 issue 55:12 61:17,22 67:6 68:5 69:11 87:7 91:12 93:13 98:4 107:9 110:7,15 112:10 121:20 128:4 128:20 138:17 141:19 142:3 144:7 150:4 151:4 155:3,22 156:1 156:2,3 157:11 158:22 164:19 166:9 167:10,17,22 168:2 168:11,13 169:2 174:17 188:14 190:11 201:15 203:17 204:2 206:20,22 207:19 208:18 210:1 212:20 217:5 220:16 224:17 241:6 265:5,13 269:9 273:19 281:5 284:16 299:7 300:18 issued 151:5 152:6.18 issues 6:21 7:6 10:1 12:12 25:8 38:3 49:15 53:21 54:18 56:18 57:22 60:1 66:5,16 80:6 90:21 95:14 107:19 130:21 135:2 156:7 160:6,8 161:15 175:16 185:20 187:4 205:2,22 206:12,16 219:2 220:11 221:20 222:15 223:9 226:1 227:7 251:2 258:2 269:15 272:1 292:6 294:17 303:15 it'll 268:11 item 270:2 272:6,8 items 78:19 228:11 260:10,22 261:7 262:4 iterate 116:10 iterations 105:13 IUR 82:17 83:8 96:20 99:9,10 103:2 142:17 146:17 IUR/PIUR 122:19 J

J 2:3

Jack 2:9 21:4,7,9 65:22

70:8 73:8 89:10 112:8

114:17 125:22 127:22

204:13,16 205:1 206:14,18 208:19 210:8 213:13 219:5 219:21,22 222:6,7 224:1,9 227:11 236:7 Jack's 211:11 218:1 JD 2:6 Jeff 19:9 39:19,21 88:16 109:5 Jeffrey 2:6 19:5 Jen 21:15 81:15 204:17 206:14 215:16,17 219:20,22 221:11 222:7 Jennifer 2:11 76:16 81:1 173:15,16 204:11,13 **Jerry** 19:5 **job** 13:3 60:9 66:12 76:5,10 171:8 176:18 190:5 287:16 Joe 19:18 20:6,9 248:11 252:15 254:2 257:17 259:21 263:19 266:12 266:15 281:1 Joe's 252:15 John 2:4 18:2,5,8 252:13 join 140:12 175:21 254:2 256:17 305:14 306:11 joined 5:10 246:16 joining 5:5 14:3,9 21:8 243:19 255:16 joint 221:17 240:16,22 241:2 258:18.20 263:5,6 277:15 285:17 295:2,16,17 297:11 Joseph 2:7,8 19:18 299:20 journals 88:4 **JR** 258:18,20 259:15,15 267:12 268:20,21 269:10 270:2 271:9 290:7,7 293:5,6 301:5 judge 123:18 207:15 judging 123:1 judgment 129:3 181:18 211:13 judgments 69:14 178:16 jump 17:5 28:12 112:8 114:17 156:17 162:22 jumping 72:13 101:18

130:17 157:13.14

158:2 175:22 186:13

186:22 190:19 204:11

iumps 118:2 justifiable 104:17 Κ Kaplan 2:7 19:19,20 43:7 44:20 45:13 57:18 58:17 60:7,16 76:17 81:3,6 87:6 89:3 119:20 120:1 122:11 198:14,16 244:10,13,18 245:1,3 252:19 259:22 260:4 261:11 263:22 271:20 273:1,21 281:2 284:14 298:18 304:7 kappa 62:20 70:4,9 Kathleen 7:16,17 8:2 Katie 3:6 255:9 284:22 294:16 296:3 300:2 303:20 keep 11:12,20 23:14 26:4 30:11 46:20 85:7 96:17 137:19,21 186:20 202:21 225:14 268:18 307:12,13 308:3 keeping 25:13 26:1 55:18 306:22 keeps 188:14 300:20 key 38:3 55:11 247:10 256:21 keypad 241:21 242:14 kick 81:3 **kicking** 143:3 kills 178:15 kinds 77:7 78:6,17 79:6 103:8 145:22 153:14 172:7 178:7 189:9,10 213:1,3 274:22 knee 71:17 213:9 243:12 257:13 258:19 260:12 261:17 272:2 272:5,17 273:4 285:21 286:20 288:7 289:19,21 292:11 295:18 296:10,11 knees 268:1 269:15 knowing 162:17 knowledge 181:3 201:12 230:3 300:9 knowledgeable 96:3 Koch 62:19 KOOS 71:16 258:20 259:15 267:12,12,14 268:15,17 270:13 286:7 290:7 293:5 295:5,18 301:5 Kozlowski 63:3

Kunisch 2:8 20:7,8,9 Kurlansky 2:8 20:12 91:8,11 110:14 167:13 194:3 210:21 L label 64:18,21 labels 68:2 102:19,22 lack 157:1 181:18 304:1 Lacy 2:5 18:16 landed 28:13 32:9 105:17 Landis 62:18 67:19 68:5,8 69:16 72:4 74:14 79:15 Landis-Adams 67:8 landscape 301:10 language 180:19 214:6 225:15 275:18 276:13 276:17 laptop 254:19 large 78:2 133:3,5 140:15 183:19 291:17 largely 80:11 259:6 larger 164:13 201:8,15 272:15 286:18 largest 229:15 Larry 19:9,10,13 28:6 56:22 57:16 68:21 74:11 76:14.18.19 80:10,17 94:19 110:12 114:16 120:2 155:11 156:16 157:20 186:15,16 190:20 198:20 211:21 214:13 215:7,12,19 236:5,5 253:2 271:16 Larry's 154:10 167:18 194:14 277:2 lastly 292:22 latched 114:4 late 62:19 268:16 Laughter 179:5 187:1 244:22 LAURENT 2:6 lay 131:12 layers 123:12 laying 176:18 lead 215:9 247:9 255:13 256:21 257:16 259:18 259:21 leader 271:18 leaders 222:12 leadership 105:22 296:20 leading 242:21 248:11 leads 166:18 226:18 lean 261:2

leap 70:14 learned 40:9 leave 138:5 169:9,11,14 223:6 270:21 271:14 leaves 100:2 leaving 217:14 led 28:6 80:17 leeway 6:11 **left** 123:16 148:16 154:13 209:10 215:3 217:16 242:6 legal 181:4 legitimately 210:2 legs 9:5 lend 65:10 218:6 lengthy 307:19 lessons 40:9 let's 8:18 34:17 94:6 131:19 132:2 137:8 139:11 166:1,13 195:4 196:11 204:7 214:18 266:19 284:2 301:7 303:6 308:2 letting 201:8 level 22:4 38:21 39:4 42:1.19 47:11 48:20 53:17 54:9 65:17 72:8 72:14 75:2 76:9,10 78:18 79:21,22,22 81:18,22 87:11,12,14 94:15 101:20 105:21 111:4 113:4,5 115:3 116:7,11 117:10 119:12 121:5,13 124:2 126:10,19 129:9,16,18 136:3 137:12 160:1 191:3 221:8 231:14 258:15 259:3 261:22 266:8 267:10 268:13 270:9 273:12 279:1 280:15 282:7 levels 49:10 66:7 68:6 72:19 87:8 130:13 135:16 259:12 liability 257:14 259:2 lies 106:17 life 285:12 light 110:6 light/green 110:5 lightly 300:9 Likewise 286:13 limit 65:15 192:14 235:12 279:15 limitation 238:12 limitations 295:7 296:18 limited 54:17 297:10

limits 105:10 LIN 2:9 line 11:12 12:4 14:12 67:15 122:14 132:1,9 138:1 139:17 154:11 174:20 175:8 196:6 231:16 244:15,17 248:6 252:4 302:7 303:12 305:3 lines 8:15 138:6 140:22 141:2,6 lingering 303:15 link 64:15 70:22 249:1 251:20 301:7 linked 143:7 271:2,3 283:14 links 27:3 Lisa 3:6,7 246:10,11 294:8 300:2 302:5,22 305:6 Lisa's 301:12 list 68:12 81:1 181:13 238:15 listed 185:13 206:12 listen 298:21 listened 287:1 listening 211:22 241:18 251:6 301:11 literally 35:7 103:11 literature 70:17 82:18 115:19 166:14 237:9 266:7 293:22 little 15:2,3,11 21:20 23:11 27:11 28:17 31:11 32:8 34:22 37:21 49:11,17 61:12 64:1,11 70:16 72:12 76:18 79:12 80:10 83:16 93:18 101:22 114:19 116:5 118:10 122:2 123:19 131:5 136:7 140:6 144:3 145:14 147:15,18,21 160:9,9 163:19 169:2 174:8 187:22 193:4 205:6 212:14 217:15 219:9 229:4 243:3 245:20 256:10 260:20 261:2,12 267:9,10 270:4 273:13 294:11 294:18 298:9 301:14 Liu 20:21,22 85:19 86:14 lives 266:2 living 5:12 loading 42:20 loads 189:11 **local** 199:12

located 146:9 226:14 locked 305:16 logic 207:9 215:6 logical 222:12 logistic 279:20 long 35:21 81:12 104:3 131:7 173:1 195:13 263:8,13 299:14 long-term 229:11 long-winded 72:12 longer 117:16 118:11 197:16 224:4 241:14 look 41:9 61:15 62:2,15 63:8 67:1 72:7,17 73:13,17 74:18 83:6 95:14 116:11,19 117:8,9 119:12 123:6 131:16 132:11 149:3 187:7 192:1 193:17 200:1 201:7 207:5 208:12 210:16 226:2 240:9 274:15 277:14 277:20,22 278:21 279:7,8 303:6 305:21 306:21 307:21 308:7 309:8 lookback 225:3.8 239:13 looked 87:10 100:4 143:9 209:14 229:5 238:13,16 277:9 278:18 279:3,10,13 280:9 294:2 looking 5:15 13:21 16:7 36:1 42:17 45:15 53:2 56:16 57:10,19 58:5 62:5 71:16 72:7 73:12 73:14 75:7,9 90:22 101:19 115:17 117:15 118:7,8,8 122:19 125:2 136:22 137:11 146:17 149:2 154:17 163:7 183:18 188:14 188:16,21 212:3,4 213:21 227:8 243:1 250:17,18 258:15 259:13 265:22 275:18 279:21 looks 85:17 loop 40:2 losing 90:2 128:12 lost 113:16,21 114:8 241:3 271:11 309:6 lot 7:3 8:8 9:9 31:3,14 36:9 44:22 53:1 56:15 60:4 61:21 92:17 97:2 116:11,15 123:22 143:8 155:4 158:10
171:1 172:16 182:6 183:12 189:7,11 199:11 200:18 202:17 207:17 211:12,17 217:14,22 225:13 226:3 230:17,21 231:7 234:2,4 262:18 268:8 277:5 278:11 284:19 294:19 299:3 299:6,8 300:1 301:8 302:17 lots 164:15 179:15 237:12 love 53:17 130:8 low 64:2,3 67:4 68:9 79:3,14,14 85:21 90:3 90:11 91:1,2 111:13 117:22 119:6 155:10 156:13 168:12 226:1 265:1 268:12 270:18 273:14 292:12,13 304:17 low-income 166:3 low-SES 188:19 189:4 197:22 low-SES- 189:3.22 low-SES-serving 189:8 low/insufficient 158:21 162:6,12 lower 65:13 82:1,3,7 102:20 129:9 139:21 190:7 242:6 lowering 186:20 lowest 113:5 117:7 229:9 **lump** 190:4 Μ magnitude 282:10 main 59:18 119:7 220:15 259:4 mainstay 205:14 maintain 9:17 maintained 302:10 maintenance 28:21 35:1 48:21 51:8,9 303:4 major 210:3 238:11 majority 111:17 133:4,5 201:6 279:12 making 11:21 19:21 36:19 95:8 109:15,15

map 101:14 142:18,21 mapped 283:11 mapping 70:9 72:22 marathon 309:3 marginal 188:6 margins 177:10 marker 151:17 Marybeth 2:5 18:22 19:3 masse 184:8 match 143:12,21 material 307:21 materials 26:14 27:9 30:10 56:11 98:13 152:9 258:7 Mathematica 22:1 mathematical 70:14 Matt 2:3 17:14,19 33:12 252:11 271:16 274:2 274:18 matter 43:19 85:9 88:18 93:12 133:18 139:8 156:11 162:14 190:12 192:7 199:21 210:14 245:8 300:11 309:12 matters 16:1 280:19 max 61:12 maximal 169:17,18 **maximum** 85:10 **MBA** 2:4,16 **MD** 2:6,7,8,11,16 3:1 MDS 228:7,10,17 mean 16:18 57:19 58:18 60:8 71:21 72:19 86:6 88:3.19 89:4,7,8,15,16 109:16 110:21 118:5 121:22 123:1 128:10,14 143:20 153:21 164:14 166:4,12 167:21 169:10 180:3 181:5 181:21 182:21 187:16 199:19 209:13 227:20 228:4,14 229:1 232:13 233:3 236:14 237:5,11 246:12 253:10 275:19 282:5 307:6 meaning 76:1,8 229:1 meaningful 43:17 194:9 265:9,11 means 89:20 104:16 114:11 144:21 157:1 166:21 184:22,22 190:5 253:12 304:17 measure-specific 15:16 236:22 measured 61:5 92:9

179:17 269:4 270:9 measurement 6:21 7:18 74:2 120:7,21 134:17 163:2 268:4 278:22 290:1 measurements 284:1 measuring 213:3 meat 8:11 36:19 52:21 mechanism 285:17 mechanisms 230:13 mediated 188:5 Medicaid 179:13 190:4 230:15 medical 23:19 146:11 183:9,12,16 199:3 232:6 293:13 294:1 Medicare 103:9 104:1 180:10 181:5 188:14 188:16,20 189:2,13 189:15,17,18,22 190:3 214:8 226:9 230:10,14 231:11,20 234:19,19 235:3,5,7 Medicare-eligible 179:10 Medicare-enrolled 179:11 meet 39:1 66:21 79:4 135:22 136:3 189:10 meeting 1:9 4:3 5:7 6:5 8:11,21 9:1 11:3 13:1 13:2 22:17 25:22 26:14 30:10 32:11 34:6 54:10 175:18 201:9 203:2 223:17 241:12 243:7 249:10 249:19 258:7 270:6 meetings 10:3 41:17 53:13 57:20 151:5 members 5:9,10 13:14 15:1 26:19 28:8 32:14 35:2 37:3 42:18 45:16 53:8 97:4,13 148:17 202:4 222:8 247:14 247:22 248:1,18 250:5,14,15,16,21 251:10 252:4 256:22 266:18 267:1 284:10 286:3 296:8 memory 230:3 mention 150:3 269:9 303:16 mentioned 80:9 96:18 136:6 163:17 164:1 203:6 210:15 247:3 257:21 259:9 287:4 mentioning 208:20 mentored 283:15

merely 54:4 message 140:9 150:14 150:16 155:6 messed 118:6 met 1:18 13:7 175:3 218:16 method 28:9 86:18 87:1 90:10 97:19 156:13 252:1 methodologic 168:13 methodological 179:18 221:7 methodologically 168:8,10 220:12 methodologies 4:6 149:15 methodologists 206:1 methodology 38:11 51:18 52:14 228:2 methods 1:8 5:6,9 11:11 28:1 30:15 37:4 37:12,16,22 38:15 39:8,13,16 45:1 50:9 53:8 55:5 58:21 71:9 86:19,21 88:18 89:12 97:13 123:18 128:8 128:11 134:18 139:13 148:10,22 149:7 160:1,19 161:8,17 168:17 175:3 180:22 205:8 220:13 221:10 242:3 249:14 250:4,6 256:12 278:19 293:2 metric 88:21,22 169:6 169:10,16 194:4 metrics 104:5 144:22 169:4 278:6 279:5 **MHA** 2:16 mic 147:21 Michael 2:14 22:14 73:5 100:21 252:22 Michigan 230:20 middle 89:22 99:16 111:17 229:14 migrated 224:20 Mike 3:3 13:17,20 68:21 104:7 127:22 130:18 130:22 131:2 140:9 155:20 157:5 252:22 254:2 Mike's 155:19 million 225:16 mind 25:13 26:1 55:18 63:12 84:17 85:8 137:21 150:9 153:18 154:3 165:3 172:11 179:9 202:22 203:9 233:8 278:9 280:20

manager 13:21

mandates 186:1

136:7 149:15 159:7

164:7 216:21 218:1

231:6 250:19 251:13

manipulate 108:20,21

307:1 mine 73:8 281:16 **minimal** 98:6 194:10 **minimis** 187:20 minimize 296:2 minimizes 119:4 minimum 39:1 44:5 62:11 72:5 81:17 82:7 88:11 92:20 95:19 104:21 109:2 111:6 126:8,9,17,18 131:6 132:19 minor 271:12 minority 150:21 188:18 minute 244:9 254:13 269:20 minutes 105:7 123:5 132:5 138:12 190:22 224:10 247:16 257:2 269:20 298:14 308:10 308:12 mirror 141:19 288:20 miscalibrated 166:2,7 misclassification 63:5 72:20 misconstrued 76:19 missed 190:22 219:16 273:16 282:1 missing 174:2,4 216:10 216:13 264:22 265:14 265:15.18.19 273:18 275:5 281:5,9,13 282:21 283:20 290:16 292:4 299:13 300:18 missingness 265:17 mistaken 175:12 mitigate 9:22 12:12 mix 76:2,6 82:9 139:2 174:2 199:9 mixing 268:13 271:9 model 75:13 148:15 152:16 154:4 158:12 162:5 165:14 166:2,5 166:6,8,11 167:5,7,10 167:20 168:8 169:19 171:19 177:6,7,16,19 177:21 178:1 181:17 183:9 192:1,2,4 193:19 194:8 195:11 197:11,12 212:8 216:6 225:21 228:13 232:4 235:9,20,20 236:8 237:4,6,12,15 238:4,12 239:6,8 264:20 279:20,22 285:15,17 290:12 291:4 293:18 295:2 297:12,22

modeled 184:22 modeling 146:7 models 151:12 153:15 188:4 210:7 216:10 229:4 230:13 232:18 234:16,17 236:9,11 237:7 239:21,22 240:7 280:4,5,6,7 moderate 41:18,20 43:18 44:3,4,18 46:17 64:2,14 67:21 79:18 93:1,4 280:19 304:16 modest 83:6 modify 45:9 303:1 moment 76:16 187:9 monetarily 172:15 monitor 126:7 month 288:4 month-to-month 226:11 monthly 86:1 months 36:3,4 187:7,8 187:8 207:6.6.7 213:18 238:1 263:8 284:18 moratorium 160:12.12 morbidities 293:10 morning 5:3 8:6 13:16 13:19 14:1,5 15:8 17:7,16,18,21 18:5,18 19:2,7,14 20:8,19 21:5,22 22:9,16,21 23:4,9,18 25:18 140:14 202:22 203:22 251:22 306:14 309:11 mortality 91:21 92:1,3 102:12 103:6 117:6,7 280:5,5,7 motivated 203:13 motive 201:13 mouth 195:17 mouthful 52:19 move 6:8 30:4,11 36:21 53:5 54:13 89:15 144:4 147:4,6 192:5 224:2 251:10 252:3 257:6,6 283:20 296:4 306:17,22 moved 26:9 114:9 moves 199:13 moving 41:10 76:15 95:17 96:17 129:15 130:6 142:15 296:16 **MPH** 2:7,11 3:2,2,3 **MPhil** 3:1 **MSc** 2:3 **MSN** 2:5 **MSSW** 2:4

multi-dimensionality 273:3 multi-item 48:14 261:15 multiple 49:13 128:8 142:21 173:18 197:21 235:15 260:10,22 261:7 286:20 296:9 mute 20:14 34:3 43:9 92:12 119:19 131:19 140:22 141:6 157:14 173:6 muted 11:12 19:15 23:15 173:13 244:21 muting 141:2 Ν N 55:19 56:2 59:15 61:7 98:18,21 122:12 138:11 139:6 143:1 149:19 174:15 185:4 201:10 203:5 244:8 **n's** 90:11 N.'s 162:17 name 62:11 68:14 238:16 named 15:13 141:15 names 138:16 252:5 narrow 78:3,5 124:15 217:9 narrowing 217:13 national 1:4 152:19 natural 166:4 nature 233:9 290:22 292:15 295:8 near 133:11 nearly 256:16 necessarily 52:12 53:14 135:10 163:16 173:22 194:12 232:22 268:7 necessary 47:3 need 9:10,21 14:7,15 26:5 35:12,13 36:15 44:17 45:16 64:10 71:3,10 72:17 74:1,5 76:22 78:13 79:7 80:22 83:11 91:3 101:5,13 105:3 115:9 116:2,12 117:8 119:9 127:3 137:21 138:6 167:16 168:2 169:13 172:17,20 178:6 194:18 196:22 198:20 199:15 216:20 226:16 246:6 248:4 278:1,8 279:4,6,8 290:20 needed 14:21 38:19 126:10,19 129:8

