NATIONAL QUALITY FORUM

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PULMONARY AND CRITICAL CARE STANDING COMMITTEE

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WEDNESDAY MARCH 16, 2016

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The Committee met at the National Quality Forum, 9th Floor Conference Room, 1030 15th Street, N.W., Washington, D.C., at 8:00 a.m., Dale Bratzler and David Lang, Co-Chairs, presiding. **PRESENT:** DALE BRATZLER, DO, MPH, Chief Quality Officer, OU Physicians - Oklahoma University Health Sciences Center, Co-Chair DAVID LANG, MD, Chair, Department of Allergy and Clinical Immunology, Respiratory Institute, Cleveland Clinic, Co-Chair GERENE BAULDOFF, PhD, RN, FAAN, Professor of Clinical Nursing, The Ohio State University College of Nursing KENNETH BENSON, Board Member, US COPD Coalition CURTIS COLLINS, PharmD, MS, Specialty Pharmacist, Infectious Diseases, St. Joseph Mercy Health System BRUNO DiGIOVINE, MD, MPH, Division Head, Pulmonary, Critical Care and Sleep Medicine, Henry Ford Medication Group TODD DORMAN, MD, FCCM, Professor and Vice Chair for Critical Care Services, The Johns Hopkins Hospital KIM ELLIOTT, Q, PhD, CPH, Administrator, Clinical Quality Management, AHCCCS WILLIAM BRENDLE GLOMB, MD, FCCP, FAAP, Senior Medical Director, Superior HealthPlan

STEPHEN GROSSBART, PhD, Senior Vice President and Chief Quality Officer, Mercy Health JAMES "MITCH" HARRIS, PhD, Director, Research & Statistics, Children's Hospital Association * EDGAR JIMENEZ, MD, FCCM, Vice President, Critical Care Integration and eICU -System, Baylor Scott & White Health ELLA KAZEROONI, MD, MS, Professor, Department of Radiology Cardiothoracic Radiology Division, University of Michigan Health System * THOMAS LAMPONE, MD, Senior Medical Director, Florida Blue RICHARD MURRAY, MD, Vice President and Deputy Chief Medical Officer, Merck and Co., Inc. JAMES O'BRIEN, MD, MS, VP, Quality and Patient Safety, OhioHealth Riverside Methodist Hospital PATRICIA J. OHTAKE, PT, PhD, Associate Professor, University of Buffalo SUSAN POLLART, MD, Associate Tenured Professor; Senior Associate Dean for Faculty Affairs and Faculty Development, University of Virginia, Department of Family Medicine * CRYSTAL RILEY, PharmD, MHA, MBA, CPHQ, CHPIT, Manager, Healthcare Policy, Baxter Healthcare CHRISTINE SCHINDLER, PhD, RN, CPNP-AC/PC, WCC, Clinical Assistant Professor of Pediatrics, Marguette University College of Nursing DAVID STOCKWELL, MD, MBA, Associate Professor of Pediatrics, Children's National Medical Center * CHANA WEST, RN, MSN, Associate, Booz Allen Hamilton DONALD YEALY, MD, FACEP, Professor and Chair, University of Pittsburgh-Department of Emergency Medicine

NQF STAFF:

ELISA MUNTHALI, Vice President, Quality Measurement JANINE AMIRAULT, Project Analyst POONAM BAL, Project Manager SHACONNA GORHAM, Senior Project Manager KAREN JOHNSON, MS, Senior Director * ROBYN Y. NISHIMI, PhD, Consultant

ALSO PRESENT:

SUSANNAH BERNHEIM, MD, MHS, Yale University School of Medicine, SHERYL M. DAVIES, MA, Stanford University * FRANCOIS DE BRANTES, MS, MBA, Health Care Incentives Improvement Institute * KAREN DORSEY, MD, PhD, Yale University School of Medicine R. ADAMS DUDLEY, MD, MBA, Philip R. Lee Institute for Health Policy Studies * MARK METERSKY, MD * AMITA RASTOGI, MD, MHA, Health Care Incentives Improvement Institute * MATT SCANLON, MD, Virtual PICU Systems, LLC * JONATHAN SHAW, MD, MS, Stanford University * CAROL STOCKS, PhD, MHSA, RN, Agency for Healthcare Research and Quality *

ANDREW WILSON, MPH, MA, Health Care Incentives

Improvement Institute *

* present by teleconference

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Adjourn

1 P-R-O-C-E-E-D-I-N-G-S 2 8:05 a.m. In the meantime, let me 3 DR. NISHIMI: 4 go over what happened on day one just to refresh 5 the committee's memory. 6 We had one, two -- 11 measures 7 yesterday. Two of the measures, the Minnesota Community Health measure and Dr. Kleinman's rate 8 9 measure, not the appropriateness measure, rate 10 measure were consensus not reached. So, those two measures, well, all the 11 12 measures go out for public comment. But, those 13 two measures in particular we'll pay special 14 attention to the comments and then you will 15 review them and we vote because consensus was not 16 reached. 17 And then, they'll either go forward to 18 the NQF members for a vote as recommended, not 19 recommended or, if you still don't reach 20 consensus, they're marked consensus not reached. 21 For one measure, Larry Kleinman's ED 22 Appropriate Asthma measure, that measure did not

advance, was not recommended. It still goes out 1 2 for comment. The committee may choose, you know, 3 based on, if there's a groundswell of positive 4 5 comments or something, may choose to take it up and discuss it again. 6 But, by and large, those measures tend 7 not to come back for further committee 8 9 discussion. 10 So, this is the report that Poonam 11 spoke to yesterday, goes out for NQF member and 12 public comment for 30 days, comes back. 13 The staff -- we all compile the 14 comments, proposed response for you to look at. 15 Some of them are just thanking you for your work. 16 You know, some of them are agreeing with you. 17 And then, there will be some where you 18 might need to discuss or the developer will need 19 to address. 20 So, that was yesterday's work. And 21 then, today's work, we'll do the balance. 22 As I indicated yesterday, we do hard

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stop and if it looks like we can't even finish 1 2 the measure by this stopping time, obviously, we won't start it. 3 If we don't finish all the measures 4 5 today, excuse me, hay fever here, we don't finish all the measures today, then we have the post-6 7 comment, not post-comment, the post-meeting call set for next week for us to finish the balance of 8 9 those. 10 We do have electronic software so, you 11 know, we vote. It's probably easier than the 12 little waving of the wands anyway. So, but 13 that's what will happen if we don't finish. 14 So, I don't want you to worry about, 15 you know, us running over. We're cognizant that 16 folks have time and so we allow for that. 17 Anything else, Poonam, Shaconna? 18 Okay, we're waiting for AHRQ and we'll 19 just have to launch if, obviously, she can't get 20 She'll have to take over. a hold of her. 21 Operator, is she back, Sheryl and 22 Carol?

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OPERATOR: Carol has just joined. 1 2 DR. NISHIMI: Okay, great. 3 Hi, this is Carol Stocks. DR. STOCKS: 4 CO-CHAIR LANG: Very good. So, we 5 will --6 DR. STOCKS: My apologies. CO-CHAIR LANG: 7 Thank you. We will proceed with discussion of 8 9 three measures this morning which are population 10 health measures pertaining to asthma, COPD and 11 pneumonia, respectively. 12 The first, our leadoff hitter for this 13 morning is 0283: Asthma in Younger Adults 14 Admission Rate. Developer is the Agency for 15 Healthcare Research and Quality. 16 Carol, would you like to briefly 17 discuss the measure, briefly for about two 18 minutes? 19 DR. STOCKS: Sure, thank you for 20 giving me a couple minutes. I'm sorry, I was a 21 little late. I was confused about the time. 22 Work that our program does involves

1	the maintenance of about 100 different
2	indicators. And, by that, I mean the continual
3	process of gathering evidence and getting input
4	from clinicians and empirical testing. Most of
5	the heavy lifting is done by our contractors.
6	And, Sheryl Davies is on the phone,
7	she'll be available to answer more technical
8	questions. She's at Stanford University, our
9	primary contractor.
10	In addition to the validation and
11	gathering evidence, we create software that can
12	be applied to user's data so that they can more
13	easily use the exact specifications for these
14	types of measures.
15	The three measures being reviewed
16	today we call the Prevention Quality Indicators,
17	the PQIs and they've been developed for use with
18	hospital administrative data or billing data type
19	of information that's readily available and
20	routinely created for every patient encounter.
21	The data have been created in
22	electronic format for decades. So, they offer an

important reliable source of information on
 certain aspects of hospital care.

The PQI measures are a little bit different from other measures that we have and maybe others that are reviewed for the most part at NQF because they take advantage of inpatient hospital data, not to measure quality of inpatient care but to gain insight into health of the community.

10 So, we view it as a window into the 11 community, one way to look at it. In some 12 respects, what goes on in community hospitals 13 could be seen as a microcosm of what's going on 14 in the community.

So, the PQIs can be used as a screening tool to help flag potential healthcare quality problem areas at the population level and that need further investigation.

19 They're based on evidence that
20 hospitalizations for ambulatory care sensitive
21 conditions are potentially preventable given
22 adequate outpatient care.

We believe that there is significant 1 2 room for improvement in this area based on -mainly based on the persistent disparities that 3 4 we have seen for years now. And, most 5 frequently, those disparities or higher rates are seen in populations that can be described as 6 7 disadvantaged or vulnerable. The idea behind these measures is not 8 9 to close the hospital doors or, likewise, the 10 POIs are not modeled to measure whether 11 appropriate decisions are being made about to 12 admit or not to admit. 13 In this day and age, we -- I guess we 14 assume that under the types of pressures faced by 15 hospitals and physicians, we believe there's a 16 pretty high probability that when individuals are 17 admitted to the hospital, they need to be there. 18 So, the notion behind PQIs is that 19 appropriate quality healthcare in the outpatient 20 or community setting can prevent the need to be 21 hospitalized. 22 Appropriate care is still centered on

1	primary care in the case of some of these
2	pulmonary indicators, have specialty care is
3	playing a very important role as well.
4	But, over the years, I think our
5	understanding of what is being measured through
6	use of ACSC hospitalization rates has become a
7	little broader.
8	And, in essence, depending on how you
9	use them, the PQIs are measuring the quality of
10	the local healthcare system. And that
11	encompasses many things to achieve the management
12	of the population's health needs.
13	To put it another way, we're measuring
14	whether the healthcare system is adequate or has
15	the capacity for meeting population health needs.
16	We do include age and gender as risk
17	adjustment factors when comparing counties or
18	other regions.
19	And, in the more recent software
20	that's being released this spring, we've added
21	percent of persons living in poverty. However,
22	depending on how you're using these measures, the

idea of risk adjustment goes a little bit against 1 2 the concept of what the PQIs are measuring. And, by that, I mean ideally a 3 4 healthcare system should be able to meet 5 population needs, whether those needs are greater 6 or not. So, I'm going to stop right there. 7 Ι don't want to take up any more time. 8 9 Thank you very much for letting me 10 introduce them. 11 CO-CHAIR LANG: Thank you, Carol. 12 We have Bruno and Susan with us also. 13 DR. POLLART: I am, yes. 14 CO-CHAIR LANG: Great, thank you, 15 Susan. 16 DR. POLLART: Sure. Just a note, I'm 17 on the webinar but I'm not seeing any slides and 18 I'm not sure you're going to be able to see my 19 vote. 20 So I have notes, I can participate 21 without seeing the slides, but if my votes don't 22 show up, I think it's an issue with the webinar.

1	MS. BAL: Susan, can you go ahead and
2	just email Poonam. That's P-B-A-
3	L@qualityforum.org with your vote so we can make
4	sure we get those in?
5	Also, if you want to try to refresh
6	your screen, that sometimes relieves that issue.
7	And then, also, before we start, I
8	just wanted to mention that for all three of the
9	AHRQ measures, Mitch Harris is conflicted so he
10	will not be able to vote or discuss these
11	measures.
12	Thank you.
13	DR. POLLART: All right. All right,
14	I've refreshed my screen and nothing's changed.
15	But, I will send my vote.
16	MS. BAL: Thank you.
17	DR. DIGIOVINE: Susan, are you going
18	to start or do you want me to start?
19	DR. POLLART: Yes, I am absolutely
20	I'm happy to start.
21	So, as was mentioned, this is an
22	outcome measure type, looking at administrative

claims, the level of analysis is population 1 2 through your county. First question is, looking at the 3 4 evidence and the question for the group is, 5 there's some updated evidence provided related to aspects of hospitalization for pneumonia. 6 But I think our group agreed on our 7 phone call that the underlying rationale for the 8 9 measure remained reasonable and there was no 10 evidence to repeat discussion or vote on 11 evidence. 12 So, unless there's disagreement, can 13 we move on to gaps in care? 14 DR. NISHIMI: Let's first -- yes --15 let's just hear from the committee if --16 CO-CHAIR LANG: Yes, and that -- so, 17 the -- I don't -- before we get to that, just the 18 only issue I have, and I have no one else to 19 bring it up, so I'll bring up now. 20 Is just the age, we've gone running 21 around now. I think we have three asthma 22 measures with three different ages. It certainly

would be nice to have asthma measures all have 1 2 the same age range. 3 DR. NISHIMI: Okay, so ---4 DR. POLLART: Age range here is for 5 discharges for patients 18 and older. DR. NISHIMI: Right. 6 So --It's 18 to 39, it's 7 CO-CHAIR LANG: 8 not 18 and over. At least that's the data that's 9 in front of me. 10 DR. POLLART: The numerator statement 11 I see says 18 and older. Is there new 12 information? 13 CO-CHAIR LANG: Are we looking at 14 0283? 15 DR. POLLART: No, you're right, I'm 16 sorry. I picked up the wrong one. I'm looking 17 at -- that was 0279. 18 DR. NISHIMI: Okay, so ---19 DR. POLLART: Yes, 18 to 39. 20 DR. NISHIMI: We'll emphasize that, 21 mention it again when we hit the specifications, 22 but Bruno, was there anything on evidence you

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needed to add?