169:7 203:15 needing 274:15 **Needleman** 2:9 21:4,5 66:2 89:11 128:1 157:16 158:4 159:4 186:17,19 187:2 206:19 210:8 213:15 216:12 219:6 223:4 224:16 236:16 238:13 240:14 needs 44:5 81:12 136:17 137:6,10 189:10 287:8 negative 70:5 Nerenz 1:19 2:2 8:12,12 15:7,8,9 56:2 59:15 61:11 69:2,6 98:20 99:4 101:16 104:7 105:4 107:8 108:1 110:11 114:16 115:1 119:16,22 122:12 125:11 127:22 130:17 131:2,18 132:2 133:9 134:11,14 136:13 138:3,5 139:20 143:4 143:19 147:15 150:2 156:15 170:2 174:15 185:4,8 194:2 203:12 221:16 222:6,11 223:2,5,14,19 248:8,9 307:5 Nerenz's 80:4 **Net** 194:5 never 68:17 153:10,15 174:6 210:6 291:11 new 7:6 14:6 28:20 33:7 47:22 54:1 82:17 103:3 116:1 129:4,11 150:17 163:1 173:21 214:20 226:13 236:10 262:9 newer 37:14 nice 40:8 146:18 nine 29:1 187:8 207:7 254:1,12 263:8 284:18 288:4 noes 208:4 noise 11:13 12:9 23:12 61:6 74:21 259:2 294:20 nominate 218:20 nominated 16:13 219:8 nominating 218:11 nominations 35:12 non- 177:3 198:17 210:10 non-issue 174:7 non-profit 17:10

Neal R. Gross and Co., Inc.

non-response 292:5 nonprofit 270:7 norm 59:1 normal 133:6 229:6,15 229:19 normally 229:5 North 23:20 note 12:3 24:16,21 48:22 53:10 67:9 94:10,16 128:6 182:19 194:21 200:5 200:16 201:22 242:6 244:4 246:13 250:10 287:15 291:7,16,22 303:21 304:4 noted 24:17,17 25:20 63:22 126:21 264:8 286:2 293:3 notes 92:18 95:9,13 97:4 196:15 203:7 213:22 247:3 262:21 262:22 noticed 123:4 231:5 288:18 noting 248:4 249:8 **notion** 180:2 **NQF** 3:1 5:5,6,19 7:9 10:11 27:14 28:15 37:22 49:14 58:5 60:10 92:15 100:9 104:11 105:12 107:10 110:5 120:16 121:2 121:11 123:11 124:2 124:16 126:8,16 129:1 134:17 135:1 148:13 149:13 150:20 152:7 154:18 155:16 158:19 159:3 162:3 170:2 171:17 174:19 175:15 180:18 185:11 193:17 197:4 200:16 201:7,16 202:2,4 205:12 223:6 230:11 241:11 245:12 247:7 257:9 260:6,11 272:13 274:5,16 281:19 NQF's 120:20 149:20 260:8 nuanced 86:16 132:15 nuances 105:19 Nuccio 2:10 21:10,11 132:4 133:22 169:22 227:14 null 70:7 number 30:17,21 31:4,7 31:8,18 49:14 52:13 59:21 62:14 65:7

179:15 202:17 205:7 218:2,3 228:19 occurred 227:8 279:4 289:21 occurs 159:22 odd 168:22 offer 13:13 17:17 50:22 55:15,19 206:13 offered 63:10 office 77:19 offline 96:1 173:12 offs 117:15 **Ok** 266:12 old 61:17 236:14 older 59:9 199:3 omitted 166:22 167:1 270:7 on-the-side 173:12 once 109:8 111:3 197:8 197:16,19 253:20 one's 196:3 one- 238:8 Neal R. Gross and Co., Inc. Washington DC

66:18 67:12 73:10

77:19 86:19 99:8

107:13 126:9,17

131:13 170:9 174:12

189:15 190:3 194:17

199:2 207:3,12 211:7

194:18 195:1 196:5

223:8 227:6 241:21

286:18 287:1 288:14

242:14 246:14.19

288:16 289:19,21

numbers 34:4 63:10

66:20 70:6 73:19

numeric 64:16 93:3

numerator 276:1

Nunnally 81:8,12

nursing 177:2,4,9

nutrition 171:13

O'Brien 2:10 21:15

observation 84:20

observations 73:11

observed 158:10

184:22 230:9

observing 143:5

257:5

obviously 26:5,16

69:10 82:1 85:20 89:4

137:17 165:21 170:13

OASIS 228:11

objection 144:1

obligations 9:6

214:17,19 215:4

0

297:10

189:22

240:18

one-hour 9:2 one-year 234:9 ones 29:14 56:12 100:19 137:6 152:14 189:16 208:7 231:12 240:11 269:10 295:11 onion 123:13 open 88:7 100:7 137:19 143:15 155:15 241:17 247:15,20 251:21 257:3 263:20 266:18 266:20 284:3 300:20 304:9 308:12 opener 55:21 opening 8:4 251:20 openness 16:20 operate 56:20 operates 103:9 operating 47:18 177:9 operations 256:20 operator 131:22 139:18 141:1 241:18,19 242:12 opine 180:22 181:1 opinion 199:20 200:22 opportunities 51:1 opportunity 4:11,17 7:21 10:17 12:19 13:14 25:7 33:8 52:20 55:19 69:9 148:22 184:12 206:13 271:10 273:16 284:12 285:4 294:16 305:4,5 306:3 307:9 opposed 45:3 164:7 227:9 269:20 295:17 opposite 124:21 195:9 **optimism** 301:8 optimistic 283:3 303:6 opting 272:17 option 161:2 options 45:8 oral 14:15,21 16:19 orally 15:21 order 6:12 10:15 11:8 42:2 44:6,10 59:7 68:13 110:13 169:7 242:12 256:19 271:16 293:13 ordered 68:13 orderly 10:14 Organization 17:10 organizational-wide 163:13 organizations 152:22 296:15,20 organizations' 152:20

organize 95:13 original 214:2 originally 81:8 85:5 307:15 originally-triggered 209:6 orthopedic 22:11 270:10 271:5 283:1 283:19 295:10 296:9 296:19 297:6,8 300:21 orthopedics 269:11,12 osteoarthritis 258:17 258:19 269:16 272:3 295:18 ought 84:14 128:7 129:22 130:2,7,14 166:15 181:2 192:21 193:15,18 208:6,8 out-of-order 283:17 outcome 20:4 30:1,2 57:7 75:10,17 116:14 145:10,15 153:12 170:7,8 172:20 181:14 183:7 209:21 232:5.6.9 233:10.11 258:17,19 277:4,17 278:8 279:9 283:3 285:18 289:7 293:20 299:9 302:20 outcome-based 290:19 outcomes 47:7,8 117:5 144:16 152:14 153:13 172:5 183:3 184:5 188:7 191:8 237:9 243:11 257:11 272:3 287:20 304:11 outlier 101:10 102:9 103:1 146:3,20 215:11 outliers 82:21 97:18 99:18 111:15 132:12 134:6 141:18 142:12 143:11 146:5,22 212:5,7,17 217:6 outline 203:6 outlined 247:11 outlines 27:22 outlying 84:1 outpatient 238:6 240:10 output 101:7,7 outside 9:10 207:15,22 210:4 overall 52:2 66:21 71:2 89:16 147:2 167:7 192:1,6,12 194:11 198:2 258:22 273:12

289:20 overarching 25:8 54:5 251:3 overfit 225:22 overfitting 225:20 overlap 72:3 289:7 overly 232:13 overstepping 184:6 overview 4:3,4 25:4 26:13 Ρ **p** 123:21 P-R-O-C-E-E-D-I-N-G-S 5:1 P-value 280:2 p.m 139:10 243:7 245:9 245:10 309:13 PAC 178:12 page 32:3 36:14 92:18 206:21 284:7 pages 307:19 paid 16:15 190:3 pain 71:17 267:15,22 268:2,13,18 269:4,15 270:8,20 271:3,9 272:7 palatable 31:3 panel 1:8,18 5:6,9 11:11 14:12 15:1.13 16:14 17:1 18:6 24:16 25:7 26:10 28:1 30:15 31:22 32:13 33:19 34:22 37:13,16 38:16 39:8,13,16 41:16 42:18 43:1 45:1 53:8 55:5 89:22 94:2 97:4 97:13 123:18 134:18 139:14 148:9,22 149:7 151:1 160:1,19 161:9,17 170:2 175:4 180:22 185:6 196:20 205:8 207:14 220:14 221:10 230:6 242:3 247:20 248:1 249:14 250:4,6,11,21 256:12 257:4 258:6 259:1,8 278:19 285:11 286:3 286:16 287:5 288:8 288:15 290:11 293:2 293:22 295:4,6 296:7 Panel's 30:5 37:4,22 148:10 panelists 258:3 panels 257:19 paper 28:6,8 55:5,6,9 55:13 57:4,5,6 71:1 75:1,21 80:17 137:2

203:8.13 218:17.21 220:5 221:21 222:15 224:14 papers 54:14 55:7,11 55:17 137:4 243:2 parallel 185:12 parameter 168:15 parameters 122:5 155:17 169:11 194:6 308:3.4 paraphrase 133:10,21 parking 262:18 part 6:5,6,18 25:14 51:3 60:4 63:17 64:3 84:19 90:14 116:17 126:14 136:5 140:16 143:2 164:21 179:1 180:15 180:19 181:12.12 183:20,22 186:6,8 203:18 204:19 219:12 227:17 249:19 251:3 262:5 291:21 292:16 297:11 298:8 301:22 303:5 PARTICIPANT 20:15 139:4 246:15 255:16 participate 138:21 247:2 298:2 participating 55:9 82:8 participation 137:1 283:19 particular 12:21 49:16 69:19,22 70:12,19 97:14,16 98:1,2 105:14 106:13 107:1 111:14,20 113:13,16 124:14,22 126:5 145:3 146:9,10,12 151:17 161:18 168:11 169:11 192:20 200:7 205:2 283:9,10 293:20 300:3 302:3 303:3 particularly 8:14 9:14 11:9 41:14 50:4 97:7 110:7 140:16 149:8 152:2 167:8 187:6 188:17 189:3 206:6 220:18 224:18 230:12 268:1 286:10,14 307:7 partly 181:18 parts 74:19 103:9 179:3 233:12 party 254:15 **PAs** 160:4 247:12 pass 29:6,11,14 32:19 37:16 38:3,4,8,9 41:1

44:19,19 45:17,19 63:20 64:9 92:14 134:10 159:21 160:17 161:9 234:15 235:18 249:12 280:18,21 pass/fail 45:1,2 92:21 93:13 94:1 282:6 passed 29:3 32:17 33:9 33:18,20 37:4,8 160:6 178:13,14,14 249:21 250:5 257:14 passes 43:14 100:2 304:17 passing 32:4 33:11 40:17 41:5,5 50:6,19 63:9 paste 227:19 path 105:17 106:7 298:16 pathways 188:9 patience 255:15 256:5 patient 4:13 78:19 87:11,12 146:10 170:9 171:9,10 177:2 180:13 185:1 189:11 212:9 213:8 228:7.9 228:16 234:21 235:1 235:14 237:17,22 238:22 239:15,18 240:16 261:21 262:4 262:4 266:7 267:21 270:9 279:8 283:2 286:16 287:19 288:6 296:6.7 patient's 239:10 299:9 patient-20:3 patient-reported 257:11 277:4 278:7 285:18 290:18 293:20 302:20 304:11 patients 78:20 87:12 153:14 171:22 177:11 179:10 188:18,19 189:2,12,15,18,22 191:7 192:18 197:22 225:9,16,17,17 226:1 226:8,15 229:9 235:4 235:11 238:17,18,18 239:4,15 270:20 281:8 286:15,15 288:1,16,22 290:21 292:20 294:5 295:16 295:19,20 299:14 Patrick 2:11 21:18,19 92:12,12 94:6,7 95:1 95:1 96:7,8,11 107:18 117:13 144:8 158:3 165:4,6,7 167:11

252:16 254:14 307:16 Paul 2:8 20:11,12,13,20 91:6 100:21 110:12 112:16 113:9 158:3 165:4,7 167:12 169:20 194:1,15 195:3 210:20 Paul's 194:1 pause 30:3 39:11,15 98:10 149:18 pay 133:8 291:13 payer 83:13 104:1 paying 51:16 77:4 201:16 payment 103:8 129:6 230:13 232:4 268:21 278:4 payments 233:17 **PCORI** 20:2 PCORI-funded 20:3 peak 30:19 penalize 118:22 penalty 199:5 pending 203:21 people 10:15 65:19 70:20 88:6 90:15 99:14 107:13 111:16 114:4,15 116:5 129:6 130:15 140:11 143:16 150:19 157:19 166:3 168:7 177:14 182:3,4 191:10 193:10,13 199:10 200:14 202:16 202:17 203:17,22 221:16 222:16 223:8 226:18 229:13 231:12 244:6 246:15 248:11 261:13 265:14 268:11 283:22 294:10.21 298:9 people's 136:16 percent 32:18 40:5,6 41:2 42:18 45:15,17 45:19 67:13,18 79:17 79:18 81:10 86:5,5 91:21,22 92:3 170:18 177:3,5,10 209:5,8 217:18 227:2,5 288:18 290:4 percentage 31:19 211:7 229:9,13 288:20 percentages 229:15 percentile 192:16 212:19,19 perception 114:14 perfect 67:22 139:22 204:22 221:15 perfectly 117:17 232:22

perform 166:12 268:7 performance 30:6 49:14 61:4 74:2 75:1 101:8 117:19,19 118:1 119:5 121:8 128:13 132:19 133:8 142:10 150:22 165:13 167:7 191:11 192:2 212:10 229:10 264:11 267:20 279:5 290:19 performing 217:11 performs 134:3 period 61:1 106:4 126:10,18 191:18 193:19 226:13 234:10 289:8 290:1,11 Perloff 2:11 21:15,16 81:15 173:17 206:18 208:17 212:15 213:12 214:10,12,15 215:13 215:17 217:4 218:15 221:14 222:21 237:14 238:7 permanent 172:3 person 11:2 180:13 247:7 269:20.21 309:7 person's 269:1 personally 68:8 104:10 perspective 31:22 41:1 43:20 183:17 184:13 196:2,15,16 232:12 269:1 perspectives 90:9 149:9 pertain 142:17 PharmD 3:2 phase 102:2 **PhD** 2:2,2,3,3,4,5,5,7,8 2:9,9,10,10,11,12,13 2:14,15,17,18,19 phenotypes 146:11 231:15 philosophical 191:5 198:7 199:21 201:1 philosophically 110:16 191:15 193:6 phone 11:12 43:8,10 138:5 164:7 244:21 245:18 246:4,14,18 251:21 254:18 phones 173:18 phonetic 63:7 81:8 98:14 244:5 PHQ-9 302:22 303:2,7 **phrase** 64:2 phrases 62:6 physical 271:4

physician 77:15 78:18 81:18,22 83:21 121:8 physicians 73:12 74:21 76:3 78:1 82:2 83:14 121:10 213:7 **PI** 20:2 pick 25:16 204:3 picked 67:4 68:2 picking 66:7 220:20 **picture** 164:13 piece 47:14 63:1,3 114:5 228:20 262:3 262:11 263:10 265:22 piling 80:4 pin 85:14 **Pittson** 244:4 PIUR 28:9 96:20 97:7,9 98:15 99:10,11 110:17 142:11,19 pivot 13:1 place 94:3 106:16 114:12 119:17 160:13 160:15 174:22 placed 241:9 plan 54:22 94:15 137:8 180:10 181:5 planned 47:14 207:17 planning 287:18 plans 152:20 play 116:4 124:3 182:15 plays 129:11 please 9:10,19 10:3,18 12:11 24:18,21 36:16 46:5,19 141:6 200:10 220:5 221:11 244:21 246:7 pleasure 256:11 **plot** 281:22 282:5 plots 280:10 plus 272:6 **PMP** 3:3 point 5:13 10:10 12:15 12:16 14:11,22 15:6 16:22 39:9 41:9 42:22 44:13 45:5 49:13 51:4 54:11 55:21 57:4,14 59:16 60:9,14 71:2 75:4 76:19 84:8 85:4 92:11 98:12 103:10 103:11,14,16 106:6,9 107:5 108:7 109:8 113:7,13 117:11 118:6 119:11 120:5,6 123:5,8,10 132:16 133:9 134:1,9 145:16 147:3 148:13 161:7 180:1 191:19,20 194:15 195:19 202:2

211:11 218:1 234:15 235:8 244:1 248:9 259:20 261:3 277:6,7 284:4 pointed 150:5 155:11 pointing 63:4 points 115:5 119:7 173:3 206:21 polemical 232:14 policies 27:16,17 39:17 175:6 policy 40:1,13 48:11 106:17 107:10 130:21 150:20 151:6 152:7 160:15 162:8 163:14 163:21 164:7 168:6 168:19 174:19,20,22 180:20 181:12 185:11 186:11 201:15 202:5 202:9 Poll 248:17 poor 76:10 83:6 132:14 159:6 172:1 182:4.5 183:6,11 184:11,11 184:17,18 199:10 poorer 180:6 183:3 poorly 75:22 **pop** 24:10 68:22 **popped** 61:20 population 42:10 61:1 192:12 194:12 211:4 212.9 populations 191:15 portfolio 163:20 205:14 portfolios 123:6 **portion** 144:16 posed 97:12 position 120:21 121:11 162:4 168:16.22 223:10 305:12 positive 31:21 93:12 287:19 possibility 93:2 94:17 possible 6:9 8:10 12:5 12:10 17:4,4 23:15 26:5 36:20 65:5 127:10 138:11 155:17 155:18 200:2 208:2 255:1 303:1 307:13 possibly 86:10 302:7 post-288:4 post-acute 18:20 214:8 post-assessment 288:4 post-intervention 272:18 potential 88:21 95:15 112:14 122:10 168:6