2 DR. DIGIOVINE: No, I agree with 3 I don't think we need to review it, but Susan. leave it to the committee. 4 5 DR. POLLART: All right. DR. NISHIMI: Does anyone object? 6 7 Okay. DR. POLLART: All right. So, we're 8 9 ready to move on in gap in care? 10 Our group discussed the question of 11 whether there was opportunity for improvement and 12 looked like there was data around gap in care, 13 especially as it related to disparities. 14 And, it was looked at from 2009 to 15 2013. And, it appears there were gaps in care. 16 And also, there's some gaps related to community 17 income level. 18 So, our sense was there was 19 opportunity for improvement. 20 CO-CHAIR LANG: Great. 21 DR. DIGIOVINE: Nothing to add. 22 CO-CHAIR LANG: Okay, proceed.

DR. POLLART: All right. Bruno, do 1 2 you want to move on to the next section on --DR. DIGIOVINE: I think we have to 3 4 vote here, Susan. That's okay, thanks. 5 DR. POLLART: Oh, I'm sorry. CO-CHAIR LANG: It's hard when you're 6 not in the room. 7 DR. POLLART: 8 Yes. 9 CO-CHAIR LANG: I think Jim had a 10 question, though. 11 Yes. DR. O'BRIEN: The question I had I guess is for the developers. 12 13 I noticed in Table 1 that now we have an average rate of .28 which is now cut in half 14 15 relative to where it was 2009. 16 At what point do the developers feel 17 like this measure's going to be topped out? 18 DR. STOCKS: I think I'm going to let 19 Sheryl Davies at Stanford answer that. 20 MS. DAVIES: Sure. 21 So, the measure, it's off, you're 22 right. And, in fact, hospitalizations in general

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have been decreasing over time.

2	One thing that we look at here,
3	instead of just the overall population is we look
4	at variation in hospitalization rates. Because
5	we're looking at population healthcare, we do
6	take into account issues such as disease
7	prevalence or other community health factors that
8	do impact the measures.
9	Those are part of the measure concept
10	that we're measuring.
11	And so, as long as there are
12	disparities that are visible, as there, you know,
13	still are with low income populations.
14	And, our data and certainly, you know,
15	in the literature, we continue to observe
16	disparities with certain minority groups.
17	I would say that we're not there yet.
18	DR. O'BRIEN: Thank you.
19	And then, also, just to clarify,
20	because I think there's a lot of it appears to
21	be that some of the analysis for this measure
22	crosses over 275.

1	It, I assume, but please clarify if
2	not, that the risk adjusting, the reliability and
3	the validity was all done on the entire
4	population and not broken up by age groups for
5	those two groups? Does that make does that
6	question make sense and is that accurate?
7	MS. DAVIES: Okay. So, the
8	reliability testing, you know, all the testing
9	that's done within the measure testing forum and
10	those are all done using the age groups that
11	apply to that measure.
12	And so, in this case, it would just be
13	the younger adult population.
14	DR. O'BRIEN: But, the disparities
15	point that you made, it looks like that includes
16	the two different age groups in the model. So,
17	looking at the disparities, that's all asthma,
18	all this group together, is that correct?
19	MS. DAVIES: Yes, yes, and the so
20	in the disparities table that you received, we
21	stratified that population.
22	DR. NISHIMI: Anything else? Ready to
-	

1 vote? 2 CO-CHAIR LANG: Yes, voting on 3 performance gap. 4 MS. AMIRAULT: Performance gap for 5 measure 0283, your options are, one high, two moderate, three low and four insufficient. 6 7 MS. GORHAM: For the people on the phone, we're having a bit of a technical 8 9 difficulty moment. Give us one minute. As you 10 can still email or send your votes in via chat. 11 DR. KAZEROONI: Who do you want us to 12 email the votes to? 13 MS. BAL: That's only for Susan to 14 send her vote to P-B-A-L@qualityforum.org. But, 15 everyone else who has access to the chat should 16 vote that method. 17 Thank you. 18 DR. KAZEROONI: Thank you. 19 DR. POLLART: So, I tried to send mine 20 through the chat, will you let me know if it 21 arrived otherwise I'm teed up to send the email. 22 But, that's just a slower process.

MS. BAL: We did not receive it. 1 2 DR. STOCKWELL: Did you all receive other votes via chat or should we vote again? 3 MS. BAL: We received all the chat 4 5 votes, thank you. And Susan, we received your email vote 6 as well. 7 8 DR. NISHIMI: Okay. Go ahead and, 9 Janine, reannounce. 10 MS. AMIRAULT: So, performance gap for 11 0283, one for high, two moderate, three low and 12 four insufficient. 13 MS. BAL: Could everyone vote one more 14 time? We're missing two votes. Thank you. 15 And, for the people online, that's 16 only for people in person. Thank you. 17 MS. AMIRAULT: Okay. Four high, 17 18 moderate, one low and zero insufficient. 19 And based on the percentage, we can 20 move forward. 21 CO-CHAIR LANG: Reliability? 22 DR. DIGIOVINE: So, you wanted me to

do this part? DR. POLLART: Yes, that'd be great, Bruno. DR. DIGIOVINE: No, that's fine, perfect. So, in terms of reliability, the developer noted that they did signal-to-noise ratios as their test of reliability and have a signal-to-noise ratio of .75 or with risk adjustment to .74. So, it would certainly seemed like they had good evidence of high reliability. DR. POLLART: Yes, and Bruno, I think you pointed out when we did the discussion that there some concern about low populations that the reliability doesn't meet the thresholds for counties with eligible populations under approximately 3,800 individuals. And, the developer spoke to that in their phone call. Do we need to discuss that again? CO-CHAIR LANG: Is there any further

22 discussion?

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1	All right, we'll proceed then to vote
2	on reliability.
3	MS. AMIRAULT: Reliability for measure
4	0283, one high, two moderate, three low or four
5	insufficient.
6	Again, reliability for 0283.
7	Five high, 16 moderate, one low and
8	zero insufficient.
9	And, based on the percentage, we can
10	move along.
11	CO-CHAIR LANG: Proceeding to
12	validity.
13	DR. DIGIOVINE: All right. So, in
14	terms of validity, again, the developer did a lot
15	of nice sort of statistical testing around
16	predictors of outcomes in the population.
17	I think here, the one thing that did
18	come up in our discussion, probably the main
19	thing that came up in the discussion is that as
20	Carol said at the beginning, I mean, this is
21	supposed to be a measure of health system
22	quality.

And, in their model, access to care is 1 2 not a significant factor. So, when they look at what predicts hospitalizations, it's prevalence 3 of risk factors, health behaviors and 4 5 socioeconomic status. So, although these clearly are 6 7 important measures for a community, I think there is some question around whether they are valid if 8 9 the question is, are they -- if access to care is 10 not a significant factor, whether you're really 11 measuring health -- the quality of the 12 healthcare. 13 I think that would be the one question 14 I'd have for the developer. I think, otherwise, 15 everything they've done shows that they've looked 16 at the question of validity in pretty good depth. 17 Susan, if you have anything to add? 18 DR. POLLART: I do not, thanks. 19 MS. DAVIES: So, this is Sheryl 20 Davies. 21 I can address -- oh, go ahead. Go 22 ahead, Carol.

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1	DR. STOCKS: I was just going to say
2	that we didn't mean to imply that access to care
3	was not a part of what's driving the
4	hospitalization rates for ACSC conditions.
5	It's a number of things that are
6	driving it. I think the concept is that the
7	healthcare system should be able to meet the
8	population needs and, clearly, access to care is
9	a big part of that.
10	It's just that over time, I think our
11	concept has expanded a little bit to recognize
12	that putting having the right physicians in
13	place and even having access to insurance may not
14	be all of the answers.
15	CO-CHAIR LANG: Yes, I think just to
16	amplify this, I just want to sharpen our
17	understanding of the goal of the measure.
18	The rationale, as stated on the
19	measure says that the measure it says with
20	appropriate pharmaceutical and other outpatient
21	management, the risks of hospitalizations
22	decreased.

So, I think what we're -- I think what 1 2 Bruno was raising is a point that, you know, what is the goal of the measure? 3 Because I think the rates correlate 4 5 most closely with socioeconomic factors as opposed to, you know, access or aspects of 6 7 healthcare. So, if you could respond to that just 8 9 so you can sharpen our understanding of the 10 measure, I think that the committee would 11 appreciate that. 12 DR. STOCKS: Well, the concept is that 13 the healthcare system is not only the physician's 14 office and whether the patient is able to fill 15 the prescription. There's a lot of factors going 16 on. 17 And, many of those factors can be 18 mediated by a community or a system, ideally, 19 it's a rather lofty goal, but it's one that we 20 believe is very important. 21 And so, the system should be able to 22 meet the community's healthcare needs.

Does that answer the question?
DR. SHAW: And, this is Jonathan Shaw,
I'm a primary care physician. This is very near
to my heart.
And, would just say that, currently,
looking at things like insurance coverage and
ratios of physicians in the area or access to
care, but things like vaccination rates, and
especially in the next few PQIs, pneumococcal and
influenza vaccination rates, tobacco cessation
programs which definitely are influenced by
primary care as well as public health have a
strong influence and correlate strongly with
socioeconomic factors.
So, it may not be as narrow as the
traditional access to care measures of how many
physicians in the area, but those are also access
to care issues.
CO-CHAIR LANG: Is there any further
discussion regarding the validity of the measure?
And, then we will proceed with the
vote on validity.

1	MS. AMIRAULT: Validity for 0283, one
2	for high, two moderate, three low or four
3	insufficient.
4	DR. NISHIMI: Ella, can you submit
5	your vote or resubmit it? It's not showing up in
6	chat.
7	MS. AMIRAULT: Zero high, 17 moderate,
8	five low and zero insufficient.
9	And, based on the percentage, we can
10	move forward.
11	DR. DIGIOVINE: So, in terms of
12	DR. POLLART: I can talk about
13	DR. DIGIOVINE: Oh, go ahead, Susan.
14	DR. POLLART: Yes, in terms of
15	feasibility, this is a simple one. All the data
16	elements are defined fields in electronic claims
17	and so the measurement's readily available on
18	administrative billing and claims data.
19	So, the committee felt that it was
20	straightforward and feasible.
21	CO-CHAIR LANG: Is there any further
22	discussion on feasibility? Bruno, were you going

1 to say something? 2 DR. DIGIOVINE: No, that's fine. CO-CHAIR LANG: 3 Okay. 4 We'll proceed to vote on feasibility. 5 MS. AMIRAULT: Feasibility for measure 0283, one high, two moderate, three low or four 6 insufficient. 7 Nineteen high, two moderate, one low 8 9 and zero insufficient. 10 And, based on the percentage, we can 11 move forward. 12 CO-CHAIR LANG: Usability? 13 DR. DIGIOVINE: Usability -- I'll go 14 ahead, Susan. 15 Again, our group thought it clearly 16 very usable being used in public reporting by 17 lots of different states and by CMS. 18 They were able to show improvement in 19 rates of hospitalization between 2011 to 2013. 20 No, sort of unexpected consequences. 21 We thought this was very usable. CO-CHAIR LANG: Any further discussion 22

by the committee or questions for the developer? 1 2 Let's proceed to vote on usability, please? 3 4 MS. AMIRAULT: Usability and use for 5 measure 0283, one for high, two moderate, three low or four insufficient. 6 7 Thirteen high, nine moderate, zero low and zero insufficient. 8 9 And, based on the percentage, we can 10 move forward. 11 CO-CHAIR LANG: Thank you. 12 So now, we're going to vote on the 13 overall measure or overall on the measure. 14 Is there any discussion? 15 DR. DIGIOVINE: Just remind me, at 16 what point do we talk about other measures, 17 harmonization has, you know, been brought up. 18 DR. NISHIMI: We have to be through 19 all of them because of the time constraints. We 20 might not get to that. We'll get to it on the 21 phone call, but I have made a note in the record 22 that you feel strongly that this whole age range

needs to be addressed. 1 2 CO-CHAIR LANG: On the -- yes, we -so then, we will proceed to a vote. 3 MS. AMIRAULT: For overall suitability 4 5 for measure 0283, one for yes or two for no. 6 DR. NISHIMI: Ella, can you submit 7 your vote again? MS. AMIRAULT: 21 yes and one no. 8 DR. NISHIMI: 9 Okay, so the measure 10 will be reflected as recommended in the report. 11 CO-CHAIR LANG: Thank you. 12 So now, we will proceed to measure 13 0275: Chronic Obstructive Pulmonary Disease or Asthma in Older Adults Admission Rate. 14 15 Carol, would you -- is there -- do you 16 wish to make additional comments regarding this 17 measure before we proceed? 18 DR. STOCKS: No, I don't think so. 19 CO-CHAIR LANG: All right. 20 The measure will be discussed by Jim 21 O'Brien and Ken Benson. 22 Take it away, gentlemen.

1	MS. BAL: Sorry, just one second.
2	Cathy, can you please work with Susan
3	so she can get the webinar working for her?
4	Thank you.
5	Sorry, go ahead, I just wanted to make
6	sure.
7	MR. BENSON: Okay, this is a
8	previously endorsed outcome measure undergoing
9	annual maintenance review.
10	It was first released in 2007. New
11	information has been provided which is a review
12	of material and that new evidence pretty much
13	supports the rationale for this.
14	We see a gap in this in that COPD is
15	the third leading cause of death in the United
16	States and of the leading causes of death, it's
17	the only one that continues to rise.
18	Performance suggests the gap still
19	exists.
20	And, any comments at that time?
21	DR. O'BRIEN: This measure is
22	analogous to the one we just discussed. It's

just the older age group and then COPD winds up 1 2 being added in. So, you're going to hear a lot 3 of the same analysis and everything else as we go 4 through it. 5 CO-CHAIR LANG: May I ask about the rationale of including COPD combined with asthma 6 7 as opposed to making, you know, separate measures since they're different conditions, as we all 8 9 know? 10 DR. O'BRIEN: Do you want the 11 developers to comment? 12 CO-CHAIR LANG: That's a question for 13 the developer. 14 DR. STOCKS: Jonathan, would you like 15 to answer that? 16 DR. SHAW: Sure. 17 There was eight on the expert panel 18 consensus in 2009 and they convened on all the 19 PQIs and, recognizing that there's a lot of 20 diagnostic uncertainty in older adults and 21 uncertainty in coding between asthma and COPD. 22 The management at the admission level