291:15 potentially 33:10 93:20 159:19 160:18 161:5 191:10 211:5 250:19 261:7 poverty 150:21 152:13 153:8 183:1 power 197:11 practical 99:21 100:11 103:20 150:6 practically 72:4 110:16 111:21 practice 73:10 90:16 107:11 110:10 practices 66:18 89:21 90:12 pragmatic 115:10 117:18 192:8 precision 61:3 89:9 103:14 predict 112:22 predictable 208:1 prediction 170:13 171:19 279:22 predictions 187:13 predictive 197:11 prefer 86:15 preferences 28:1 130:11 preferred 252:1 prefers 148:13 preliminary 27:7 29:11 32:16 97:3 148:7 160:3 249:22 250:7 presence 165:17 present 2:1 3:5 9:13 106:2 151:15 283:5 305:6 presentation 107:15 229:3 298:22 presented 28:4 41:22 73:20 106:19 124:19 142:6,16,21,22 153:2 166:2 176:21 227:21 266:6 272:22 281:15 281:21 285:9 presenter 11:9 172:9 198:18 president 3:1 7:18 134:16 presiding 1:20 press 241:20 242:13 308:16 pressing 136:17 presumably 133:14 241:12 pretend 181:22 pretty 12:17 58:7 76:4

	1	I	I
83:6 95:21 99:11	274:12	247:18 276:14 287:8	103:22 104:20 105:14
166:22 167:19 180:3	process 4:3 14:18 25:4	292:3,19 294:17	113:14,16
258:22 268:10 280:11	33:7 36:7 37:1,7,14	296:12	purview 220:6
281:14 298:17	42:22 43:4 51:2,4	provided 15:16,22	push 117:12 227:5
prevalence 85:8	56:16 64:22 68:11	26:14 27:6,9,19 38:22	pushing 175:7 306:14
prevent 254:17	93:7 97:22 110:6	48:4 97:8 132:12	put 53:18 70:22 77:6,13
Preview 4:19	137:20 145:12 161:14	160:2 170:16 264:9	80:4 85:14 94:20
previous 30:8 34:11	176:12 184:6 203:17	274:9 282:2 285:10	95:11 101:11 138:19
37:6 41:17 53:11	207:21 208:5,15	287:5 291:5 292:4	159:11 169:5 170:21
70:17 140:15,17	210:14,19 211:16	293:1,4 297:3 307:18	191:22 192:4 193:18
141:12,20 142:4	216:16 217:13 219:7	provider 81:18 99:15	203:13 206:4 216:5
143:17 166:14 172:8	219:12,13 247:4	117:19 118:12 119:5	262:17 279:2 286:21
179:12	250:18 279:8 298:4	119:6 144:14,18,19	301:1,18
previously 34:9 39:13	processing 145:21	152:20 171:10 172:6	puts 168:15,21
primarily 146:20 171:22	produced 67:12 258:22	180:8,9 184:15,16,20	putting 79:20 99:14
172:10 257:18	producing 213:2	207:8,16 210:1,4	162:18 165:9 219:13
primary 243:11 257:12	product 55:3	provider's 170:8 171:6	258:5
289:19 292:10 304:12	productive 54:16	180:17	
principle 190:13	products 23:22	providers 63:5 76:2	Q
principled 182:2	professional 15:15	109:4 116:15 117:5,7	gual 278:6
principles 25:12 32:2	profile 82:17 83:8 84:5	117:22 133:5 152:2	qualifies 260:18 303:3
205:17	103:2 115:16 119:8	172:13 184:20 187:6	
			qualify 268:20
prior 150:19 231:13 249:15	146:17	188:22 189:4,8 226:5 287:17 291:10	quality 1:4 7:18 118:12 120:19,22,22 134:16
	profiling 102:6		
privilege 298:7	prognostic 181:15	provides 26:16 133:1	135:6 136:2 151:18
PRO 269:1 281:9	program 91:20 112:22	188:1	151:20 152:1,5 157:1
288:22 292:2	277:16	providing 104:6 110:7	163:1 172:13 177:12
PRO-PM 29:22	programs 91:15 260:22	148:10 240:18 296:21	189:18 200:9 208:22
PRO-PMs 259:11 291:2	278:4	province 181:9	269:14 278:21 279:10
291:9	progresses 203:2	proxy 10:7 183:11	283:4 288:2 303:3
probably 24:7 59:17	prohibition 160:13	273:18 282:22 292:9	quandary 154:7
79:4 89:5 94:17 107:4	project 13:21	292:11,19	quantitative 194:4
111:2 115:1 127:17	PROM 286:1	psychological 120:11	quantity 82:16,18
145:5 147:10 159:1,3	PROMIS 17:9,11,12	PT 2:4	quartile 67:11 90:5
166:17 167:19 192:11	270:7,13,15 271:1	public 4:11,17 5:10	192:16 265:12
199:17 200:2 202:15	301:6	14:16 132:18 133:7	quaternary 116:21
220:10 221:13 262:15	PROMs 286:3,5,8 290:9	152:18 199:4 241:15	questionable 157:3
262:17 300:5,12	proof 291:5	241:17 285:14 289:11	questionnaires 48:15
problem 75:14 77:6	propensity 281:11	290:11 295:10 296:8	questions 30:4,9 39:12
78:12 80:1,5 90:8	properly 108:6	308:12	39:13 46:5 47:1 52:18
101:15 109:14 110:2	proportion 61:3 192:17	published 28:7 115:21	52:20 53:4 65:8 86:11
139:4 154:11 158:6,7	proposal 220:4	166:14 268:19	87:17 88:14 96:11
158:8,9 172:4 173:2	propose 115:21	pull 12:22 33:8 40:14	150:6,12 170:6
193:1 223:13 227:16	proposed 70:8 83:19	123:12 160:16 161:2	174:18 205:4 211:19
227:22 238:2 270:16	101:21 230:14 232:4	162:10,11,15	221:7 224:12 242:16
283:20	269:11 290:12 291:1	pulled 32:13,13,21 33:3	243:22 248:3 260:5
problematic 58:1 70:21	proposes 146:19	89:21 147:20 153:15	262:1 264:12 274:4
118:10	proprietary 295:8 298:3	161:6 250:1,4	283:10,11
problems 60:5 153:14	prospectively 297:11	purchasing 172:16	queue 125:22 130:18
218:4 259:1 283:8	297:22	purely 168:2 195:12	271:19
procedure 39:17 289:5	provide 7:2,22 9:21	purpose 42:7 77:5,12	quick 6:3 8:21 25:2
289:5 292:10,21	27:11 40:20 44:9	79:20 83:22 97:16,21	60:18 81:4,16 105:5
procedures 73:13	50:16 51:1,14,20,22	98:3 100:20 106:21	124:12 132:4 174:16
264:2,3,4 286:21			
	52:19 55:20 98:1	107:1 111:20 113:20	195:6 200:5 204:16
288:13,17,17 289:2	106:8 108:12 110:21	120:7,12,21 121:13	224:1 236:6 244:11
289:19,20,21 290:3,4	125:1 132:22 148:21	124:22 125:18 126:5	247:6 253:8 256:19
293:8	149:10 189:9 198:6	140:19 143:11	303:15
proceed 104:6 204:8	224:2 233:7 247:14	purposes 77:20 78:10	quickly 36:20,21 57:3
1	I	I	I

85:4 92:14 112:8 203:5 224:10 287:6 298:17 quintiles 99:14 quirk 68:11 quite 75:21 83:8 85:9 95:9 98:5 99:5 155:22 195:2 201:12 229:20 250:14 267:4 276:13 284:18 292:12 307:18 quorum 9:18 42:18 248:7 quorums 45:15 quote 276:2 R r 123:21 r-squared 187:14,17 189:20 190:14 200:20 rabbit 120:4 raise 10:8,9,13,15 68:12 85:14 86:11 87:17 139:20 174:9 201:15 208:17 217:4 217:22 242:9 246:11 308:18 raised 33:16 66:1 85:5 90:22 91:3 109:6 150:12,13 174:18 195:3.4 201:10 206:7 227:12 236:5 240:4 242:19 262:21,22 263:14 264:1,7,12 265:14 281:7 294:17 raises 83:9 raising 208:16 219:2 272:1,9 273:2 random 216:17 265:18 265:19 range 31:2 45:19 63:16 64:8,20 70:2,4 133:13 ranges 66:20 70:20,22 72:1 ranking 189:20 rankings 187:15,18 188:1 192:6,19 193:3 rarely 174:1 rate 117:6 243:10 257:11 277:18 281:19 283:19 291:4 299:17 304:11 rater 62:21 72:10 raters 70:1,13 79:13 rates 117:7 185:15 rating 41:15,20 42:3,4 44:4,8,22 46:16 64:4 79:14 89:17 99:19 304:13

ratings 41:11 42:14 43:18 44:3,16 46:11 47:1 64:1 92:22 99:15 103:7 304:16,16 ratio 74:21 115:14 243:15 304:21 rationale 38:4 40:17 44:2,11 50:13 170:16 178:3 ratios 102:12,13 103:7 re-adjudicated 250:2 re-estimating 236:12 reach 14:8 37:9 105:21 203:10 reached 29:5,10,15 31:5,20 32:15 45:18 249:12 257:15 259:10 279:14 reacting 179:20 reaction 93:17,22 read 15:11 82:18 96:12 180:18 242:3 252:5 265:5 266:3 reading 262:21 265:1 readmission 207:17 readmissions 24:3 ready 138:1 249:6,7 303:10,16 real 17:3 68:5 80:1 132:4 176:15 189:14 196:19 224:1 245:16 263:3 269:17 reality 101:22 103:20 106:3 realize 101:19 106:2 109:14 138:15 reason 33:11 38:9 50:5 63:11 114:8 118:21 138:19 151:13 153:18 161:3 162:7 169:12 169:14 187:12 188:13 198:1 200:2 211:8 269:5 280:17 289:3 306:18 reasonable 69:13 75:3 134:4,5 143:22 144:2 184:5 208:12 209:17 210:5,11,16 211:15 211:16 222:20 reasonably 111:12 112:3 280:1 **reasons** 188:2,10,12 197:12,21 239:16 273:15,17 280:21 reassurance 146:21 recall 14:14 33:6 180:17,19 207:2 250:12

recap 41:13,17 receive 42:2 287:19 288:2 received 15:12,19 111:4 286:11 receptive 181:11 reclassification 194:5,8 recognize 12:19 13:6 18:14 105:2 148:17 290:18 291:8 recognizing 92:15 129:5 297:19 recommend 291:20 recommendation 185:13 264:15 recommendations 7:3 26:8 27:16 41:4 44:15 45:9,12 47:16 48:2 50:16 51:13 106:11 106:12 122:3 185:6 221:22 recommended 149:13 151:6 265:2 269:7 289:16 295:7 297:9 reconnected 95:2 reconsideration 29:18 33:1 164:11 reconsidered 81:13 reconsidering 269:18 reconvene 137:8 243:6 244.1 reconvenes 38:1 record 139:9 245:9 309:13 recording 11:5,17 200:9 records 225:9 recovery 268:1 272:18 288:6 289:8 recused 24:20 26:19 248:5 recycled 195:4 red 110:5 redial 194:21 redialing 244:14 reduce 89:4 270:21 reevaluated 33:22 reevaluating 245:14 reevaluation 302:15 reference 26:22 27:9 59:1 62:6,10,18 63:9 98:17 214:5 293:17 references 28:9 referencing 27:13 **referred** 185:14 referring 26:15 31:17 178:9 185:18 refers 264:5

reflect 146:6 187:21 297:13 302:12 reflected 49:4 151:21 reflecting 273:5,6 reflects 151:18 152:1 refraining 24:21 refresher 165:10 247:6 refreshing 44:1 regard 141:22 regardless 156:6 region 102:18 register 253:11,13 registered 253:10 registering 254:1,12 255:18 registry 271:6 283:14 298:3 regression 279:20 regressions 236:20 regular 302:16 regularly 293:10 rehab 226:15,17,18,20 238:19 239:11 240:17 240:19 263:7 284:19 reinforce 56:3 176:9 reiterate 159:21 290:8 **rejecting** 50:21 52:12 52:17 133:6 rejigger 306:18 related 16:5,8 17:17 18:6,11 22:12,22 23:10 94:12 101:4 131:11 140:17 173:22 182:18 216:22 240:20 265:4 302:3 relates 24:2 73:8 155:7 relating 17:22 relation 19:4 299:5 relationship 4:7 141:10 152:11,12 153:5,6 171:9 172:18 relationships 52:8 188:5 relative 128:13 187:15 relatively 129:11 160:2 268:12 relay 308:20 relevant 16:1,15 20:1,5 23:5 43:14 56:14 154:1 185:17 261:12 262:12 263:2 reliabilities 91:15 reliability/validity 142:1 reliable 67:18 74:4 75:11,13 79:16 81:10 89:14 99:17 100:3,5,6 106:21 107:15 109:16 111:18 117:19 121:7

122:20,21 123:20,21 218:8 reliably 76:20,21 82:20 97:15 141:17 relies 267:20 rely 269:14 remain 209:6 269:4 299:12,17 remainder 249:9,20 remaining 217:16 298:19,19,22 299:18 299:21 remains 7:5 281:13,16 remarks 5:20 7:22 8:4 11:21 remember 11:12,19 90:17 307:12 remembering 67:14 remind 37:1 257:8 270:5 reminded 200:5 reminder 12:4 16:21 50:1 256:19 304:13 reminders 8:22 16:10 36:13 47:5 49:18 60:18 remotely 173:13 removed 289:1 repeat 36:15 42:16 58:11 81:16 126:13 161:22 repeatability 60:21 repeatedly 237:8 repeating 55:4 repetition 162:1 replaced 241:1 replacement 240:17 241:2 258:18,20 277:16 285:17 288:7 292:11 295:2,16,17 297:12 reply 252:6 report 20:10 27:14 149:14,20 151:5 152:6,18 180:18,20 185:6,7,17 reported 20:4 86:2 146:18 184:8,8,10 243:11 279:9 283:3 reporter 11:3 reporting 52:3 132:18 133:8 184:22 185:14 186:1,2 229:8 273:18 289:11,15,16 292:9 292:16 **reports** 282:22 represent 16:12 representation 221:18

representative 42:9 representativeness 42:10 representatives 296:13 represented 199:5 272.8 represents 217:17 289:20 reproducibility 60:22 request 126:8,16 218:13 296:1 requested 39:16 requesting 218:10 requests 222:17,19 require 46:13 47:10 48:5,16,19 129:16 131:10 173:21 244:6 298:2 required 42:2 48:20 49:9 275:21 285:19 **requirement** 47:12,17 47:19 92:7,20 requirements 39:1 45:21 47:6 56:19 127:12 276:6 292:17 reauires 112:14 126:6 129:17 130:3 research 16:4 88:3 145:6 149:17 residence 172:3 residual 166:21 residuals 146:7 resolution 233:7 resolved 51:3 resource 47:8 81:19 217:19 resources 198:2 respect 24:1 67:8 80:16 136:16 166:3 181:7 212:13 300:2 respectful 303:11 305:3 306:6 respectfully 114:21 119:18 120:2 respond 201:14 263:16 responded 242:3 responding 46:22 125:12 **response** 27:6 51:2 105:5 122:7 124:13 173:8 174:16 244:6 247:16,18 253:9,10 253:14 254:3 257:3 258:5 265:22 266:1 271:19,22 282:14,16 284:5 287:5 291:3,7 291:15 293:2 298:21 299:17 303:21 306:5

307:19 response-biased 291:18 292:1 responses 254:9 284:9 291:1 292:12,19 307:10 responsibility 287:14 responsible 213:7 responsive 66:14 responsiveness 259:13 rest 30:1 67:12 249:9 restricted 130:3 restriction 127:6 restrictions 180:12 181:4 306:20 restrictive 130:12 result 60:2 234:3 results 38:15 42:12 94:18 98:8 112:5 148:7 229:8,8 235:17 257:13 258:22 259:17 285:9 291:16,18 304.15resumed 139:9 245:9 retest 71:20 77:9 returning 35:20 51:9 review 14:15 15:19 16:2 16:6 24:13,19 25:2 26:22 27:2,11 28:2 36:13 37:8 38:2 39:8 49:6,6,21 53:22 64:21 70:17 78:16 153:20 175:17 208:2,14 210:12 211:2 225:9 227:17 251:6 293:13 293:22 294:1 302:11 304:19 305:5,5 reviewed 6:19 30:18,22 31:9 34:10 90:18 257:19 258:8 284:11 reviewer 154:7 207:20 reviewers 106:20 276:10 reviewing 44:1 reviews 66:6 97:13 203:14 revisit 121:22 revisiting 201:17 revolution 201:11 202:3 revote 32:21 33:10 37:18 38:8 40:14 revotes 49:1 rewarded 172:15 rheumatology 269:13 **RHIA** 2:19 rich 128:2 142:12 187:3 193:21 195:2 200:14

237:12 richer 237:6 rid 143:11 riding 256:13 rigorous 7:5 286:10 290:10 ringing 173:18 risk-75:22 243:9 281:18 risk-adjusted 57:7 75:22 157:8 184:13 231:20 235:20 risk-adjustment 57:5 165:14 178:1 182:20 risk-variable 288:22 RN 2:5 **RN-BC** 2:8 road 271:7 301:3 302:9 robust 6:22 258:5 266:1 **robustly** 294:17 role 148:10 roll 14:13 79:21 261:7 rolls 103:17 Romano 2:11 21:19 107:21 108:3 144:8 144:10 165:5.8 252:16,17 254:14,17 255:2 306:12,13 307:16 Ron 23:3 **RONALD** 2:16 **room** 10:6 209:10 242:18 **rotate** 84:4 rough 80:18 roughly 79:17 round 176:16 262:16 routine 117:1 RPh 2:17 rule 236:1 292:17 rules 56:10,20 209:18 274:7 run 190:2 running 236:19 249:4 304:19 305:13 rush 268:3 S s 266:9 S&P 263:1