was often identical or very similar. So, that's 1 2 the rationale there. Definitely some 3 uncertainty. 4 But, you know, the patterns are very 5 different among the age 40 and above and goes up strongly with age. 6 CO-CHAIR LANG: Additional discussion? 7 Yeah, I would just ask, I guess, I 8 9 don't know if it's in the data anywhere, but 10 whether there's any data looking at the rates of 11 hospitalization for patients who would fit asthma 12 and those for whom it would fit COPD to see 13 whether that overlap that we know does exist 14 clinically actually is reflected in your data? 15 MS. DAVIES: So, this is Sheryl 16 Davies. 17 We don't report that here. In our 18 data, you know, we do see a mix of diagnosis 19 codes. You know, we can't know exactly, you 20 know, what underlies those diagnosis codes, but 21 we do see a mix of diagnosis codes with 22 predominance, and I'll have to look up the number

if the committee is interested, the predominant 1 2 diagnosis is COPD in this age group. CO-CHAIR LANG: Additional discussion? 3 4 Yes? 5 I just had a comment, DR. LAMPONE: and this would probably cross over to the prior 6 7 measure that we just reviewed. And, this is for the developer. 8 9 Have you seen communities based on the 10 data develop programs or what impacts they're 11 having in the community to help drive this data? 12 I think it's important data to know at the 13 geographic area and the drivers of the exacerbation of COPD and asthma and 14 15 hospitalization rates. 16 But, how are the communities and 17 providers in those communities using this data so 18 we can capitalize on the information we have? 19 MS. DAVIES: So, we don't -- oh, go 20 ahead, Carol. 21 DR. STOCKS: No, you go ahead. 22 Yeah, so, you know, we MS. DAVIES:
don't, especially, you know, AHRQ being part of
 the federal government, collects systematic data
 about the use of measures.

So, what we do observe is that these
measures are used quite frequently within public
health programs and within state reporting.

7 Within the research, they are used as outcomes measures in this case and with the prior 8 9 measure. We do see them being used in research 10 and otherwise as they -- in conjunction with 11 other measures such as the prevalence of COPD or 12 asthma and certainly issues such as air quality 13 or, you know, within the research, environmental 14 pollution or job-related pollution and smoking 15 rates.

So, I mean, I'm not sure if I'm answering your question directly, partially because we don't have a systematic way of monitoring use.

20 But, in general, these measures are 21 very widely used as screening tools for, you 22 know, looking at utilization of population

health.

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DR. LAMPONE: Fair enough. Okay.
DR. GROSSBART: With reference to that
question, the organization I'm affiliated with
has a Medicare Shared Savings Program. So, this
is one of the ACO measures that CMS has mandated
or is analyzing for each of those covered lives
within our and everyone else's Medicare Shared
Savings Program.
And, we've hired a hundred care
managers who do, among other things, try to
manage patients with COPD and keep them out of
the hospital. So, this is having an impact, you
know, in the trenches here.
CO-CHAIR LANG: Is there further
discussion regarding evidence?
Then we will oh, Steve, are you
okay?
Then we will proceed to the vote.
MS. AMIRAULT: Evidence for 0275, one
for yes, two for no. Again, evidence for measure
0275.

1	Okay, 22 yes and zero no.
2	So, based on the percentage, we can
3	move forward.
4	CO-CHAIR LANG: Risk gap?
5	MR. BENSON: In terms of gaps? You
6	know, the we think that there is a pretty
7	significant gap in the new evidence. What's
8	introduced supports that.
9	There are some questions in there of
10	how these gaps arrived. Some apparently
11	contradictory information on the rate of
12	hospitalization for blacks relative to whites.
13	And then, another items that says
14	there's little variation between blacks and
15	whites. A little confused by that, but overall,
16	the performance data does suggest a gap.
17	CO-CHAIR LANG: Is there additional
18	discussion or questions for the developer?
19	Thank you, then we'll proceed to vote
20	on performance gap.
21	MS. AMIRAULT: Performance gap for
22	measure 0275, one for high, two moderate, three

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1	low or four insufficient. Again, performance gap
2	for 0275.
3	Six high, 16 moderate, zero low and
4	zero insufficient.
5	Based on the percentages, we can move
6	on.
7	CO-CHAIR LANG: Reliability?
8	DR. O'BRIEN: So, the reliability
9	testing was done similarly to the previous
10	measure, it was signal-to-noise ratio.
11	The performance was actually better in
12	the deciles than it was for the previous measure
13	with just one the smallest that the decile
14	with the counties with the lowest population just
15	came below the specified threshold.
16	I did have a question for the
17	developers. There's mention of two different
18	risk adjusting models, one that's just age and
19	gender and then the other one that talks about
20	including some measure of socioeconomic status.
21	It mentions that model's available.
22	Which of the two is actually in use?
-	

Typically, it's the age 1 DR. STOCKS: 2 and gender or no risk adjustment, depending on, you know, what, you know, the users are most 3 4 interested in measuring. So, as you know, there's a lot of 5 issues around measuring or risk adjusting for 6 socioeconomic status and indicates of these 7 measures, particularly when you're trying to 8 9 identify disparities, it can mask disparities. 10 But, some users do use the poverty 11 adjustment which, you know, is available on the 12 software as an option to compare like 13 communities. 14 DR. O'BRIEN: So, I guess for the NQF 15 staff, is this committee then voting to improve 16 all different ways that this might be used? So, 17 non-risk adjusted, risk adjusted with 18 socioeconomic status, without socioeconomic 19 status in the model? 20 DR. NISHIMI: Yes. 21 CO-CHAIR LANG: Is there further 22 discussion or questions for the developer

concerning reliability? 1 2 Then, we will proceed to vote. MS. AMIRAULT: Reliability for measure 3 4 0275, one high, two moderate, three low or four 5 insufficient. Three high, 19 moderate, zero low and 6 zero insufficient. 7 8 Based on the percentage, you can move 9 on. 10 DR. O'BRIEN: Regarding validity, 11 again, same as the previous measure, two 12 different pieces. 13 One's face validity in which there's 14 an expert panel convened. This group wound up 15 supporting the measure with some concern which is 16 based on their second level of support. 17 Some of their concerns were similar to 18 what we talked about. 19 And, there was also the same empirical 20 validity testing looking at principle components 21 that, again, found an association with health behaviors and socioeconomic status. 22

1 CO-CHAIR LANG: I have a question for 2 the developers. There's a notation in the proposed 3 4 measure that patients with severe chronic 5 respiratory disease had been excluded because COPD asthma differs in the subgroup from patients 6 with COPD asthma lung. 7 Could you elaborate on that, please? 8 9 DR. STOCKS: Jonathan, do you want to 10 take this as a clinician? 11 DR. SHAW: Yeah, I think it's in reference -- if you looked at the exclusions, I'm 12 13 trying to pull them up in front of me, but that's 14 on the Excel appendix. 15 It's congenital lung diseases, cystic 16 fibrosis, rare, but, you know, definitely of 17 significant prevalence conditions that we didn't 18 feel captured the community health measure of 19 being exceptions. 20 And, likely be focused and more 21 specialized hospitals, urban regions. 22 DR. STOCKS: And, we do align our

measures. These specifications, the exclusion,
actually originally arose within the pediatric
asthma measure during an expert consensus process
and during our 2009 consensus process.
The panel has recommended that we
extend the exclusion, although it doesn't
actually exclude that many numerator cases.
They recommended that we include this
exclusion because these patients received
different types of care and their
hospitalizations probably reflect different
factors.
CO-CHAIR LANG: All right, fair
enough.
Are there any other questions for
developers? Any other comments?
All right, seeing no further
questions, comments, we'll proceed to the vote.
MR. AMIRAULT: Validity for measure
0275, one for high, two moderate, three low or
four insufficient.
Two high, 18 moderate, two low and

zero insufficient. 1 2 Based on the percentage, we can move 3 on. 4 CO-CHAIR LANG: Feasibility? 5 DR. O'BRIEN: This is based on administrative billing and claims data as well as 6 U.S. Census data and the software is readily 7 available from AHRQ. 8 9 CO-CHAIR LANG: Any further discussion 10 questions? 11 Please, Bruno? 12 DR. DIGIOVINE: I don't want to go 13 back to validity, but just as you made your 14 point, Dave, I looked at the exclusion criteria 15 and they are all around pediatric diagnoses. 16 And so, I do have some concerns that 17 they're not excluding adult diseases that would 18 fit into what I think they're trying -- so, they 19 have congenital bronchiectasis, but they don't 20 have bronchiectasis. 21 So, it would strike me that there 22 probably needs to be some retooling of the

exclusionary criteria to include adults. 1 2 CO-CHAIR LANG: Yeah, I haven't been able to pull it up on my screen, either. But, I 3 4 recall, you know, wondering about conditions like 5 Churg-Strauss and allergic bronchopulmonary aspergillosis and how these other conditions were 6 7 handled. Would the developers wish to comment 8 9 further? 10 MS. DAVIES: Well, so --11 DR. STOCKS: Is that -- go ahead, 12 Sheryl. 13 MS. DAVIES: Yes, those particular 14 conditions were not brought up by our expert 15 panel in 2009, but, like Carol said, we can 16 certainly revisit those conditions and look at 17 their frequency within the numerator population. DR. NISHIMI: Okay, so in the comments 18 19 to the developers and the record of the report, 20 we'll make that indication. 21 CO-CHAIR LANG: So, we're on 22 feasibility.

So then, where are we with respect to 1 2 that issue, then? We'll revisit this? 3 DR. NISHIMI: Well, no. You can 4 revote based on that, otherwise, it'll just be a 5 recommendation to the developer that they take a look at those adult exclusions. 6 CO-CHAIR LANG: That's fine. 7 8 DR. NISHIMI: If you --9 CO-CHAIR LANG: Is that okay with the 10 11 DR. NISHIMI: Is that okay with --12 CO-CHAIR LANG: Is there anybody wish 13 to revote? 14 DR. NISHIMI: Okay, so then --15 CO-CHAIR LANG: All right. So, then 16 we're --17 DR. NISHIMI: -- it'll just be a 18 comment. 19 CO-CHAIR LANG: Okay, thank you for 20 that clarification. 21 So then, we'll proceed to vote on 22 feasibility.

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1	MS. AMIRAULT: Feasibility for measure
2	0275, one for high, two moderate, three low or
3	four insufficient.
4	14 high, 8 moderate, zero low and zero
5	insufficient.
6	Based on the percentage, we can move
7	forward.
8	CO-CHAIR LANG: Excellent. We're
9	proceeding to usability.
10	DR. O'BRIEN: So, this is in use as
11	mentioned in some of the discussion in a wide
12	variety of ranges including the Medicare Shared
13	Savings Program down in Cincinnati.
14	There has been improvement from 2011
15	to 2013 in this rate. The developers suggest
16	over 104,000 fewer hospitalizations. It's not
17	clear what's triggering this improvement, whether
18	it's intentional or it might be also changes in
19	qualifications for hospitalizations or reduction
20	in hospitalizations overall.
21	CO-CHAIR LANG: Is there further
22	discussion or questions?
•	

1	Please, Dale?
2	CO-CHAIR BRATZLER: So, I had, you
3	know, on the previous measure, we talked a little
4	bit about how the measure was being used and, you
5	know, I think it makes sense in large shared
6	savings programs and potentially in community
7	care organizations.
8	You know, Oregon's been using some of
9	these because they're kind of population-based
10	performance metrics.
11	I did have a little concern about
12	what's the minimum sample size that this measure
13	works at?
14	And, the reason I raise this question,
15	I had to go back and look at our QRUR report.
16	But, now, CMS is using PQI 5, so this is 0275 for
17	COPD and asthma at the level of the individual
18	practice as a part of the QRUR, which concerns me
19	a bit that that's really not population level
20	evaluation and it's actually being used as part
21	of the value modifier.
22	So, I question whether that's an

appropriate use or whether there's the minimum 1 2 sample size that should be, you know, that you can actually apply this performance metric to? 3 4 I'm not sure if my question is 5 completely clear, but I do have concerns about some of the use of the metric. 6 7 DR. STOCKS: Can we address that as developers? 8 9 DR. NISHIMI: If you can hold off, we 10 have a committee follow-up first. 11 DR. STOCKS: Okay. 12 DR. MURRAY: I guess what I'm trying 13 to ask was were we asking for a remedy, you know, 14 like a notification on when you're using this 15 metric, it cannot be used in a size smaller than 16 x. Is that what we're asking? 17 Because that might apply to some of 18 other metrics that we're looking at, too. 19 CO-CHAIR BRATZLER: To me, I think it 20 goes to the validity of the measure. The 21 validity may be very good at the population 22 level, but how small does the population get

1	where the measure is not valid or, you know, I
2	don't know if I'm, again, asking the right
3	question, but I'm interested to see what the
4	developers say.
5	But, I do have concerns because I went
6	back I had to go back real quickly and search
7	the CMS methodology, but they explicitly state
8	that they're using PQI 05 at the practice level
9	as a part of the value modifier now.
10	So, I'm concerned about the sample
11	size or the population size that this is being
12	applied to.
13	DR. NISHIMI: Go ahead, AHRQ.
14	DR. STOCKS: So, the measure that CMS
15	is using, as we know, and the materials with the
16	footnote there, is an adaptation of the PQI. So,
17	the measure before you today is the population
18	health measure.
19	We provide the information on what CMS
20	uses because it's one of the most visible ways
21	that admission rates themselves are being used.
22	And, as you heard before, you know,

it's a, you know, within those programs, we can 1 2 see, you know, the action being taken. However, the testing that we provide 3 4 today and all the information is based on the 5 population measure. We cannot speak to, you know, the 6 minimum sample size with inference. 7 It's a CMS 8 program. 9 When you change the denominator 10 population, you change rates, you change the 11 distribution across the measured entities. And, 12 those all, all of those factors will actually 13 impact the signal-to-noise ratio. 14 So, you know, we, as AHRQ, are, and 15 we, as the measure developer under contract with 16 AHRQ, are bringing before you the population 17 health-based measure and we can speak to what we 18 observed. 19 And that is that, for this particular 20 measure, there are some reliability concerns for small counties. And for those counties, we 21 22 recommend using the smoothed rates. And, the

smoothed rates actually account, I guess, you'd 1 2 call it a reliability adjustment. So, it will account for variation and 3 reliability for those very small counties. 4 CO-CHAIR LANG: Steve, did you want to 5 say something? 6 7 DR. GROSSBART: Just a comment, is it a measurement developer's responsibility for the 8 9 measure being used liberally and CMS does have a 10 tendency to do that quite a bit among others. 11 No, it's -- we don't DR. NISHIMI: 12 place the implementation burden on the developer. 13 And, yes, CMS does use this measure and other 14 measures towards its own ends. 15 DR. O'BRIEN: Although, I would offer 16 that that probably would be considered an 17 unintended consequence that should be identified. 18 CO-CHAIR BRATZLER: Yes, so I agree. 19 And, I just -- when I -- because I kind of, as we 20 were having the conversation, went and searched 21 the CMS website real quick and they explicitly 22 identified PQI 05 as the methodology behind the