S&P 263:1 safest 106:16 safety-net 192:14 Sam 2:12 3:2 13:6 21:21 22:7 81:2 85:2 138:11,20,20 139:5 141:15 247:8 251:11 256:6 260:19 261:3 266:1,14

sample 42:9,11 52:4 67:12 73:16 74:7 81:17 89:13,16,18 94:12 98:6,9 104:15 104:21 118:3 127:11 131:6 174:5 212:9 215:2 265:7 268:6 282:9 sat 83:1 89:22 satisfaction 73:15 satisfactory 64:3,4,5 175:5 saw 33:12 61:21 63:22 96:22 158:22 195:7 210:6 212:2 227:17 293:3 saying 63:12 67:17 100:2 104:14 109:3 123:2,20 140:9 162:2 163:15 167:6 172:5 187:20 194:21 196:10 212:6 216:19 227:1 266:16 296:22 301:15 says 100:5 180:15 181:13 196:5 208:5 253:8 265:21 scale 41:15 72:4 74:15 76:21 120:11 134:9 scales 48:14 83:7 scenarios 232:21 schedule 128:3 224:3.7 241:14.15 307:7.15 scheduled 8:8 298:15 304:19 schema 277:22 scheme 147:2 182:21 schemes 231:3 science 88:7 302:12 scientific 1:8 5:6 57:7 123:18 125:16 180:22 205:8 256:11 293:2 scientifically 104:17 scope 42:8 124:15 217:14 301:21 score 42:1 47:10,11,21 48:17,20 49:10 61:2,4 65:13,16 74:4 76:9,10 79:22 231:8,9,17 232:7,14,16,19 233:6 236:13 238:10 258:15 258:17,19 259:3,12 260:7 261:8 263:4 267:17 273:12 274:9 304:2 score- 280:14 score-level 261:20 280:16 scores 59:1 82:22

142:10 156:13 190:7 232:20,22 234:1 264:11 scoring 59:1 158:5 261:9 screen 49:20 170:6 179:21 186:20 242:7 253:16 304:14 screening 39:2,6 script 15:11 scripted 14:18 se 135:19 210:19 Sean 2:10 21:14 sec 39:19 second 33:20 43:13 46:8 48:1,3 75:6 81:4 116:9 118:6 119:11 131:4 132:6 140:13 171:4 188:13 191:20 224:11,16 243:5 254:20 258:13 274:13 275:16 276:3,17 278:10 289:5 second-to-last 179:22 **secondly** 279:10 section 30:5 52:20 53:6 156:4 security 180:5,6 181:8 seeing 62:16 90:17 94:5,13 144:2 160:21 187:11 205:9 207:2 225:14 230:17 272:11 seek 56:5 seeking 174:18 221:8 seen 30:16 34:12 36:11 86:2,9,20 87:8 128:22 129:4 140:8 152:17 155:10 162:19 175:21 190:16 196:19 207:1 209:4 210:10,15 224:18 282:10 selected 52:8 selecting 30:15 selection 198:3 self-report 267:21 send 10:19 49:21 155:6 203:19 sending 140:9 senior 7:17 13:7 sense 14:11 28:3 44:4 44:22 61:21 139:17 139:19 159:20 167:1 185:9 191:16 207:18 209:21 210:11 240:21 301:13 sensitive 224:5 sensitivity 265:4 289:2 sent 12:15 77:16

194:21 248:17 separable 167:9 272:1 separate 58:4,7,15 72:9 101:12 145:1 217:5 268:18 272:1 **separately** 101:5,13 269:4 270:9 September 35:19,22 36:2 sequence 68:19,22 serious 70:10 serve 278:20 serves 62:3 service 226:4 services 23:21 189:10 219:8 225:2 240:19 263:7 serving 189:4 190:1 **SES** 190:6 191:4,12 192:1,4,4,19 196:17 196:21 197:6,9,15,18 session 138:13 140:17 141:11,13 143:18 147:7 245:13,13 set 12:6 29:21 62:19 65:15 74:8 88:12 95:9 95:14 96:19 133:13 133:18 147:11 175:2 175:16 204:12 217:9 217:17 235:9 240:9 241:11 269:3 279:22 283:10,10 setting 54:1 109:2 155:3 settings 64:17 setup 158:18 229:18 **seven** 16:6 29:2,8 175:13 178:10 249:18 270:2 288:18 seven- 300:6 severe 179:18 SF-12 273:9 shadow 250:13 Shantanu 3:1 5:19,20 7:15 share 28:5 31:10 35:18 36:7 149:9 161:8 204:17 206:14 243:3 276:18 282:20 304:14 shared 19:21 51:11,14 98:13 148:4,8 287:14 sharp 80:21 sharply 56:17 64:11 Sherrie 2:7 19:18 20:6 43:5 44:12 57:16 58:10 59:15 60:8 69:6 76:16 80:9 85:17 87:5 87:6 89:1 110:12

114:17,20 119:17,19 194:2,16,16 196:4,7 196:12 198:11,13 200:6 244:10 248:11 252:18 257:17 259:20 260:2 263:18 267:1 271:16,17,21 277:6,7 281:1 298:16 Sherrie's 64:13 194:20 shift 67:18 101:1 253:21 shifted 67:15 shipped 301:19 short 267:17 268:9,17 268:19 269:5,6 295:4 295:12,15,21,22 296:5 301:5 short-term 219:4 234:8 shortchanged 307:8 shorten 273:8 shortened 141:11 shorter 296:1,17 shortly 8:1 245:16 249:4 306:9 show 6:17 31:12 48:17 86:17 91:18 92:7 171:3 195:10 197:14 198:4 304:15 showed 176:22 214:7 229:3 showing 77:17 103:19 171:8 shown 141:17 shows 64:19 shrink 109:11 shrinkage 88:19 89:12 89:20 90:10,14,20 91:12,22 92:6 109:8 117:16 118:16 119:1 120:3 128:6,10 shrinking 89:7 109:16 shut 125:19 sick 116:22 sicker 199:10 sickest 116:22 side 67:15 93:7 163:2 176:11 sides 195:16 sign 139:7 signal 61:6 144:14,18 144:19 152:5 156:22 160:22 162:18 259:2 signal-to- 74:20 signal-to-noise 52:3 63:2 109:9 115:14 156:20 significance 195:11 significant 63:5 95:21

107:10 176:20 177:15 177:19,19 192:21 197:9,15,16 275:13 300:15 similar 11:2 22:3 37:6 201:3 214:21 217:10 275:2 **similarly** 67:19 88:8 Simon 2:12 21:21,22 85:3 138:11 256:7 261:4 266:12,19 271:15 274:2 277:2 280:22 simple 67:11 91:19 179:11 simpler 93:17,22 simply 67:4,9 68:2 90:13 102:19 128:13 171:13,15 172:5 184:8 227:22 241:20 242:13 290:7 Simultaneous 115:2 140:20 214:11 single 82:16 170:13 236:13 261:8 272:6 sit 16:11 site 92:2 101:10 sites 92:8 169:7,13 194:13 sitting 10:5 situation 86:12 100:17 111:15 157:22 197:1 199:13 situations 91:17 92:5 134:4,5 153:2 154:20 178:7 six 29:22 32:14 140:8 152:21 187:7 205:9 207:6 223:8 252:2 276:7 six-to- 270:1 size 42:11 66:18 73:16 74:7 81:17 89:18 90:5 90:5 98:9 104:16 127:11 131:6 174:5 sized 268:10 sizes 52:4 89:14 94:12 98:6 104:21 118:4 skeptical 86:7 skew 167:20 skewed 235:17 skilled 177:2,4,8 214:16 214:19 215:4 240:18 skim 46:2 slated 29:9 slide 31:11 37:20 40:5 42:19 51:10 59:11 61:8 63:22 147:6

158:18 204:9 205:5 206:16 260:17 slides 45:20 47:4 245:20 slight 66:11 slightly 74:17 slotted 103:15 small 90:4 91:15,20 92:8 109:17 118:3 188:21,22 189:15,19 189:20 190:2 209:7 248:9 smaller 89:13,21 90:6,8 90:11 188:7,19 189:21 264:18 smallest 66:22 Smith 178:13 smoothly 11:8 SMP 13:21 27:19,21 28:7,18 32:16 33:9 37:8 38:8 39:3 40:3 51:12 83:3 102:11 148:17 221:19 SNF 217:18,20 229:10 238:18 239:11,15 **SNFs** 239:16 so- 62:6 so-called 84:5 social 4:9 50:5,15 147:9 147:22 148:11,15 149:8,21 150:4,7,11 150:20 151:10 153:21 154:22 155:8 161:12 162:5,13 163:3,6,14 165:19 166:4 174:21 175:2 176:19 177:11 179:8,15 181:7,22 182:12,16 183:10,16 184:3,9 187:9 188:2 195:21 200:18 299:11 socially 191:6 192:17 societies 285:21 296:9 296:22 Society 91:13 296:11 296:11 sociodemographic 156:10 170:3,20 171:18 172:19 173:20 191:16 193:8 sociodemographics 146:8 socioeconomic 110:19 156:8 198:22 software 248:17 249:3 249:6 solo 256:13 solution 87:3 **solve** 101:15

somebody 64:19 102:15 186:21 208:5 208:7 254:5 somewhat 276:12 283:16 soon 17:4 sooner 96:8 sorry 15:10 19:5,15 34:2 39:21 49:6 81:6 101:18 108:4 126:14 131:20 173:1 190:21 198:16 203:3 215:13 219:16 222:6 223:22 246:12 254:11 255:6 272:20 276:2 303:20 sort 12:7 33:15,21 34:13 57:18 58:2 59:8 77:3 78:8 81:10 84:16 84:20 85:13 86:12 87:7 92:7 96:1 107:17 111:6 124:4 134:21 135:6 145:11,21 146:10 147:2 154:16 162:21 163:1,9,13,18 164:4,11 169:12,17 174:8 186:2 193:4 198:20 207:7 208:8 208:20 210:7,22 211:9 212:18 218:10 218:13,20 227:7 234:8 239:8,13 241:3 274:6,7 278:15,22 279:2,15 280:20 282:6.11 sorts 231:22 sought 44:8 sound 12:9 94:6 107:19 167:19 216:7 sounds 127:3 220:6 222:18 223:18 308:2 source 88:5 173:22 199:1 sources 225:10 Sox-Harris 2:13 22:8,9 69:4,8 88:2 100:22 142:2 space 102:7 107:4 174:8 speak 10:9,17 12:7 24:14 47:2 140:7 157:14 159:2 176:8 186:15 198:12 246:5 246:19 251:14 284:15 285:4 302:8 speakerphone 12:8 200:7,10 speaking 11:15,20 12:1 73:8 115:2 140:20

141:6 145:20 183:21 200:10 214:11 227:13 230:5 231:1,6 290:8 special 5:11 113:19 295:14 specialists 167:2 specially 96:3 specific 15:18 65:7 70:6 71:11 72:20 106:15 107:3 112:13 128:21 129:1 133:19 140:18,19 141:14 150:8 153:19 161:10 165:17 167:4 175:20 180:19 185:5 210:18 225:1 226:1,4,5,16 227:10 231:22 232:2 232:15 233:1,16 275:8,18 276:5 279:15 295:13 specifically 16:3,7,8 72:18 102:9 129:4 133:12 141:22 143:7 150:3 169:9 175:19 228:21 233:15 285:6 286:18 specification 126:12 127:3 specifications 38:18 49:19 50:21 105:1 127:13 207:12 specifics 33:18 specified 101:7 178:17 **spectrum** 112:19 125:4 287:13 288:3 spelled 210:6 spend 8:17 36:9 46:4 49:16 105:8 spending 25:18 214:8 226:10 227:20 228:4 228:14 229:1 233:12 spent 228:8 spirit 16:19 split 67:11 77:10 sponsor 180:10 sponsors 181:5 spot 271:18 307:5 spread 117:5 spring 1:9 5:7 26:10 30:19,22 40:12 206:8 spuriously 89:5 square 79:14 squeezing 307:14 stability 97:18 staff 3:1 7:9 10:11 17:2 32:13 37:22 60:10 92:15 100:9 160:8 202:4 223:6 247:7

248:4,6 274:5 staffing 49:20 stage 214:17 231:3 staged 264:2 288:12,17 289:1,4 stakeholder 285:7 286:10 295:11 296:3 stakeholders 6:18 39:14 105:21 285:13 stakes 233:18 stand 160:9 250:7 standalone 218:7 standard 66:22 68:9 75:18 95:19 111:6 116:7 118:17 191:21 224:21 227:1 237:5 279:21 280:12 282:8 standardized 102:12 103:6 239:21 240:1 243:10,15 257:10 277:18 281:19 304:10 304:21 standards 62:7,8 65:13 129:15 130:2 standing 4:13,15 32:20 32:22,22 33:7 37:2,10 37:17 38:6 40:3 50:17 135:11 148:16 149:1 149:11,12 155:6 160:2,15 161:2,18 162:9 164:19 167:3 201:3,17 202:11 204:21 205:21 218:16 219:16 220:5 221:19 222:8 241:8 250:9 278:19 standpoint 199:21 stands 151:17 star 44:21 99:15 103:7 241:21 242:13 246:6 308:16 star-1 196:8,10 242:5 staring 272:14 start 15:5 27:15 67:5 76:4 80:22 94:3 148:6 151:15 201:11 203:5 216:19 224:5 266:22 267:8 285:5 308:3 started 8:1 37:12 120:16 139:12 140:11 143:5 163:4 176:11 203:7,20 227:13 246:21 251:12 starting 28:2 33:7 36:14 75:4 122:14 202:2 257:9 starts 284:6 state 122:10

(202) 234-4433

stated 112:16,17,21 113:9 statement 6:18 124:8 statements 62:22 90:18 statistic 52:2 62:20 63:6 70:4 96:21 statistical 88:5,12 183:17 191:5 195:10 196:1 201:2 291:14 statistically 291:19 statistics 33:21 63:16 64:8,19 65:10 66:19 71:10,20 72:15 73:1 83:5 84:14 88:13 90:6 100:1 154:13 156:20 157:2 280:6 statistics-dependent 80:13 stats 41:7 status 78:15 150:21 198:22 statutory 180:11 stay 95:8 137:18 138:12 139:2,5,6 214:19 215:4 244:14,16,19 244:20 245:5.5 271:18 stays 253:16 steal 144:3 step 9:10 123:17 126:3 127:5 stepping 9:13 steps 93:6 95:15 96:2 **Stepwise** 171:2 stick 187:9 224:7 sticking 208:18 stiffness 272:5,6 stimulate 201:11 Stolpe 3:2 13:6 stop 73:3 stop-go 110:5 stopgap 39:9 Stoto 2:14 22:15,16 68:21 73:6 104:8 130:22 131:3 140:9 155:21 157:4 252:22 straighten 58:2 strategic 55:16 strategies 54:12 strategy 83:17 stratified 185:15,18 strength 52:9 183:8 stretch 9:4 strict 150:19 strictly 93:13 strong 105:17 269:17 stronger 171:16 strongly 168:6

struck 184:1 277:9,13 **structure** 101:14 struggle 91:14 110:15 **stuck** 299:17 studies 197:14 198:4 199:2 266:7 288:19 study 211:8 stuff 53:1 stylized 224:21 sub-bullet 48:3 subcommittee 221:18 222:15 241:9 subcriterion 48:22 **subgroup** 9:15 42:19 45:16 63:17 82:13 84:19 97:1 150:10 230:2,7 245:15,22 247:13,13 248:3,18 250:14,16,20,22 251:4,9 252:4 256:22 266:18 267:1 284:10 303:10,16 304:6 306:17 subgroups 28:22 42:20 43:4 subject 24:5 53:12 207:10 subjective 276:13 submission 46:16 155:14 160:22 214:2 270:18 283:7 302:3.4 submissions 175:13 201:14 203:1 207:2,3 276:8 submit 29:15 48:7 298:5 submitted 18:12 28:15 46:15 48:11 56:11 106:18 125:1 205:12 245:15 247:12 249:13 249:13 250:6 285:19 303:17 submitting 29:18 51:17 249:15 subsections 275:7 subsequent 150:13 subset 269:12 subsets 231:15 275:7 substantial 67:22 148:18 281:14 substantially 76:8 200:20 **subtopic** 224:14 succinct 191:2 sudden 76:6 sufficient 9:3 73:19 237:11 276:11 sufficiently 143:17

288:10 suggest 65:4 133:6 suggested 75:2 109:5 suggesting 58:12 59:6 suggestion 131:4 171:16,17 211:18 283:17 suggestions 108:18 suggests 67:16 156:10 264.1 suitable 125:17 126:3 127:5 summarize 10:19 61:14 95:13,22 206:16 247:10 256:21 284:9 summarized 160:1 summary 66:3 103:17 160:5 200:17 201:5 201:19,21 202:12 247:18 258:1 summer 232:4 summit 297:8 sums 190:4 supplier 23:21 supply 180:5,7 support 6:17 9:21 95:20 103:17 114:14 152:19 169:8 184:4 198:6 199:17 200:18 294:4 299:11 supported 28:7 123:14 123:15 198:8 290:13 296:16 supports 17:11 suppose 181:17 supposed 44:7 128:18 132:6 145:13 158:13 159:5,9 165:16 229:2 261:16 266:9 282:18 surgeon 287:15,21 surgeons 91:13 296:10 296:19 surgery 22:11 116:20 213:9,18 263:9.12 284:17 292:11 295:14 survey 35:5 48:15 73:15 273:4 286:1 surveys 174:1 295:8,15 295:22 299:15 Susan 2:19 24:6,7,9 suspect 74:15,18 79:5 158:17 suspicious 146:5 Suter 3:7 246:10 294:8 294:10,14 302:5,5 305:8,10 swapped 138:16 Sweden 288:20

335

Neal R. Gross and Co., Inc.

Washington DC

switching 34:21 74:22 288:8 290:10 293:22 test 42:6 52:15 71:20 68:10 73:4,6 74:10 systematic 61:5 208:12 295:3,6 296:7 72:1,2 82:6 97:14 76:14 82:10 69:16 94:9,19.21 208:14 210:12 216:16 296:13 11:10 141:21 197:6 245:21 249:4 96:10 104:7 105:41 207:12 220:21 systems 103:10 176:14 82:10 69:16 94:9,19.21 176:14 82:10 69:16 94:9,19.21 table 10.6 51:7 52:16 176:26 176:11.20 176:26 176:11.20 195:6,15 23:41:3 100:18 164:16 teleptone 24:121 testing 45:6,8 27:4,14 226:22 24:14 table 10.6 51:7 52:16 176:26 176:17.50 284:17:15 284:2 284:12 42:17.8 table 200:5 220:71 286:4 30:71 30:21 teleptone 24:121 426:14 76:11 48:4,6 tacks 10:71 225:73 286:4 30:71 30:21 116:3 141:9 14:31 242:14 242:20 24:16 13:49 talloring 24:17 225:13 teleptone 24:121 426:14 76:11 48:4,6 242:17.8 284:17:15 284:2 takes 28:13 22:14 teleptone 24:21 284:13:13 24:14:14:2 116:13 16:14:14:14:14:14:14:14:14:14:14:14:14:14:				530
system 103.8 1295.36 296.7 72:1,282:6 77:1,482:6 76:1482:10	switching 34:21 74:22	288.8 200.10 203.22	tost 12:6 52:15 71:20	68.10 73.4 6 74.10
254:21 technique 268:4 125:131:10 196:17 85:16 91:6 94:9,19.21 208:14 210:12 216:6 tee 0:11 1141:21 176:225:22 429:4 96:10 104.7 105:4 208:14 210:12 216:6 tee 0:131:13 test 77:8 170:119:15 122:11 127:2 220:1 tee 0:11 1141:21 test 77:8 170:21 19:20 254:7 14ble 10:6 51:7 52:16 176:26,62 73:41:3 test 95:12 259:11 150:2 157:4190:19 160:18 164:16 telephone 241:21 test 92:12 456:6 220:02 424:12 222:14:14 220:02 424:12 225:1 226:32:03:13 03:01:0 tagged 20:12 20:5:1 telephone 241:21 48:31:62 049:9:19 thard 276:19 theoretical 21:3:5 tagged 20:41:2 20:5:1 telephone 22:0 15:14 176:3 41:19 143:12 266:8 220:17 256:9 theoretical 21:3:5 116:13 14:19 04:31 temping 57:21 59:10 256:8 220:17 256:9 theoretical 21:3:5 115:5 12:70 10:715 11:15:25:12 temping 57:21 59:10 256:32:00 41:14:18 176:23:63:10 41:14:18 209:20 276:9:10 308:10 125:7 265:5 25:36:10 41:14:18 125:22:25:15 115:52:45:13 37:10 10:15:15:15 205:20 212:12:13 temoping 57:21 59:10				
systematic 61:5 208:2 tee 61:11 141:21 197:6 245:21 240:4 96:10 107:105:4 208:14 210:2 216:16 tee-up 204:16 251:9.19,20 254:7 110:11 119:15 122:11 217:2 220:21 teed 13:13 test-r7:8 127:21 130:17 131:18 systems 103:10 teedin 171:20 test-r6:82 259:1 136:20 147:41 447:13 T Teigland 2:15 22:20,21 test-r6:82 259:1 126:21 57:4 190:19 160:18 164:16 teelonf 0:12:02 tested 51:22 269:1 226:47:12 242:22 241:4 table 0:6 51:7 52:16 176:2.6 178:12:02 telephone 241:21 259:12 269:1 289:52 41:24 221:7.8 tagged 204:12 205:1 telephone 241:21 259:12 23:47:7.8 284:20 30:10 there 209:12 tagged 204:12 205:1 telephone 241:21 255:20 258:12,13 274:89,10 theoretical 21:35 tallored 23:6 23:41 178:4 216:21 255:20 258:12,13 274:89,10 theoretical 21:35 takeways 206:15 tempting 57:21 59:10 tempting 57:21 59:10 tenty 27:26:31 274:14,21 275:1 theoretical 21:35 takeways 206:15 tempting 57:21 59:10 tempting 57:21 59:10 tests 77:8,9,12,13 107:16 149:19:				
208:14 210:12 216:16 tee-up 204:16 251:9.19.20 254:7 110:11 191:5 12:21 177: 220:21 teed 13:31:3 teed 13:31:3 teed 13:31:3 100:11 21:52:20:21 teed 13:13:1 test-77:8 136:20 14:14:14:17:31:16 120:11 21:52:20:21 teed 13:13:1 test-77:8 136:20 14:14:14:14:13:15 120:11 21:55:20 176:2,6 178:11:20 testing 4:5,8 27:4,14 227:11 22:22:24:14 120:11 21:55:20 195:6,1 5 23:4:3 28:10 38:11:14:14:22 22:11:5:28:22:22:24:14 120:12 11:55:12 telephone 24:12:1 48:31:62:04:99:8;19 themes 20:11 120:12 11:7:25:32 26:4:30:71:30:8:21 98:10:12:78:11:8:24:24:17:58:21 theoretically 21:15 121:01 12:24:17 22:51:3 26:3:40:71:30:82:1 98:10:12:78:11:42:15 theoretically 21:15 123:47:10 20:31:6 111:5:137:91:43:19 27:41:42:175:1 theoretically 21:15 124:47:22:22:24:14 28:8:17:77.8,9;12:13 theoretically 21:15 theoretically 21:15 124:14:14:18:13:13:12:22:22:22:22:22:22:22:22:22:22:22:22:				
217:2 220:21 teed 13:33 test.retest 258:16 136:20 1414 147:13 systems 103:10 T teing 204:12 test.retest 258:16 136:20 1414 147:13 table 10:6 51:7 52:16 176:2.6 178:11.20 testing 45.6.8 27:4,14 227:11 229:22 241:4 table 90:5 table 90:5 teleconference 1:18 39:5 41:22 42:1,7 228:42 24:17, 22 24:14 table 90:5 telephonic 267:15 242:14 48:8 16:20 499:19 that'd 276:19 tagging 11:3 15 tempting 30:43 178:2.6 13:30:22 258:12 28:63 228:42 21:15 28:42 226:4.7, 22 23:1:2,14 178:42 16:21 255:20 258:13 20:22 157:4.89:71 theoretical 21:35 takeaways 206:15 tempting 57:21 59:10 258:12 30:14 30:41 theoretical 21:35 takeaways 206:15 tempting 57:21 59:10 tend 73:17 88:19 92:11 40:14 14:19 136:5 175:13 28:16 134:8 19 38:13 14:19 138:13 14:19 137:9 143:19 1257:265:5 tend 73:17 88:19 92:11 40:14 14:19 134:19 138:13 14:19 138:19 22:16 tend 73:17 88:19 92:01 43:04:1 126:21 14:14:2 134:8 19 38:13 14:19 111:5 137:9 143:19 178:20.20 14:3 187:148				
systems 103:10 testing 204:12 testing 4:56,8 27:4,14 150:21574 150:21574 testing 4:56,8 27:4,14 24:22:22:22:22:22:22:22:22:22:22:22:22:2		•		
Image: constraint of the section of the sec				
T Teigland 2:15 22:20.21 176:26 178:11,20 259:12 268:6 204:52 15:15,18 227:11 229:22 241:4 table 10:6 51:7 52:16 10:018 164:16 176:26 178:11,20 28:10 38:11,14,14,22 227:11 229:22 241:4 tables 90:5 telephone 241:21 39:5 41:22 42:1,78 28:42 30:81 30:10 that 29:22 241:4 tagged 204:12 205:1 telephone 241:21 48:10 40:49.91.91 that 27:17 52:10 that 28:10 30:10 tailoring 224:17 225:1 telephone 267:15 206:8 220:17 256:9 theme 209:12 theme 209:12 tailoring 224:17 225:1 178:16:21 25:5:0 268:12,13 274:38,910 there 209:12 theme 209:12 224:7,10 20:3 178:42 16:14:24 255:82 208:13 30:22 28:12,13 274:38,910 there 209:12 234:7,10 240:3 tempting 57:21 59:10 285:8 290:14 30:11 there 209:12 there 209:12 234:7:10 220:17 276:9:10 308:10 125:7 266:5 text 102:19.92 78:14 41:18 134:19 138:13 141:9 111:5 137:9 143:19 125:7 265:5 tend 73:17 86:19 92:3 178:20.20 14:3 107:16 14:21 128:3 134:19 138:13 141:9 125:27 66:5 24:20 24:11 136:17 16:5:19 17	systems 103:10			
table 10:6 51:7 52:16 trif62:6 178:11,20 testing 45:66,27:4,14 227:11 229:22 241:4 160:18 164:16 195:6,15 234:13 39:5 41:22 42:17,8 258:427:15 284:2 tables 90:5 teleconference 1:18 39:5 41:22 42:17,8 258:427:15 284:2 tagging 113:15 telephonic 267:15 9:8 8106:12,18 114:2 18:46:40:499:19 tallored 23:6 23:11 telephonic 267:15 9:8 8106:12,18 114:2 18:esting 45:60,27:4,14 226:4,72:22 31:2,14 telephonic 267:15 9:8 8106:12,18 114:2 18:esting 45:60,27:4,14 226:4,72:22 31:2,14 telephonic 267:15 9:8 8106:12,18 114:2 18:esting 45:60,27:4,18 226:4,72:22 31:2,14 telephonic 57:15 9:8 8106:12,18 114:2 18:esting 45:60,27:4,18 226:4,72:22 31:2,14 teng 11:22 01:5:14 testing 45:60,27:4,18 11:5:137:65:69 226:20 tempting 57:21 59:10 testing 45:60,27:4,22:15 theores 44:15 taken 60:15 228:7 teng 11:12 2 17:5:20 20:14:3 11:5:137:143:14 134:19 18:12 19:22 13:21 tending 111:22 17:15:20 20:14:3 12:15:14:12:12 134:19 14:21 18:12 19:22 19:15:14 tending 11:12:2 <td< td=""><td>Т — т</td><td></td><td></td><td></td></td<>	Т — т			
62:9 67.7 159:20 195:6 15 234:13 28:10 38:11 14,14,22 242:20 24:418 256:16 160:18 164:16 teleconference 1:18 195:6 15 234:13 28:10 38:11 14,14,22 224:20 24:418 256:16 tagged 204:12 205:1 telephone 241:21 45:21 47:6,11 48:4,6 244:20 308:1 309:10 tagged 204:12 205:1 telephonic 267:15 28:8 106:12,18 114:2 themes 200:12 tailoring 224:17 225:13 telephonic 267:15 28:8 106:12,18 114:2 themes 200:12 244:12 235:1 tell 34:13 102:20 255:14 116:3 141:19 143:12 theoretical 213:5 taken 60:15 228:7 tell 34:31 302:22 258:12,13 274:8,9,10 theoretical 213:5 taken 60:15 228:7 tem 29:1 32:16 134:9 225:7 268:5 51:15 52:4 54:13 58:7 takes 35:18,20 83:18 ten 79:1 78:61:9 29:10 tests 77:8 91:71 51 25:5 51:15 52:4 54:13 58:7 134:19 138:13 141:9 115:13 78:14 31:19 179:20 201:20 78:14 81:19 87:19 179:20 215:28 51:15 52:4 54:13 58:7 148:8:15 21:13 tend 73:17 88:19 21:20 tests 77:31 97:15 125:5 51:15 52:4 54:13 58:7 148:8:15 21:13 111:15 168:22 117:20 20:12 152:8 168:14:12 148:1				
160:18 telephone 242:14 39:5 41:22 27:7 28:42 27:11:5 28:42 20:11:5 tackling 7:5 242:14 45:21 47:61:14 28:42 30:10 tagging 11:15 242:14 45:21 47:61:14 48:8,16:20 49:8,19 tailored 233:6 23:41 tell 34:13 122:22 28:81:3 30:22 28:81:20:12,13 27:41:42 theme 20:12 theme 20:12 theme 20:12 theme 20:12 theoretical 21:35 theoretical 21:37 theoretical 21:35 theoretical 21:37 theoretical 21:37 theoretical 21:37:45 theor				
tables 90:5 telephone 241:21 45:21 47:6,11 48:4.6 242:03:08:13:09:10 tagged 204:12 205:1 242:14 48:8,16;20 49:9;19 that'd 276:19 tagged 204:12 205:1 268:4 307:13:08:21 98:106:12,18:114:2 themes 20:12 tailored 23:5 tell 34:13:12:20:15:14 116:3:14'1:19:143:12 theoretical 213:5 226:4,7.22 231:2,14 255:22 28:13:30:22 258:12:13:27:48;4.11:9:143:14 theoretical 213:5 taken 60:15 228:7 tempting 57:21 59:10 tests 73:19 97:15 125:5 26:23:24:64:13:58:7 takes 02:15 tem 79:13:21:6 13:49 tests 73:19 97:15 125:8 66:41:26:71:07:15 takes 02:16 228:7 ten 79:13:77:86:19 92:3 179:20 281:20 78:14 81:19 87:19 105:8 130:20 133:16 111:15 137:9 143:19 114:21 128:3 136:17 14:11:21 136:17 14:11:21 134:19 138:13 14:19 158:8 188:19 21:21:6 179:20 281:20 78:14 81:19 87:19 134:19 138:13 14:19 158:8 188:19 21:20:1 179:20 281:20 78:14 81:19 87:19 134:19 138:13 14:19 158:19 130:11 158:18 62:1 171:15 171:15 134:19 138:13 14:19 158:8 139:11				
tacking 7:5 24:14 48:8.16.20.49:9.19 thard 276:19 tagged 204:12 205:11 telephonic 267:15 51:7 70:6 73:18 98:7 therme 209:12 236:234:1 tell 34:13 122:20 155:14 116:3 141:19 143:12 therme 209:12 226:4,7,22 231:2,14 255:22 288:13 302:22 258:12,13 274:8,9,10 theoretical 213:5 234:7,10 240:3 tem j97:12 51:10 tests 73:19 97:15 125:5 theoretical 213:5 takeaways 206:15 ten 29:1 132:16 134:9 256:22 288:13 300:22 258:12,13 274:8,9,10 theoretical 213:5 290:20 takes 59:18,20 83:18 ten 29:1 73:9 143:10 128:5 290:14 304:12 therays 182:7 105:8 130:20 133:16 ten 73:7 78:19 92:3 171:5 177:15 775.8,9,12,13 71:8 12:0 51:15 55:24 54:13 58:7 147:8 156:3 175:13 21:20 THA 304:12 99:14 104:22 107:16 51:14 181:7 148:11 136:11 186:22 193:4 tendercy 226:3 18:2,6,8,13,15,20,22 13:11:14 18:12 13:11:14 18:12 147:8 156:20 98:14 tending 111:22 19:16,17 20:6,11 21:3 13:6:17 14:4:5 149:1 13:6:17 14:4:5 149:1 136:17 135:5,12 tending 21:22 21:11:16:16:				
tagged 204:12 205:1 telephonic 267:15 51:7 70:6 73:18 98:7 theme 209:12 tagging 113:15 268:4 307:1 308:21 98:8 106:12,18 114:2 themes 80:11 tailored 233:6 234:1 tell 34:13 12:20 155:14 116:3 141:19 143:12 themes 80:11 226:4,7,22 231:2,14 255:22 288:13 302:22 258:12,13 274:84,910 theoretically 211:5 taken 60:15 228:7 telling 304:3 274:14,21 275:1 theoretically 211:5 taken 60:15 228:7 tenyear 297:20 300:7 text 102:19,22 152:8 66:4,12 67:10 77:15 tak 59:18,20 83:18 ten/s 77:86:19 92:3 theode 57:7.86,912,13 theode 57:7.86,912,13 134:19 138:13 141:9 115:8 73:20,20 tende 57:7.86,912,13 tende 57:7.86,912,13 147:8 156:3 175:13 21:2:0 71:5 8:20,20 14:3 128:9 131:14 135:14 134:19 136:21 193:4 tende 57:7.86,912,13 tende 57:7.86,912,13 167:14 14:17:14:14:19 147:8 156:3 175:13 21:2:0 22:14:17:14 12:13 167:14 14:12:23 167:14 14:12:12 136:17 165:20 98:14 tending 11:12 19:6:6,22:7:16 26:7.3 167:14 18:17 18:4:14 167:14 18:17 18:4:14 136:19 166:3 <td></td> <td></td> <td></td> <td></td>				
tailored 233:6 234:1 tell 34:13 122:20 155:14 98:8 106:12,18 114:2 themes 80:11 tailoring 224:17 225:13 178:4 216:21 255:20 206:8 220:17 266:9 theoretical 213:5 236:7,10 240:3 telling 304:3 274:14,21 275:1 theoretical 213:5 takeaways 206:15 tempting 57:21 59:10 285:8 290:14 304:1 theoretical 213:5 takeaways 206:15 tempyear 297:20 300:7 text 102:19,22 152:8 51:15 52:4 54:13 58:7 tak 8:6 59:18,20 83:18 ten-year 297:20 300:7 text 102:19,22 152:8 51:15 52:4 54:13 58:7 105:8 130:20 133:16 ten-year 297:20 300:7 text 102:19,22 152:8 71:92 281:20 134:8 19 85:130:20 133:16 tendncy 226:3 179:20 281:20 78:14 481:19 87:19 134:19 138:13 141:9 158:8 188:19 212:20 THA 304:12 99:14 104:22 107:16 134:19 122 tending 11:122 19:16,17 20:6,11 21:3 136:17 144:5 149:1 148:21 286:27:16 267:7 tending 11:122 19:16,17 20:6,11 21:3 136:17 144:5 149:17 135:16 22:4 75:15 83:4 tending 29:2 101:17 108:11 19:16 203:3 207:5,20 136:17 144:14:18:7 184:1 18:16 24:75:15 83:4				
tailored 233:6 234:1 tell 34:13 122:20 155:14 116:3 141:19 143:12 theoretical 213:5 tailoring 224:17 225:13 226:47,22 231:2,14 78:4 216:21 225:20 26:8:12,13 274:8,9,10 theoretical 213:5 226:47,10 240:3 telling 304:3 274:14,21 275:1 276:9,10 308:10 taker 60:15 228:7 276:9,10 308:10 taker 60:15 228:7 theoretical 21:25:8 66:4,12 67:10 77:15 200:20 276:9,10 308:10 teny 277:20300.7 tenty 132:17 86:19 92:3 179:20 281:20 78:14 81:19 87:19 105:8 130:20 133:16 111:5 137:9 143:19 111:5 137:9 143:19 179:20 281:20 78:14 81:19 87:19 147:8 156:3 176:13 212:20 71:5 8:20,20 14:3 128:7 144:21 107:16 114:21 128:3 147:8 156:3 176:13 212:20 71:15 8:20,20 14:3 136:17 144:51 149:1 181:11 195:16 822:12 tendney 226:3 182:6,813,15,20,22 136:17 144:51 149:1 190:11 tensis 02:7 tensis 02:7 23:27, 74:6,11 22:3 166:14 187:4 190:12 tendey 22:09:2 21:12,18 22:7,14:19 20:31 20:5,20 20:31 20:2,20 214ked 75:20 98:14 tensis 02:17 35:16 1				
tailoring 224:17 225:13 178:4 216:21 255:20 206:8 220:17 256:9 theoretically 211:5 226:4,7,22 231:2,14 255:22 286:13 302:22 258:12,13 274:8,9,10 theoretically 211:5 takeaways 206:15 tempting 57:21 59:10 tess 73:19 97:15 125:5 51:15 52:4 54:13 58:7 290:20 276:9,10 308:10 125:7 265:5 51:15 52:4 54:13 58:7 takes 228:15 ten-year 297:20 300:7 test 73:19 97:15 125:5 51:15 52:4 54:13 58:7 taks 59:18,20 83:18 111:5 137:9 143:19 178:20 281:20 78:14 81:19 87:19 105:8 130:20 133:16 111:5 137:9 143:19 THA 304:12 99:14 104:22 107:16 134:19 138:13 141:9 158:8 188:19 212:16 thask 55:77,8,9,12,13 100:716 114:21 128:3 131:21 186:22 193:4 tending 111:22 19:16,17 20:6,11 21:3 105:3 151:8 156:22 277:14 278:11 307:10 tension 82:5 23:2,3,7 24:6,11,22 161:15 166:16 167:4 19:16,17 20:6,11 21:3 150:3 151:8 156:22 10:17 108:1 119:16 200:3:13 207:5,20 309:11 tension 82:5 23:2,3,7 24:6,11,22 161:15 166:16 167:4 19:16 107 20:9 8:14 tents 10:7 76:13 81:14 82:12				
2264.7,22 231:2,14 255:22 288:13 302:22 258:12,13 274:8,9,10 theories 44:15 234:7,10 240:3 telling 304:3 274:14,21 275:1 therapy 182:7 takeaways 206:15 tempting 57:21 59:10 285:82 30:14 304:1 therapy 182:7 290:20 276:9,10 308:10 tests 73:19 97:15 125:5 262:23 8:10 41:14,18 290:20 276:9,10 308:10 tests 73:19 97:15 125:5 66:4,12 67:10 77:15 takes 29:18,20 83:18 tend 73:17 86:19 92:3 179:20 281:20 78:14 81:19 87:19 105:8 130:20 133:16 111:5 137:9 143:19 THA 304:12 99:14 104:22 107:16 134:19 138:13 141:9 158:8 188:19 92:23 179:20 281:20 78:14 81:19 87:19 134:19 138:13 141:9 158:8 188:19 21:20 THA 304:12 99:14 104:22 107:16 147:8 156:3 175:13 212:20 179:20 281:20 78:14 81:19 87:19 139:16 227:16 287:7 tends 32:2 21:12,18 22:7,14,19 156:515:15 274:14 276:11 307:10 tends 32:2 21:12,12 42:7,14,19 156:516:16 130:11 tends 09:17 34:20 45:4 66:2 73:3 167:14 181:7 184:1 108:17 135:5,12				
234:7,10 240:3 telling 304:3 274:14,21 275:1 therapy 182:7 taken 60:15 228:7 276:9,10 308:10 285:8 290:14 304:1 thing 5:16 9:9 19:16 taken 60:15 228:7 276:9,10 308:10 test 73:19 97:15 125:5 26:3 20:14 304:1 takes 228:15 ten-year 297:20 300:7 text 102:19,22 152:8 66:4,12 67:10 77:15 take 85:18,20 83:18 111:5 137:9 143:19 158:8 188:19 212:16 text 102:19,22 152:8 66:4,12 67:10 77:15 134:19 138:13 141:9 158:8 188:19 212:16 tendency 226:3 text 102:19,22 152:8 107:16 114:21 128:3 147:8 156:3 175:13 212:20 7:15 8:20,20 14:3 102:19 13:14 135:14 142:1 128:3 195:16 227:16 267:7 tending 311:22 19:16,17 20:6,11 21:3 150:3 151:8 156:22 274:14 278:11 307:10 tension 82:5 23:2,3,7 24:6,11,22 16:15 166:16 167:4 108:17 135:5,12 tension 82:5 23:2,3,7 24:6,11,22 16:15 166:16 167:4 128:18 245:15 526:5 294:5 299:2 101:17 108:11 19:16 208:2,21 21:11 108:12 425:4:15 286:5 294:5 299:2 101:17 108:11 19:16 208:2,21 21:11 128:16 24:7 55:18:3<				
takeaways 206:15 tempfing 57:21 59:10 285:8 290:14 304:11 things 5:16 9:9 19:16 290:20 276:9,10 308:10 125:7 265:5 5:115 52:4 54:13 58:7 takes 228:15 ten-year 297:20 300:7 text 102:19,22 152:8 66:4,12 67:10 77:15 138:8 59:18,20 83:18 tend 73:17 86:19 92:3 179:20 281:20 78:14 81:19 87:19 105:8 130:20 133:16 111:5 137:9 143:19 THA 304:12 99:14 104:22 107:16 134:19 138:13 141:9 158:8 188:19 212:16 thank 5:5 7:7,8,9,12,13 107:16 114:21 128:3 147:8 156:3 175:13 212:20 7:15 8:20,20 14:3 128:9 131:14 135:14 181:21 186:22 193:4 tendency 226:3 18:2,68,13,15,20,22 136:17 144:5 149:1 195:16 227:16 267:7 tending 111:22 19:16,17 20:6,11 21:3 150:3 151:8 156:22 274:14 278:11 307:10 tents 10:7 34:20 45:4 66:2 73:3 167:14 181:7 184:1 108:17 135:5,12 tents 10:7 34:20 45:4 66:2 73:3 167:14 181:7 184:1 108:17 135:5,12 tents 10:7 34:20 45:4 66:2 73:3 167:14 181:7 184:1 108:17 135:5,12 tents 10:7 34:20 45:4 66:2 73:3 167:14 181:7 184:1				
taken 60:15 228:7ten 29:1 132:16 134:9tests 73:19 97:15 125:526:2 36:10 41:14,18290:20276:9,10 308:10125:7 265:551:15 52:4 54:13 58:7takes 228:15ten-73:17 86:19 92:3179:20 281:2078:14 81:19 87:19105:8 130:20 133:16111:5 137:9 143:19THA 304:1299:14 104:22 107:16134:19 138:13 14!)158:8 188:19 212:16thak 5:5 77.8,9,12,13107:16 114:21 128:3147:8 156:3 175:13212:20715 8:20,20 14:3128:9 131:14 135:14181:21 186:22 193:4tendency 226:318:2,6,8,13,15,20,22136:17 144:5 149:1195:16 227:16 267:7tending 111:2219:16,17 20:6,11 21:3150:3 151:8 156:2274:14 278:11 307:10tendis 32:221:12,18 22:7,14,19158:5 159:15,19309:11tension 82:523:2,3 7 24:6,11,22161:15 166:16 167:4108:17 135:5,12tenuous 83:1776:13 81:14 82:12187:11 188:2 202:1151:9 169:3TEP 269:6,22 285:2084:15 87:5 96:6 98:19203:13 207:5,20286:5 294:5 299:2101:17 108:11 19:16208:2,21 21:1:1208:20 21:2,22158:7 165:19 183:15262:13 276:21147:5 165:11 67:31268:14 217:21206:20 212:12,22160:14 170:6 171:20128:1 33:91 37:10228:15 283:15 284:20206:20 212:12,2291:14 95:19 167:11268:14 277:20,22278:15 283:15 284:20158:16 62:21118:77 19 67:19 177:11246:12 200:16 20:21269:17 23:22206:20 212:12,2291:14 95:19 17:20278:15 283:15 284:20299:11,15 30:61:82158:16 62:2091:1				
290:20276:9,10 308:10125:7 265:551:15 52:4 54:13 58:7take 8: 85:18,20 83:18ten-year 297:20 300:7text 102:19,22 152:866:4,12 67:10 77:15talk 8: 85:18,20 83:18111:5 137:9 143:19T19-20 281:2078:14 81:19 87:19105:8 130:20 133:16111:5 137:9 143:19THA 304:1299:14 104:22 107:16134:19 138:13 141:9158:8 188:19 212:16thank 5:5 7:7,8,9,12,13107:16 114:21 128:3147:8 166:3 175:13212:20THA 304:1299:14 104:22 107:16195:16 227:16 267:7tendency 226:318:2,6,8,13,15,20,22136:17 144:5 149:1195:16 227:16 267:7tending 11:2221:12,18 22:7,14,19158:5 159:15,19309:11tension 82:523:2,3,7 24:6,11,22161:15 166:16 167:4108:17 135:5,12tension 82:523:2,3,7 24:6,11,22167:14 481:7 184:1108:17 135:5,12tension 82:523:2,3,7 24:6,11,22167:14 181:7 184:1108:17 135:5,12tension 82:523:2,3,7 24:6,11,22167:14 181:7 184:1108:17 135:5,12tension 92:520:6,5 29:45 299:2101:17 108:1 119:1620:8:2,21 211:11118:37:10 107:9 152:15106:22 111:7 262:1136:16 30:167:11246:1 260:8 261:16206:20 21:21:22term 30:91 36:42178:14 96:8,11266:14 277:20,22266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:202111 22:12:22192:16 194:7 199:13245:3,5 248:15118:15 199:172266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20266:291:14 95:14				
takes 228:15ten-year 297:20 300:7text 102:19,22 152:866:4,12 67:10 77:15talk 8:8 59:18,20 83:18tend 73:17 86:19 92:3179:20 281:2078:14 81:19 87:19105:8 130:20 133:16111:5 137:9 143:19158:8 188:19 212:16179:20 281:2078:14 81:19 87:19134:19 138:13 141:9158:8 188:19 212:16thank 5:5 7:7,8,9,12,13107:16 114:21 128:3147:8 156:3 175:13212:2071:5 8:20,20 14:3128:9 131:14 135:14181:21 186:22 193:4tendency 226:318:2,6,8,13,15,20,22136:17 144:5 149:1195:16 227:16 267:7tending 111:2219:16,17 20:6,11 21:3150:3 151:8 156:22274:14 278:11 307:10tends 92:221:12,18 22:7,14,19158:5 159:15,19108:17 135:5,12tenuous 83:1776:13 81:14 82:12167:14 181:7 184:1108:17 135:5,12tenuous 83:1776:13 81:14 82:12187:11 188:2 202:1151:9 169:3TEP 269:6,22 285:2084:15 87:5 96:6 98:19203:13 207:5,201alking 34:2 54:15286:5 294:5 299:2101:17 108:1 119:16208:2,2 121:1:158:18 62:4 75:15 83:4term 35:9,19 78:16128:1 133:9 136:13215:8 216:14 217:1183:7,10 107:9 152:15108:22 111:7 262:11136:19 140:4 141:4226:14 239:9 240:19266:273:18 74:22 85:9193:20 194:15 188:10208:12 204:19266:273:18 74:22 85:9193:20 194:15 188:10206:16 4277:0,22266:273:18 74:22 85:9193:20 194:15 188:10206:16 4277:0,22266:291:14 95:14 127:6198:10 202:12 204:6290:17 292:8 299:8				
talk 8:8 59:18,20 83:18 tend 73:17 86:19 92:3 179:20 281:20 78:14 81:19 87:19 105:8 130:20 133:16 111:5 137:9 143:19 147:8 156:3 175:13 212:20 THA 304:12 99:14 104:22 107:16 134:19 138:13 141:9 158:8 188:19 212:16 thank 5:5 7:7, 8,9;12,13 107:16 114:21 128:3 128:9 131:14 135:14 181:21 186:22 193:4 tendency 226:3 18:2,6,8,13,15,20,22 136:17 144:5 149:1 195:16 127:14 128:3 128:9 131:14 135:14 195:16 227:16 267:7 tendid \$2:2 21:12,18 22:7,14,19 158:5 159:15,19 309:11 tends \$2:2 21:12,18 22:7,14,19 158:5 159:15,19 309:11 tends \$2:2 23:2,3,7 24:6,11,22 161:15 166:16 167:4 188:2 002:1 187:19 180:3 178:14 81:19 87:19 151:9 169:3 TEP 269:6,22 285:20 84:15 87:5 96:6 98:19 203:13 207:5,20 181:14 82:12 187:11 188:2 002:1 141:7 151:19 183:15 262:13 276:21 147:5 165:1 167:11 246:12 40:24 29:9 240:19 266:2 73:18 74:22 85:9 193:20 194:15 198:11 268:14 277:20,22 266:2 73:18 74:22 85:9 193:20 194:15 198:11 268:14 277:20,22 276:16 194:17 199:13				
105:8 130:20 133:16111:5 137:9 143:19THA 304:1299:14 104:22 107:16134:19 138:13 141:9158:8 188:19 212:16thank 5:5 7:7,8,9,12,13107:16 114:21 128:3147:8 156:3 175:13212:20tradency 226:318:2,6,8,13,15,20,22136:17 144:5 149:1195:16 227:16 267:7tending 111:2219:16,17 20:6,11 21:3156:3 155:19274:14 278:11 307:10tending 111:2219:16,17 20:6,11 21:3150:3 151:8 156:22274:14 278:10 307:10tends 32:221:12,18 22:7,14,19158:5 159:15,19309:11tension 82:523:2,37 24:6,11,22161:15 166:16 167:4talked 75:20 98:14tents 10:734:20 45:4 66:2 73:3167:14 181:7 184:1108:17 135:5,12tenuous 83:1776:13 81:14 82:12187:11 188:2 202:1151:9 169:3TEP 269:6,22 285:2084:15 87:5 96:6 98:19203:13 207:5,20talking 34:2 54:15286:5 294:5 299:2101:17 108:1 119:16208:2,21 211:1158:18 62:4 75:15 83:4term 35:9,19 78:16128:1 133:9 136:13215:8 216:14 217:1126:20 212:12,22terms 30:21 35:2,11169:20 173:3 174:10226:14 239:9 240:19266:273:18 74:22 85:9193:20 194:15 198:10276:15 283:15 284:20266:273:18 74:22 85:9193:20 194:15 198:10276:15 283:15 284:20266:273:18 74:22 85:9193:20 194:15 198:10276:15 283:15 284:2018k 37:20 63:291:14 95:14 127:6198:10 202:12 206:6290:17 292:8 299:8talked 43:20160:14 170:6 171:20217:3 234:11 236:3299:11,15 306:18,21				