metric that they put in the QRUR that they hold 1 2 individual practices accountable for. So, I understand that's not AHRO's 3 fault and it's not the fault of this measure. 4 Ι 5 understand that. But, I do -- I think, you know, James's point is a good one, that it is an 6 7 unintended consequence. And, if you to the CMS website, it 8 9 says this is the PQI 05 measure that's being used 10 to hold a practice level, you know, accountable 11 for admission rates for asthma COPD. 12 CO-CHAIR LANG: Bruno? 13 DR. DIGIOVINE: Yes, I think you just 14 pointed out that it's not the role of the 15 developer and it's not the -- I guess, it's not 16 AHRQ's role. I guess the question is, is it 17 NOF's role? Is it our role, as a committee, or 18 this organization's role to say, this measure is 19 only approved for measurement at this level? 20 And, that's what we do. DR. NISHIMI: 21 DR. DIGIOVINE: Okay. 22 DR. NISHIMI: You're voting on it and

that's what the report clearly indicates, the 1 2 level of analysis population. CO-CHAIR LANG: Is there additional 3 4 discussion, addition questions for the 5 developers? As I see no further questions, 6 discussion, we'll proceed to a vote on usability. 7 MS. AMIRAULT: Usability and use for 8 9 measure 0275, one for high, two moderate, three 10 low or four insufficient. 11 DR. NISHIMI: David, can you resend 12 your vote? David? 13 DR. STOCKWELL: Yes, I'm here. Sorry, 14 I'm having access problems, just a sec. 15 DR. NISHIMI: If you want to email it 16 to P as in Peter, B as in boy, A as in --17 DR. STOCKWELL: Yes, I'll do that. 18 I've got her email. 19 DR. NISHIMI: Okay. 20 DR. STOCKWELL: Thank you. 21 Okay, just sent. 22 DR. NISHIMI: Okay.

MS. AMIRAULT: Would everyone mind 1 2 just pointing just pointing one more time? Thank 3 you. 4 Three high, 15 moderate, four low and 5 zero insufficient. Based on the percentage, you can move 6 7 on. CO-CHAIR LANG: All right, so now, 8 9 we're going to proceed to vote on the overall 10 measure. 11 Discussion? Ouestions for the 12 developer? 13 Seeing no further questions, 14 discussion, we'll vote on the overall suitability 15 for endorsement of the measure. 16 MS. AMIRAULT: For overall suitability 17 for Measure 0275, one for yes, two for no. 18 Eighteen yes, four no. 19 So, based on the percentage, this will 20 be recommended. 21 CO-CHAIR LANG: We're now moving on to 22 our third measure, our third population health

measure, 0279: Bacterial Pneumonia Admission 1 2 Rate. 3 Carol, would you like to -- or Sheryl, would you like to make a few comments about this 4 5 briefly before we proceed? No, I don't think so. 6 DR. STOCKS: 7 Thank you. CO-CHAIR LANG: Very well, the measure 8 9 will be reviewed by Susan Pollart and Rich 10 Murray. 11 Evidence? 12 DR. MURRAY: This is NQF Measure 0279, 13 Bacterial Pneumonia Admission Rate, PQI 11. 14 And, this is an outcome measure. The 15 data source is from claims, and the level of 16 analysis is at the population level -- county or 17 city. 18 I don't know if this one is also being used by CMS at the practice level, but if it is, 19 20 we should consider that same discussion that Dale 21 just brought up. 22 The evidence here, you know, includes

providing the rationale that supports the
 relationship of the health outcome, in this case,
 admission for pneumonia.

4 Two processes are structures and care 5 and the developer says that their rationale for the measure is that access to high quality care, 6 7 early intervention and appropriate treatment including pharmaceutical treatment will minimize 8 9 the likelihood of mild respiratory conditions 10 progressing to pneumonia reducing the likelihood 11 of hospitalizations.

12 There is no requirement for a 13 literature review, but they did review some 14 additional literature.

15 And, the new question for the 16 committee is that, although the developer 17 provides updated evidence related to aspects of 18 hospitalization for pneumonia, does the committee 19 agree that the underlying rationale for the 20 measure remains reasonable? And, there is no 21 need for the discussion or vote of the evidence. 22 CO-CHAIR LANG: Yes, so the underlying

rationale for the outcome measure hasn't changed 1 2 since the last endorsement review. So, unless there is an objection from anyone on the 3 4 committee, there's not any need for any vote. DR. MURRAY: And the numerator and 5 denominator have not changed. 6 7 CO-CHAIR LANG: Okay. Then, we will 8 proceed without voting to performance gap. 9 I can step in if you DR. POLLART: 10 want me, Richard. 11 MR. MURRAY: Sure. 12 DR. POLLART: Looking at gaps, there 13 was evidence of disparity, particularly on older men both socioeconomic status and in rural areas. 14 15 So, the group felt that there were gaps in care, 16 warranting it as a national performance measure. 17 DR. MURRAY: And, there were no 18 disparities related to race, right? Just to male 19 patients 65 and over and patients with the lowest 20 income and also patients living in rural 21 locations. 22 DR. POLLART: Yes, that's what was

1 reported. 2 DR. MURRAY: Which further supports 3 the variation in care. 4 CO-CHAIR LANG: Is there further 5 discussion? 6 Bruno, yes? 7 DR. DIGIOVINE: A couple of questions. One is, the disparities that are 8 9 reported, are those -- is there data that the 10 developers provided that I'm not seeing right here, or is that just based on a literature 11 12 review or something else? 13 And then, I don't know if this is here 14 or in validity. I guess there's still this --15 this one, for me, is much harder to understand 16 how much healthcare can intervene in preventing a 17 pneumonia admission. 18 It just strikes me as not -- the face 19 validity of that, to me, is difficult to 20 understand. 21 DR. MURRAY: Although the data that 22 they provide in the performance gap of the

overall document, you know, shows sort of 1 2 progressive decline in the observed rate in the period of 2009 to 2013. 3 4 DR. DIGIOVINE: So, does the developer 5 have some health system improvement that they think correlates with that decrease in pneumonia 6 7 rates? In the evidence -- yes, 8 DR. SHAW: 9 this is Jonathan Shaw. 10 There's very strong evidence that 11 pneumococcal vaccinations as well as flu 12 vaccination reduces hospitalization rates in a 13 given area. 14 DR. MURRAY: And, while we're looking 15 at those data, could we ask the developer to 16 clarify in the table that's under the performance 17 gap section, there's a -- I don't know if it's 18 typo or not, but under the very last row, year 19 2013, the standard deviation is 2.43, a striking 20 drop from the previous four years. Do you see 21 that? 22 MS. DAVIES: I can address -- yes, I

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can address that.