134:19 138:13 141:9158:8 188:19 212:16thank 5:5 7:7,8,9,12,13107:16 114:21 128:3147:8 156:3 175:13212:207:15 8:20,20 14:3128:9 131:14 135:14181:21 186:22 193:4tendency 226:318:2,6,8,13,15,20,22136:17 144:5 149:1195:16 227:16 267:7tending 111:2219:16,17 20:6,11 21:3150:3 151:8 156:22274:14 278:11 307:10tension 82:523:2,3,7 24:6,11,22161:15 166:16 167:4108:17 135:5,12tenuous 83:1776:13 81:14 82:12187:14 181:7 184:1108:17 135:5,12term 35:9,19 78:16128:11 33:9 136:13215:8 216:14 217:11156:7 165:19 183:15262:13 276:21136:19 140:4 141:4226:14 239:9 240:19256:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:2021angential 174:9172:13,14 184:17245:22 242:4,17260:22266:291:14 95:14 127:6198:10 202:12 204:6299:11,15 306:18,2121angential 174:9172:13,14 184:17245:22				
147:8 156:3 175:13212:207:15 8:20,20 14:3128:9 131:14 135:14181:21 186:22 193:4tendency 226:318:2,6,8,13,15,20,22136:17 144:5 149:1195:16 227:16 267:7tending 111:2219:16,17 20:6,11 21:3150:3 151:8 156:22274:14 278:11 307:10tension 82:523:2,3,7 24:6,11,22161:15 166:16 167:4309:11tension 82:523:2,3,7 24:6,11,22161:15 166:16 167:4108:17 135:5,12tenuous 83:1776:13 81:14 82:12187:11 188: 202:1151:9 169:3TEP 269:6,22 285:2084:15 87:5 96:6 98:19203:13 207:5,20talking 34:2 54:15286:5 294:5 299:2101:17 108:11 19:16208:2,21 211:1158:18 62:4 75:15 83:4term 35:9,19 78:16128:1 133:9 136:13215:8 216:14 217:1158:7 165:19 183:15262:13 276:21147:5 165:1 167:11246:1 260:8 261:16206:20 212:12,22terms 30:21 35:2,11158:10 202:12 3174:10262:7,10,14,14217:12 218:22 23:641:4 57:19 67:4 72:19178:19 186:8,11268:14 277:20,22talks 37:20 63:291:14 95:14 127:6198:10 202:12 204:6290:17 292:8 299:8talied 43:20160:14 170:6 171:20217:3 234:11 236:3299:11,15 306:18,21tangential 174:9172:13,14 184:17245:3,5 248:1518:16 19:13 245:12targets 79:4212:5 20:5:1 212:6:17255:16 256:4,7thor 176:11task 27:14 123:18217:11 228:1 238:17256:16 256:4,7thorough 153:2229:19 13:5,14 14:10307:9294:14,15 298:1118:16 19:13 245:1212:19 13:5,14 14:10				
181:21 186:22 193:4 195:16 227:16 267:7 274:14 278:11 307:10 309:11tendency 226:3 tending 111:22 tends 32:2 tending 32:2 tending 30:1118:2,6,8,13,15,20,22 19:16,17 20:6,11 21:3 19:16,17 20:6,11 21:3 				
195:16 227:16 267:7 274:14 278:11 307:10tending 111:22 tends 32:219:16,17 20:6,11 21:3 21:12,18 22:7,14,19150:3 151:8 156:22 151:8 156:15 19:15,19309:11 alked 75:20 98:14 talked 75:20 98:14 tens 10:7 tenuous 83:17 TEP 269:6,22 285:20 286:5 294:5 299:2 286:5 294:5 299:2 203:13 207:5,20 talking 34:2 54:15 286:5 294:5 299:2 286:5 294:5 299:2 286:5 294:5 299:2 203:13 207:5,20 talking 34:2 54:15 286:5 294:5 299:2 203:13 207:5,20 talking 34:2 54:15 286:2 11:7 262:11 108:22 11:7 262:11 108:22 11:7 262:11 108:22 11:7 262:11 108:22 11:7 262:11 108:22 11:7 262:11 136:19 140:4 141:4 226:14 239:9 240:19 226:14 239:9 240:19 227:13 234:11 236:13 229:11,15 306:18,21 236:22 255:8,13,14 245:12 245:41 230:3 299:11,15 306:18,21 299:11,15 306:18,21 299:11,15 306:18,21 299:11,15 306:18,21 299:11,15 306:18,21 299:11,15 306:18,21 299:11,15 306:18,21 299:11,15 306:18,21 299:11,15 306:18,21 299:11,21 209:12 12:17 23:7,16 287:16 287:12				
274:14 278:11 307:10 309:11tends 32:2 tension 82:521:12,18 22:7,14,19 23:2,3,7 24:6,11,22158:5 159:15,19 161:15 166:16 167:4talked 75:20 98:14 to 08:17 135:5,12 151:9 169:3tents 10:7 tenson 83:1734:20 45:4 66:2 73:3 76:13 81:14 82:12167:14 181:7 184:1 187:11 188:2 202:1talking 34:2 54:15 58:18 62:4 75:15 83:4 tast,7 10 07:9 152:15 266:2 213:27 165:19 183:15 262:13 276:21TEP 269:6,22 285:20 286:5 294:5 299:284:15 87:5 96:6 98:19 101:17 108:1 119:16 128:1 133:9 136:13 215:8 216:14 217:11 246:12 260:8 261:16203:13 207:5,20 203:13 207:5,20talking 34:2 54:15 58:18 62:4 75:15 83:4 tast,7 10 07:9 152:15 262:13 276:21108:22 111:7 262:11 136:19 140:4 141:4 266:14 239:9 240:19203:13 207:5,20 203:13 207:5,20talking 34:2 54:12 266:2 266:2term 35:9,19 78:16 262:13 276:21128:1 133:9 136:13 168:22 111:7 262:11 136:19 140:4 141:4 246:1 260:8 261:16206:20 212:12,22 266:2 266:2term 30:21 35:2,11 73:18 74:22 85:9 193:20 194:15 198:10 198:10 202:12 204:6 290:17 292:8 299:8203:13 207:5,20 216:14 237:9tallied 43:20 talks 37:20 63:2 tallied 43:20160:14 170:6 171:20 12:14 92:14 127:6198:10 202:12 204:6 290:17 292:8 299:8299:11,15 306:18,21 306:2tangential 174:9 12:25 215:21 216:17 22:52 15:21 216:17 22:52 15:21 216:17 22:52 12:52:12 22:57:8,13,1418:15 119:13 245:12 118:15 119:13 245:12tangential 77:9 12:12 207:14 245:18217:11 228:12 36:17 285:21 288:14 299:3 284:21 285:2,3299:11,15 306:18,21 299:21 255:16 256:4,7 287:1618:15 2287:4 284:12 285:2,3299:11 29				
309:11tension 82:523:2,3,7 24:6,11,22161:15 166:16 167:4talked 75:20 98:14tents 10:734:20 45:4 66:2 73:3167:14 181:7 184:1108:17 135:5,12tenuous 83:1776:13 81:14 82:12187:11 188:2 202:1151:9 169:3TEP 269:6,22 285:2084:15 87:5 96:6 98:19203:13 207:5,20talking 34:2 54:15286:5 294:5 299:2101:17 108:1 119:16208:2,21 211:158:18 62:4 75:15 83:4term 35:9,19 78:16128:1 133:9 136:13215:8 216:14 217:1183:7,10 107:9 152:15108:22 111:7 262:11136:19 140:4 141:4226:14 239:9 240:19266:2 0 212:12,22terms 30:21 35:2,11169:20 173:3 174:10262:7,10,14,14217:12 218:22 232:641:4 57:19 67:4 72:19178:19 186:8,11268:14 277:20,22266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20talks 37:20 63:291:14 95:14 127:6198:10 202:12 204:6290:17 292:8 299:8talled 43:20160:14 170:6 171:20217:3 23:13 245:12299:11,15 306:18,21tangential 174:9172:13,14 184:17241:22 242:4,17306:22tangettal 174:9172:13,14 184:17245:35 248:15third 75:19 117:11tape 200:9201:2 209:16 211:1255:15 252:18 253:4118:15 119:13 245:12targets 79:4217:5 285:6273:22 276:22 277:1thorough 153:22team 7:12 9:20 12:15285:12 281:12 73:5 285:6273:22 276:22 277:1thorough 153:2212:19 13:5,14 14:10307:9294:14,15 298:11304:5,8,18 309:2308:6terrific 66:15 280:2 <td></td> <td>-</td> <td></td> <td></td>		-		
talked 75:20 98:14tents 10:734:20 45:4 66:2 73:3167:14 181:7 184:1108:17 135:5,12tenuous 83:1776:13 81:14 82:12187:11 188:2 202:1151:9 169:3TEP 269:6,22 285:2084:15 87:5 96:6 98:19203:13 207:5,20talking 34:2 54:15286:5 294:5 299:2101:17 108:1 119:16208:2,21 211:1158:18 62:4 75:15 83:4term 35:9,19 78:16128:1 133:9 136:13215:8 216:14 217:1183:7,10 107:9 152:15108:22 111:7 262:11136:19 140:4 141:4226:14 239:9 240:19156:7 165:19 183:15262:13 276:21147:5 165:1 167:11246:1 260:8 261:16206:20 212:12,22terms 30:21 35:2,11169:20 173:3 174:10262:7,10,14,14217:12 218:22 232:641:4 57:19 67:4 72:19178:19 186:8,11268:14 277:20,22266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:202allied 43:20160:14 170:6 171:20177:3 234:11 236:3299:11,15 306:18,21tangential 174:9172:13,14 184:17241:22 242:4,17306:22targets 79:4212:5 215:21 216:17253:12 255:8,13,14118:15 119:13 245:12targets 79:4212:5 215:21 216:17253:22 257:8,13,14118:15 119:13 245:1212:14 13:5,14 14:10307:9294:14,15 298:11110:15 11:12 3245:1212:19 13:5,14 14:10307:9294:14,15 298:11thorough 153:2230:8:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:530:8:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:530:8:6terrific 66:15 280				
108:17 135:5,12 151:9 169:3tenuous 83:17 TEP 269:6,22 285:20 286:5 294:5 299:276:13 81:14 82:12 84:15 87:5 96:6 98:19 101:17 108:1 119:16 208:2,21 211:11 208:2,21 211:12 209:11,15 108:22 201:2 201:4 14:51 201:2 201:4 17:61 201:2 201:6 211:1 201:2 201:2 201:6 211:1 201:2 201:15 215:12 255:8,13,14 217:11 228:12 265:9 211:17 23:7,16 201:15 212:10 17:14,19 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14,19 212:12 207:14 245:18 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14,19 212:12 207:14 245:18 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14,19 213:5 14:8,10 17:14				
151:9 169:3TEP 269:6,22 285:2084:15 87:5 96:6 98:19203:13 207:5,20talking 34:2 54:15286:5 294:5 299:2101:17 108:1 119:16208:2,21 211:1158:18 62:4 75:15 83:4term 35:9,19 78:16128:1 133:9 136:13215:8 216:14 217:1183:7,10 107:9 152:15108:22 111:7 262:11136:19 140:4 141:4226:14 239:9 240:19156:7 165:19 183:15262:13 276:21147:5 165:1 167:11246:1 260:8 261:16206:20 212:12,22terms 30:21 35:2,11169:20 173:3 174:10262:7,10,14,14217:12 218:22 232:673:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20talks 37:20 63:291:14 95:14 127:6198:10 202:12 204:6290:17 292:8 299:8tallied 43:20160:14 170:6 171:20217:3 234:11 236:3299:11,15 306:18,21tangential 174:9172:13,14 184:17241:22 242:4,17306:22targets 79:4212:5 215:21 216:17253:16 256:4,7third 75:19 117:11tage 5 79:4212:5 215:21 216:17255:16 256:4,7third 75:19 117:11124:14263:11 273:5 285:6273:22 276:22 277:11thorough 153:22team 7:12 9:20 12:15285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11thorough 153:22308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5308:6terrific 66:15 280:2th				
talking 34:2 54:15286:5 294:5 299:2101:17 108:1 119:16208:2,21 211:1158:18 62:4 75:15 83:4term 35:9,19 78:16128:1 133:9 136:13215:8 216:14 217:1183:7,10 107:9 152:15108:22 111:7 262:11136:19 140:4 141:4226:14 239:9 240:19156:7 165:19 183:15262:13 276:21147:5 165:1 167:11246:1 260:8 261:16206:20 212:12,22terms 30:21 35:2,11169:20 173:3 174:10262:7,10,14,14217:12 218:22 232:673:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20266:273:18 74:22 85:9198:10 202:12 204:6290:17 292:8 299:8tallied 43:20160:14 170:6 171:20217:3 234:11 236:3299:11,15 306:18,21tangential 174:9172:13,14 184:17241:22 242:4,17306:22targets 79:4201:2 209:16 211:1251:15 252:18 253:4118:15 119:13 245:12targets 79:4212:5 215:21 216:17255:16 256:4,7148:15 119:13 245:1212:19 13:5,14 14:10307:9294:14,15 298:11140:13 245:1227:18 254:12 305:20287:16264:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11140:45,8,18 309:2308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:512:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 202:17				
58:18 62:4 75:15 83:4 83:7,10 107:9 152:15 156:7 165:19 183:15 266:20 212:12,22 266:2term 35:9,19 78:16 108:22 111:7 262:11 262:13 276:21128:1 133:9 136:13 166:19 140:4 141:4 147:5 165:1 167:11 147:5 165:1 167:11 246:1 260:8 261:16 262:7,10,14,14 262:7,10,222 263:12 273:18 74:22 85:9 273:18 74:22 85:9 273:18 74:22 85:9 273:18 74:22 85:9 217:3 234:11 236:3 299:11,15 306:18,21 299:11,15 306:18,21 200:22 212:2 209:16 211:1 253:22 255:8,13,14 255:16 256:4,7 273:22 276:22 277:1 255:16 256:4,7 273:22 276:22 277:1 293:21 201:2 201:215 285:21 288:14 299:3 284:21 285:2,3 284:21 285:2,3 284:21 285:2,3 284:21 285:2,3 293:21 284:21 285:2,3 293:21 203:15 209:16 266:14 203:15 209:15 202:17 203:15 209:16 266:16 287:16215:15 252:18 253:4 284:21 285:2,3 293:21 284:21 285:2,3 293:21 293:21 203:15 209:16 266:16 203:15 209:16 266:16		-		
83:7,10 107:9 152:15 156:7 165:19 183:15 206:20 212:12,22 266:2108:22 111:7 262:11 262:13 276:21136:19 140:4 141:4 147:5 165:1 167:11226:14 239:9 240:19 246:1 260:8 261:16206:20 212:12,22 266:2terms 30:21 35:2,11 41:4 57:19 67:4 72:19169:20 173:3 174:10 178:19 186:8,11262:7,10,14,14 262:7,10,14,14217:12 218:22 232:6 266:273:18 74:22 85:9 193:20 194:15 198:10178:15 283:15 284:20 201:7 292:8 299:8talks 37:20 63:2 tallied 43:2091:14 95:14 127:6 160:14 170:6 171:20 172:13,14 184:17198:10 202:12 204:6 217:3 234:11 236:3 245:3,5 248:15290:17 292:8 299:8 290:17 292:8 299:8talgential 174:9 tagets 79:4 124:14192:16 194:7 199:13 201:2 209:16 211:1 212:5 215:21 216:17 253:22 255:8,13,14265:24 265:14 253:4118:15 119:13 245:12 265:16 256:4,7 273:22 276:22 277:1team 7:12 9:20 12:15 285:21 288:14 299:3 308:6284:21 285:2,3 284:21 285:2,3 294:14,15 298:11 307:9294:14,15 298:11 304:5,8,18 309:2 294:14,15 298:11 304:5,8,18 309:2thorough 153:22 293:21 293:21 293:21 293:21 201:2 207:14 245:18technical 5:4 10:1 12:12 207:14 245:18terrific 66:15 280:2 287:16thaks 5:21 8:6,11,17 13:5 14:8,10 17:14,19 126:6 128:17 153:20technical 5:4 10:1 12:12 207:14 245:18territory 122:14,16 185:2218:12 19:9 21:7,8,14 23:16 26:11 45:13185:19 200:15 202:17 203:15 209:16 266:16				
156:7165:19183:15262:13276:21147:5165:1167:11246:1260:8261:16206:20212:12,22terms30:2135:2,11169:20173:3174:10262:7,10,14,14217:12218:22232:641:457:1967:472:19178:19186:8,11268:14277:20,22266:273:1874:2285:9193:20194:15198:10278:15283:15284:20tallied43:20160:14170:6171:20217:3234:11236:3299:11,15306:18,21tangential174:9172:13,14184:17241:22242:4,17306:22306:22306:22tangets79:4201:2209:16211:1251:15252:18253:4118:15119:13245:12task27:14123:18217:11228:12256:6273:22276:22277:11118:15119:13245:12teams71:29:2012:15285:21288:14299:3284:21285:21293:21118:15119:13225:12teams246:12307:9294:14,15298:11307:9294:14,15298:11184:1695:10108:5teams246:22287:1613:514:695:10108:5266:16184:10175:19126:6128:17153:20technical5:410:1terrific66:15280:2thanks5:2186,11,1784:16 <t< td=""><td></td><td>-</td><td></td><td></td></t<>		-		
206:20 212:12,22terms 30:21 35:2,11169:20 173:3 174:10262:7,10,14,14217:12 218:22 232:641:4 57:19 67:4 72:19178:19 186:8,11268:14 277:20,22266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20talks 37:20 63:291:14 95:14 127:6198:10 202:12 204:6290:17 292:8 299:8tallied 43:20160:14 170:6 171:20217:3 234:11 236:3299:11,15 306:18,21tangential 174:9172:13,14 184:17241:22 242:4,17306:22tangets 93:12192:16 194:7 199:13245:3,5 248:15third 75:19 117:11tape 200:9201:2 209:16 211:1251:15 252:18 253:4118:15 119:13 245:12targets 79:421:25 215:21 216:17253:22 255:8,13,14Thoracic 91:13task 27:14 123:18217:11 228:1 236:17255:16 256:4,7thorn 176:11124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:2212:19 13:5,14 14:10307:9294:14,15 298:11thorough 153:24308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5teams 246:22287:1613:5 14:8,10 17:14,19126:6 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
217:12 218:22 232:641:4 57:19 67:4 72:19178:19 186:8,11268:14 277:20,22266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20talks 37:20 63:291:14 95:14 127:6198:10 202:12 204:6290:17 292:8 299:8tallied 43:20160:14 170:6 171:20217:3 234:11 236:3299:11,15 306:18,21tangential 174:9172:13,14 184:17241:22 242:4,17306:22tangetial 174:9192:16 194:7 199:13245:3,5 248:15third 75:19 117:11tape 200:9201:2 209:16 211:1251:15 252:18 253:4118:15 119:13 245:12targets 79:4212:5 215:21 216:17253:22 255:8,13,14Thoracic 91:13task 27:14 123:18217:11 228:1 236:17255:16 256:4,7thorn 176:11124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:2212:19 13:5,14 14:10307:9294:14,15 298:11thorough 153:22308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5308:6terrific 66:15 280:213:5 14:8,10 17:14,19126:6 128:17 153:20teams 246:22287:1613:5 14:8,10 17:14,19126:6 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
266:273:18 74:22 85:9193:20 194:15 198:10278:15 283:15 284:20talks 37:20 63:291:14 95:14 127:6198:10 202:12 204:6290:17 292:8 299:8tallied 43:20160:14 170:6 171:20172:13,14 184:17241:22 242:4,17306:22tangential 174:9172:13,14 184:17245:3,5 248:15third 75:19 117:11tape 200:9201:2 209:16 211:1251:15 252:18 253:4118:15 119:13 245:12targets 79:4212:5 215:21 216:17253:22 255:8,13,14Thoracic 91:13task 27:14 123:18217:11 228:1 236:17255:16 256:4,7thorn 176:11124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:2212:19 13:5,14 14:10307:9294:14,15 298:11thorough 153:22308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5teams 246:22287:1613:5 14:8,10 17:14,19126:6 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
talks 37:20 63:291:14 95:14 127:6198:10 202:12 204:6290:17 292:8 299:8tallied 43:20160:14 170:6 171:20217:3 234:11 236:3299:11,15 306:18,21tangential 174:9172:13,14 184:17241:22 242:4,17306:22tangible 93:12192:16 194:7 199:13245:3,5 248:15third 75:19 117:11tape 200:9201:2 209:16 211:1251:15 252:18 253:4118:15 119:13 245:12targets 79:4212:5 215:21 216:17255:16 256:4,7thorn 176:11task 27:14 123:18217:11 228:1 236:17255:16 256:4,7thorn 176:11124:14263:11 273:5 285:6273:22 276:22 277:11thorough 153:22team 7:12 9:20 12:15285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11304:5,8,18 309:2308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5teams 246:22287:1613:5 14:8,10 17:14,19126:6 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
tallied 43:20160:14 170:6 171:20217:3 234:11 236:3299:11,15 306:18,21tangential 174:9172:13,14 184:17241:22 242:4,17306:22tangible 93:12192:16 194:7 199:13245:3,5 248:15third 75:19 117:11tape 200:9201:2 209:16 211:1251:15 252:18 253:4118:15 119:13 245:12targets 79:4212:5 215:21 216:17253:22 255:8,13,14118:15 119:13 245:12task 27:14 123:18217:11 228:1 236:17255:16 256:4,7thorn 176:11124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:22team 7:12 9:20 12:15285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11thorough 153:22308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5teams 246:22287:1613:5 14:8,10 17:14,1912:66 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
tangential 174:9172:13,14 184:17241:22 242:4,17306:22tangible 93:12192:16 194:7 199:13245:3,5 248:15third 75:19 117:11tape 200:9201:2 209:16 211:1251:15 252:18 253:4118:15 119:13 245:12targets 79:4212:5 215:21 216:17253:22 255:8,13,14118:15 119:13 245:12task 27:14 123:18217:11 228:1 236:17255:16 256:4,7thorn 176:11124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:22team 7:12 9:20 12:15285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11thorough 153:4227:18 254:12 305:20Terri 2:17 23:7,16304:5,8,18 309:2thought 81:9 83:1308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:512:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
tangible 93:12192:16 194:7 199:13245:3,5 248:15third 75:19 117:11tape 200:9201:2 209:16 211:1251:15 252:18 253:4118:15 119:13 245:12targets 79:4212:5 215:21 216:17253:22 255:8,13,14118:15 119:13 245:12task 27:14 123:18217:11 228:1 236:17255:16 256:4,7Thoracic 91:13124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:22team 7:12 9:20 12:15285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11thorough 153:4227:18 254:12 305:20Terri 2:17 23:7,16304:5,8,18 309:2thorough 153:4308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:512:12 207:14 245:18185:2213:5 14:8,10 17:14,1918:12 19:9 21:7,8,1412:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
tape 200:9201:2 209:16 211:1251:15 252:18 253:4118:15 119:13 245:12targets 79:4212:5 215:21 216:17253:22 255:8,13,14Thoracic 91:13task 27:14 123:18217:11 228:1 236:17255:16 256:4,7thorn 176:11124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:22team 7:12 9:20 12:15285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11thorough 153:22227:18 254:12 305:20Terri 2:17 23:7,16304:5,8,18 309:2thought 81:9 83:1308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5teams 246:22287:1613:5 14:8,10 17:14,1912:66 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16			-	
targets 79:4212:5 215:21 216:17253:22 255:8,13,14Thoracic 91:13task 27:14 123:18217:11 228:1 236:17255:16 256:4,7thorn 176:11124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:22team 7:12 9:20 12:15285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11thoroughly 153:4227:18 254:12 305:20Terri 2:17 23:7,16304:5,8,18 309:2thought 81:9 83:1308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:512:12 207:14 245:18185:2223:16 26:11 45:13185:19 200:15 202:17				
task 27:14 123:18217:11 228:1 236:17255:16 256:4,7thorn 176:11124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:2212:19 13:5,14 14:10285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11thoroughly 153:4227:18 254:12 305:20Terri 2:17 23:7,16304:5,8,18 309:2thought 81:9 83:1308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:512:12 207:14 245:18185:2218:12 19:9 21:7,8,14126:6 128:17 153:2012:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
124:14263:11 273:5 285:6273:22 276:22 277:1thorough 153:22team 7:12 9:20 12:15285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11thoroughly 153:4227:18 254:12 305:20Terri 2:17 23:7,16304:5,8,18 309:2thoroughly 153:4308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5287:1613:5 14:8,10 17:14,19126:6 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16	0			
team 7:12 9:20 12:15285:21 288:14 299:3284:21 285:2,3293:2112:19 13:5,14 14:10307:9294:14,15 298:11thoroughly 153:4227:18 254:12 305:20Terri 2:17 23:7,16304:5,8,18 309:2thought 81:9 83:1308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5287:1613:5 14:8,10 17:14,19126:6 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16			-	
12:19 13:5,14 14:10 227:18 254:12 305:20 308:6307:9 Terri 2:17 23:7,16 terrific 66:15 280:2 287:16294:14,15 298:11 304:5,8,18 309:2 thanks 5:21 8:6,11,17thoroughly 153:4 thought 81:9 83:1teams 246:22 technical 5:4 10:1 12:12 207:14 245:18287:16 185:2213:5 14:8,10 17:14,19 18:12 19:9 21:7,8,14 23:16 26:11 45:13140:08:5 12:12 207:14 245:18				•
227:18 254:12 305:20 308:6Terri 2:17 23:7,16 terrific 66:15 280:2304:5,8,18 309:2 thanks 5:21 8:6,11,17thought 81:9 83:1 84:16 95:10 108:5teams 246:22 technical 5:4 10:1 12:12 207:14 245:18287:16 territory 122:14,16304:5,8,18 309:2 thanks 5:21 8:6,11,17184:16 95:10 108:5 13:5 14:8,10 17:14,19 18:12 19:9 21:7,8,14 23:16 26:11 45:13				
308:6terrific 66:15 280:2thanks 5:21 8:6,11,1784:16 95:10 108:5teams 246:22287:1613:5 14:8,10 17:14,19126:6 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16	-			
teams 246:22287:1613:5 14:8,10 17:14,19126:6 128:17 153:20technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
technical 5:4 10:1territory 122:14,1618:12 19:9 21:7,8,14185:19 200:15 202:1712:12 207:14 245:18185:2223:16 26:11 45:13203:15 209:16 266:16				
12:12 207:14 245:18 185:22 23:16 26:11 45:13 203:15 209:16 266:16				
203.10,11200.10 Terry 232.20 57.13,13 00.7,0,10 200.17 279.11 200.10				
	203.10,11200.10	1011 y 202.20	57.15,15 00.7,0,10	200.17 213.11 200.10
	1	ı	1	1

thoughtful 55:2 137:3 153:22 243:1 thoughts 96:5 179:19 204:17 218:15 223:20 277:8 307:3 thousand 225:16,17 thousands 102:7 thread 88:3 three 28:22 42:14 45:3 52:13 66:4 92:2 118:9 138:12 186:10 187:7 207:6 213:18 257:2 273:16 290:4 301:3 302:9 304:16 threshold 58:22 62:11 65:9 66:7 67:4 79:8 80:14,18 81:21 82:2 84:10 108:10 109:3 111:9,13 112:2 115:12 126:9,17 133:19 264:13 289:10 289:10,11,16 thresholds 4:5 62:1,22 63:10 65:11 66:17 74:8,20 75:17 77:3 78:8 80:12 82:7 90:13 91:3 127:1 133:14.15 throw 67:6 82:9 187:20 198:7 tier 48:2 tiers 45:3 tight 78:4 95:9 177:9 time-limited 113:22 114:2 timely 10:14 times 6:3 7:11 9:16 87:9 99:6 115:14 121:19 123:9 135:9 142:17 **TKA** 304:12 to.7 63:9 today 5:6,16 6:20 9:1 10:2 11:2 13:9 15:20 16:1,5,6,16 17:13 18:1 19:8 20:1,5 21:1 21:12 22:13 23:11 25:3 26:15 29:9,19 49:7 50:3 53:14,22 54:12 56:7,12 71:16 83:19 134:20 151:3 162:9 247:9 249:9,10 256:17 303:18 305:15 305:16 306:7 307:4 309:4 today's 11:5 22:17 toes 60:14 told 107:15 129:2 159:13 187:17 190:1

tomorrow 17:13 21:1 24:2 25:15,17 47:15 54:8 56:8,13 234:14 249:10 305:14,21 306:1,11,14 307:12 308:4,9 309:9,11 tomorrow's 22:18 tool 26:22 tools 116:7 top 29:22 192:16 248:19 265:12 276:3 308:10 topic 92:16 101:18 140:13 141:12 178:22 200:15 203:6 204:8 218:21 223:21 230:2 topics 54:13 55:2,6 241:7 243:3 302:2 torn 218:10 240:4 tortures 179:1 total 28:14,19 29:8 31:8 188:7,8 211:4 233:11 243:12,12 257:12,12 286:19,19 totality 149:3 totally 179:4 210:9 touch 36:2 306:9 308:7 touched 98:5 tough 8:13 106:14 107:8 115:15 180:21 305:12 307:5 track 11:20 58:9 103:3 308:9 tracking 34:8 trade-off 82:1 tradeoff 109:15,20 110:1 traditional 48:13 110:4 237:7 training 179:2,3 transcribing 11:1 transcription 11:5 transcriptionist 11:15 transfer 214:20 216:4 transferring 216:3 transform 229:19 transition 12:22 transitioning 250:11 transparency 15:20 16:20 88:6 transportation 252:1 treat 60:2 151:13 156:5 182:4 188:18 treated 151:10 233:4 treating 177:11 182:3 treatment 153:16 175:5 198:1 treatment-requiring

298:4 treatments 197:16,19 198:3 tremendous 209:9 217:6 296:2 trending 31:20 trial 163:3,6 202:6 209:20,21 211:10 trialist 209:16 trials 210:15,22 tricky 49:11 105:11 261:4 tried 121:19 triggered 148:4 233:21 troopers 309:3 trouble 20:13 94:6 120:15 246:8 255:15 troubleshooting 95:3 true 86:11 99:5 154:22 truly 102:4 103:22 117:17 182:12 217:17 truncated 212:18 truncating 25:22 try 9:13,16 10:15 23:14 26:4 39:3 45:11 60:6 61:14 68:18.22 95:4 95:13 96:7,12 127:16 131:15,22 140:5 141:7 157:12,15 164:2 173:7 174:5 191:1 196:7 198:12 250:22 254:6 255:4,6 287:6 308:3 trying 5:11 6:3,8 20:20 25:11 43:16 66:12 71:2 77:11,12,12 84:8 90:7 93:10 106:3 114:13 125:9 127:10 174:11 245:18 266:15 281:4 **TUESDAY** 1:13 tune 250:22 turn 7:13 43:10 136:14 282:18 294:12 twelve 284:18 288:4 twice 254:5 two 21:1 23:1 24:11 29:4,10 32:20 33:3 52:13 58:4,7 64:15 66:3 79:13 99:1 101:2 101:3 104:4,4 105:7 108:22 118:9 123:14 142:6,7 179:3 198:9 206:21 212:22 228:12 243:8,20 245:14 254:22 257:2 265:14 268:13 269:19 274:7 292:5,8 296:8 298:19

298:22 299:18 301:3 302:9 two- 263:3 Two-day 42:17 two-hour 9:2 two-part 99:9 tying 163:11,20 type 20:4 29:21 47:6 48:7 59:1 77:4 79:9 96:11 106:4 135:4 209:2 214:10,16 242:6 279:5 288:16 293:14 typed 244:5 types 45:22 77:17 78:9 78:10 97:15 106:12 125:5 216:9,10 221:3 274:19.20 typical 229:6 277:22 typically 34:12,14,16 38:7 39:2 42:1 102:2 231:1,20 277:21 280:5 U **U-shaped** 229:8,12,20 ultimate 44:19 ultimately 32:16 64:9 152:15 uncertain 240:4 uncertainty 189:1 unclear 38:18 288:13 **uncommon** 280:3 undergoing 243:16 292:20 295:16 304:22 undergone 286:19 underlying 209:18 261:16 underpin 205:17 underserved 169:13 understand 9:8 52:14 58:12 69:17 82:19 87:21 110:2 123:22 145:6 163:22 184:18 202:5 236:9 300:5 understandable 85:21 understanding 184:16 201:10 205:19 206:3 209:9 224:13 271:7 278:3 understands 148:12 understood 102:1 153:12 156:1 undoubtedly 256:14 unfair 189:8 262:8 unfortunate 300:15 unfortunately 35:20 42:21 111:1 256:2

261:10 **uniform** 79:8 uniformly 78:8 unique 6:3 146:8 184:19 218:18 239:9 uniquely 77:3 unit 89:17 121:6,13 262:12 units 78:12,17 80:6 90:2,4,8 91:2 109:17 121:4 229:10 University 230:20 unmeasured 146:6 unmute 173:7 281:4 unmuted 196:5 unpack 155:4 unpaid 16:15 17:8 22:10 unrelated 213:17 216:15,20,22 219:8 unstaged 264:4 untenable 168:16 unusual 280:8 upcoming 27:12 update 25:20 36:6 302:11.17 updates 4:3 25:4 30:5 36:7 **upper** 65:15 67:11 **upset** 228:3,19 **upwardly** 76:12 urgency 223:17 use 9:19 10:4 12:6 25:11 47:8 78:5 81:20 83:12 87:1 98:1,2 100:14,15 102:16 106:5,13,22 108:15 110:8 112:14 117:15 117:16 118:15,22 120:10 122:21 123:1 127:6 128:5 129:14 129:17 130:3,3,11,16 132:10,17 133:7,12 134:21 135:7,19 141:19 152:9 168:12 169:6 185:10 186:1 194:4 200:7 209:19 217:19 228:11 231:8 234:20 269:3 270:11 270:12,13 271:1,1 278:13 303:2 useful 10:3 96:6 125:16 187:21 299:2 users 110:8 **uses** 88:19 101:2 112:13 115:20 122:15 123:7,14 128:21 129:1 133:13,16,20

142:7,22 238:4,5,8 usually 62:18 89:8 152:14 utilization 213:3,4 232:5 239:12

v vaque 62:6 valid 104:18 119:2 128:19 145:10 156:6 156:6 158:14,16 187:8 215:3 217:21 218:8 219:14 234:4 270:19 validate 293:14 validation 279:22 280:13 validity 4:8 29:4,5,7 38:12 41:22 46:13,15 46:17 47:9,21 48:3,9 49:2,9 50:6,11 51:7 52:7 57:11.12 76:10 101:13 109:19 115:4 133:14 141:10,19 142:14,15,20 143:7 143:12,21 149:8 154:10 156:3,4,13 157:10 158:8,9,21 159:6,10 161:1,10 162:6 165:11.12 167:18,22 168:13 172:10,11 195:12 198:21 206:6,8 216:17 217:8,21 218:19 220:17 221:3 221:3 232:12 233:5 250:8 257:15,18 259:9,13,14 262:14 263:1 264:21 266:6 267:2 270:18 273:6 273:12,15 274:8,9,10 274:14,20 275:1,4,7 279:15,16,21 280:15 287:2 293:5 299:3 304:13,17 validity/reliability 178:15 valuable 294:7 value 89:16 103:17 229:2 297:10 value-based 172:16 values 64:16 82:21 84:1 84:11 93:4 278:12 variability 116:15 282:5 variable 151:15,17,22 152:11 166:22 185:16 281:10 293:9 variables 167:1 177:6

177:15 188:4 199:9 225:22 262:14 293:18 293:21 294:3,6 297:10 variance 78:3,5,22 79:16 80:6 81:10 89:5 123:9 177:22 217:6 226:17 227:3,5 263:3 263:10 299:4 variances 78:2 variation 61:4 77:17,21 89:7 144:15,15 145:8 234:3 263:4 265:10 variety 230:12 232:17 various 26:18 27:13 45:22 53:8 105:22 275:3 vast 111:17 vastly 152:19 **verbal** 64:18 version 270:2,12 286:7 295:4,6 versions 268:17,19 269:10,19 295:12 296:5 versus 58:6 59:1 71:5 75:17 93:4 106:3 130:11 181:19 184:20 226:22 263:7.11 270:1 285:13 299:4 verus 263:7 vetted 293:21 viable 93:21 vice 7:17 134:16 Victoria 246:13 view 59:17 virtually 187:18,19 virtue 181:5 250:3 visibility 174:7 visits 77:19 voice 140:3 volume 91:2 92:8 98:6 98:9 109:2,5 117:15 117:22 182:20 188:22 264:13,18 289:9 294:12 volumes 118:1 119:6 188:20 189:2 voluntary 290:22 297:22 volunteer 55:8 202:15 241:10 292:16 vote 37:22 43:1,5,20 48:8,9 155:10 160:19 160:21 161:1 162:16 168:12 203:1 248:2,7 249:5,7,15 250:6,7,11 250:13 251:20 253:15

253:16 254:10.20 255:22 256:3 273:14 275:14 300:17 303:10 303:16 304:6 voted 254:5 280:17,21 votes 29:18 56:6 252:2 254:2,12,22 255:19 255:21 256:4 voting 9:18 24:22 26:18 50:11,13 149:7 158:20 160:14,20 245:21,22 248:16 249:3 251:9,19 257:6 298:17 304:9 vulnerable 191:13,14 w wade 259:7 wait 194:20 236:4 Waiting 256:3 waive 159:10 waking 108:4 165:11 walk 204:14 Walters 2:16 23:3,4 wanted 7:19 9:3 28:5 36:5.7 54:11 57:4 85:4,13 94:10,16 101:22 107:13 108:7 120:1,5 131:3 134:20 138:15 139:1 143:2 162:21 174:9 176:9 176:14 198:19 200:12 203:21 215:13 217:22 224:1 234:18 246:3 273:22 294:17,21 298:8 301:22 wanting 97:5 wants 259:22 300:17 Warholak 2:17 23:8,9 252:21 warrants 199:22 wash 182:17 wasn't 40:7 101:19 174:18 177:16 210:3 235:2 264:5,21 267:2 281:22 282:1 watch 62:15 68:16,18 68:22 199:22 watching 10:12 95:8 230:9 248:10 way 10:14 54:21 55:2,8 57:22 58:18 59:20 62:12,13 66:7 70:10 86:10 88:20 91:1,17 93:7,8,12 96:16 106:19 108:16 109:13 110:9 115:17 117:20 121:2 124:1,15,21

125:13 126:4 131:7.8 136:8 140:3 142:18 145:21 149:10 150:11 155:9 159:13 172:17 174:19 182:4 193:5 196:12 197:2 224:21 234:22 237:21 240:7 240:11 242:10 246:16 254:21 264:9 270:19 275:14 300:20 301:2 301:2,13 306:13 308:21 ways 65:5 117:17,18 123:7 135:17 160:7 217:22 222:19 291:3 293:15 298:6 web 13:2 webinar 8:22 9:20 10:7 26:10 112:10 137:18 137:19 220:1,16 242:9 245:5 246:11 308:16,19 309:4,6 webinars 137:4 website 102:15,16 weeds 267:7,9 270:4 week 25:6 weeks 6:12 206:5 220:2 220:17 weigh 100:10 220:4 222:16 275:11 weighed 152:21 275:9 weight 120:10 121:21 Weinhandl 2:18 23:17 23:18 82:12 101:17 145:19 178:22 179:6 185:2 186:7 230:1 weird 261:13 welcome 4:2 5:17 6:3 100:10 141:8 186:16 245:4,12 welcoming 5:20 7:22 well-being 120:11 went 26:12 61:13,19 69:16 120:18 139:9 227:19 239:15 245:9 268:16 269:5 286:9 290:9 297:14 298:10 309:13 weren't 177:18 232:22 250:15 264:9 West 15:1 21:8,19 59:8 108:4 306:15 white 2:19 24:7 54:14 55:7 57:4,6 75:1,21 80:16 177:4 218:17 218:20 220:5 221:21 wide 119:4 284:18 widely 233:2

widespread 232:21 willing 222:14,16 wind 225:10 window 284:17 winsorization 212:16 wish 261:5 wishes 259:8 withdrawn 33:5 WOMAC 271:2,3 286:6 wonder 87:8 139:13 wonderful 153:21 251:18 253:4 255:12 285:3 304:8 wondering 44:20 58:3 92:5 126:16 210:22 267:6 303:10 word 70:11,19 160:13 179:21 180:16 276:12 words 7:20 51:20 91:19 111:8,10 254:18 work 6:6,9 7:10 16:5,16 18:6 34:5 60:6 70:17 70:18 72:18 77:16 80:19 93:10 95:4 96:4 99:1 100:16 104:22 109:9 124:1 128:18 152:10 153:3 163:11 163:12,20 164:2 172:14 173:9,12 223:12 246:22 251:13 268:11 296:7 300:7 301:9 306:10 worked 12:20,21 107:19 285:12 300:3 workgroup 22:10 working 31:15 134:18 163:2 170:5 205:11 230:18 245:17 249:6 285:11 286:17 works 74:6 254:21 305:18 worksheets 160:5 world 184:14 worried 114:19 189:17 worrying 84:1 227:4 worse 176:12 191:8 197:22 wouldn't 106:8 125:12 163:15 261:18,18 300:10 wound 240:17,17 wrap 4:19 49:11 184:1 307:4 wrestle 260:1 write 154:14 221:21 243:2 writing 203:19 written 55:2 162:8

	wrong 76:20,21 118:7	14 29:3 177:10
	119:14 120:14 158:12	141 4:8
	177:20 178:2	147 4:9
	177.20 170.2	15- 299:16
	X	1550 281:19
	x 74:7 113:20 123:20	16 32:17 79:17
	Y	17 217:18
		18 177:3 243:16 304:22
5	y 123:20	2
	Yale 3:6,7 230:20	
	243:12 246:4 255:14	2 4:20 25:22 26:4
	257:22 258:4 277:11	132:15 134:9
	285:1 300:2 303:20	2:29 245:9
	year 34:14 64:6 91:21	20 31:2 67:13 79:17
	109:1 115:21 118:8	81:21 228:8 264:18
	225:11 231:13,14	200 225:21
_	237:17 238:9 263:9	200,000 225:22
2	288:17 289:5 299:7	2009 63:1
9	years 63:4 92:2 108:22	2011 27:14 62:2
_	118:9 120:20 152:17	2014 150:19 151:1
6	170:3 228:8 243:16	185:6
	278:18 295:1 301:3	2015 150:19
	302:9	2019 30:20,22 40:13
4	yeoman's 7:10	2020 1:9,14 5:7 28:16
	yes/no 133:19	31:1
	yesterday 25:21	204 4:10
	younger 304:22	21 28:19
		21st 181:6
	Z	22 32:9
3	z 123:21	241 4:11
	zero 70:6 91:21,22 92:3	243 4:13
	178:3	25 4:4 40:6 67:13,18
	Zhenqiu 2:9 20:21 21:3	86:5 118:1 177:4,10
	68:17 85:17,20 87:4	281:8 289:18 290:2
	zip 102:18	298:13
	Zoom 108:5	25-case 264:12,14
		2500 192:10,13
	0	2539 21:2
	0.25 304:3	25K 289:9
	0.69 280:2	
	05 79:5	3
	0715 243:14 304:20	3 82:13 87:1 97:1
		3.14 290:1
,	1	3:30 137:15 243:6 244:2
	1's 306:17	245:10
	10 192:16 209:5,8	30 190:22 227:2
	100% 291:12	30% 299:17
	100,000 225:22	30,000 267:7,8
	11 227:3,5	304 4:15
	11:33 139:9	308 4:17,20
	12 238:1 270:1 271:1	309 4:22
	12-item 269:18 270:12	33% 289:18 290:3
	301:5	3559 21:2 22:3,5 243:9
	12-page 287:5	257:10 304:10
	12:29 139:10	3564 214:7
	12:30 137:8,16 138:2	36 79:18
	12.30 137.8,10 138.2 120 177:6	38 284:7
	123-hospital 282:9	
	120-1103pital 202.3	

4
4 62:10 79:16 87:1 95:18 4.17 288:21
4:51 309:13 40 45:18,19
43% 264:2 288:14 49-59 307:19
5
5 4:2 63:16 64:5 209:7 50 28:15 30:20 32:10 45:19 81:10,21 86:5 50% 281:7
55 4:5 59 79:17
6
6 63:16
6:00 306:15 60 45:16 213:8 66 42:18 45:15
7
7 63:3 67:10,10,12 72:4 74:16 75:2 80:17 81:7 70% 281:9 70s 62:19
73 32:18 75 40:5 41:2 166:13,19 76 4:6
8
8 86:22 833 194:17,18 196:5 85 166:15,17
9
9 63:6 64:20 87:1 132:16 134:9 9:00 1:18
9:06 5:2 95th 212:19 99th 212:18
99(1) 212.10

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