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2	And, it is actually, we provided some
3	updated tables in the distribution of the PQI is
4	an interesting distribution. I won't go into the
5	details of it.
6	But, as you know, distributions,
7	particularly outliers can impact the standard
8	deviations.
9	We provided updated tables taking out
10	those outliers just for clarification.
11	DR. MURRAY: Okay, thank you.
12	DR. YEALY: I had one question about
13	the performance gap and the disparities.
14	Is it it looks like male sex and
15	age over 65 is a big drivers, but those are big
16	drivers of mortality prediction when you develop
17	acute pneumonia, at least if you use the
18	pneumonia severity index.
19	So, this is kind of circular; of
20	course, they would drive this particular event
21	because, in fact, men die more often with the
22	same level of pneumonia than a woman does and

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people over 60, the base way you get points in 1 2 the pneumonia severity index is your age if it's 3 over 50. 4 So, I wonder about half of the 5 performance opportunity actually being exactly what we're looking for? It's you want those 6 7 folks admitted. It's not -- or at least more proportionally admitted. 8 9 I'm not sure I'm seeing the problem 10 exactly here. 11 DR. SHAW: These are not -- these are 12 potentially preventable, not unnecessary 13 admissions. We're not saying that these aren't 14 necessary. 15 So, in terms of the potentially 16 preventable, I'd go back to the effective high 17 rates of pneumococcal vaccinations, early 18 outpatient detection should still influence the 19 population level rates regardless of the fact 20 that, yes, when the elder male or elder pneumonia 21 patient presents, they should be admitted. 22 DR. O'BRIEN: Is there a population-

based measure of pneumococcal vaccination and flu 1 2 vaccination rates already available? NOF has endorsed 3 DR. NISHIMI: pneumococcal vaccination influence and 4 5 vaccination measures, yes. DR. MURRAY: It would be interesting 6 7 to compare the change in that over time with the change in this. 8 9 So, also, earlier, we DR. DIGIOVINE: 10 heard about outreach for trying to prevent COPD 11 admissions and asthma admissions. Is there 12 anybody reporting that they're doing outreach to 13 try to prevent pneumonia admissions? 14 So, in the evidence -- so, DR. SHAW: 15 this is the measure evidence form under the --16 there is a reference to a program within the VA 17 that showed success and it was focused on 18 vaccination. And, it showed significant decreases after that, that after -- it's on page 19 20 7 of the evidence form. CO-CHAIR LANG: Okay, we have Crystal 21 22 and then Todd.

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1 I'm sorry, Don? Don? Oh, you didn't 2 put your -- okay. Todd? 3 4 DR. DORMAN: So, I guess it's less a 5 question and just a comment. I think what's confusing me a little 6 7 bit here is the statement that appropriate pharmaceutical treatment with the degree to which 8 9 the likelihood of milder respiratory conditions 10 progressing to pneumonia, and I think that's the 11 question. 12 Where is the evidence that there's 13 some intervention for milder respiratory 14 conditions? What's being presented is 15 vaccination, which doesn't fit what that sentence 16 says and I think that's the disconnect for me. 17 DR. SHAW: This is Jonathan, again. 18 There is a large truck of pneumonias 19 which can be treated outpatient if caught early, 20 maybe not in the older population per se, but, 21 you know, just looking at all population, all 22 ages.

1	And so, you know, with early access to
2	care, many of these patients will be treated for
3	"walking pneumonia" and avoid hospitalization.
4	CO-CHAIR LANG: I also have a question
5	for the developer.
6	The measure is entitled Bacterial
7	Pneumonia Admission Rate, yet what you're
8	tracking is discharges.
9	So, I'm just wondering, you're using
10	the discharge diagnosis as a proxy for
11	admissions, so I'm wondering whether you can
12	reconcile this for us? Is there any data you
13	have that implies that it's apples and apples?
14	DR. STOCKS: In the type of data that
15	we're using, the records are created at the time
16	of discharge and the principle diagnosis is the
17	one that is adjudged to be the major cause of
18	that admissions. Sometimes that, the first
19	impression or the admitting diagnosis is not what
20	it turns out to be.
21	We believe the discharge diagnosis
22	and, actually, these records aren't even created

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until the time of discharge. 1 2 Do you have anything to add, Sheryl? CO-CHAIR LANG: I just had a 3 4 clarification --- so, are you using discharge 5 claims data, or are you doing chart review discharge diagnoses? 6 7 DR. STOCKS: It's discharge claims, not claims, but billing data created by the 8 9 hospitals and, of course, those billing records 10 are based on the coders looking at the medical 11 records. 12 CO-CHAIR LANG: Okay. So, it's from 13 the hospitals themselves, not the payers or CMS? 14 DR. STOCKS: That's correct. 15 CO-CHAIR LANG: Okav. 16 DR. MURRAY: So, this measure 17 underestimates the actual admission rate by some 18 amount related to say, death or transfer, is that 19 right? 20 DR. STOCKS: No, we would include 21 So, transfers are only excluded in one cases. 22 direction to avoid double counting of

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hospitalizations.

2	DR. MURRAY: Okay.
3	DR. STOCKS: And, deaths would be
4	included. It's just when the diagnosis so, in
5	this case and the case of a principle diagnosis
6	here, you know, that principle diagnosis is the
7	diagnosis that, quote, occasions, principally
8	occasions, the admission.
9	And so, you know, we don't observe a
10	huge, you know, difference between, you know,
11	admission and discharge, in this particular case.
12	You would only observe that, for
13	instance, if somebody thought somebody had
14	pneumonia and then at the end of the
15	hospitalization, they figured out that it wasn't
16	really pneumonia, then it would be what's called
17	a rule-out diagnosis.
18	Rule-out diagnoses are not codable as
19	a principle diagnosis or a secondary diagnosis.
20	So, we're actually capturing, you know, what
21	diseases that are recorded by the physicians.
22	CO-CHAIR LANG: Thank you.

Are there any additional questions for 1 2 the developers or comments? We're on performance gap, and we're going to vote on performance gap. 3 4 MS. AMIRAULT: Performance gap for 5 Measure 0279, one for high, two moderate, three low or four insufficient. 6 7 One high, 11 moderate, 10 low and zero insufficient. 8 9 And, this is grey zone. 10 CO-CHAIR LANG: Okay. We will move 11 forward with -- we have to discuss reliability. 12 DR. MURRAY: So, on reliability, the 13 developer indicates that there were some changes 14 made to the measure specifications since the 15 prior endorsement review. 16 They added several codes including 17 staphylococcal pneumonia, methicillin-susceptible 18 staph pneumonia. 19 So, a number of codes were added and 20 some additional exclusions. They did repeat the 21 reliability testing and they also, let's see, 22 they did this at the measure score level using

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more current data.

2 And, they did a risk adjustment model as well using data from the Healthcare Cost and 3 4 Utilization Project state and patient database in 5 40 states representing 89 percent of the country. And, as the summary of their testing, 6 they reported a reliability testing, not at the 7 individual element level, but at the measure 8 9 level with a signal-to-noise ratio of .97 which 10 they say is very high. 11 And, when they added social 12 demographics statistics to the risk adjustment 13 model, the signal-to-noise ratio was about the 14 same at .96. 15 So, the question is, are we confident 16 that this is sufficiently reliable to be useful 17 to look at changes in essentially quality of 18 care? 19 CO-CHAIR LANG: Susan, is there any 20 additional comments you wish to make? 21 DR. POLLART: Yes, no, I think that 22 summarized it.

[
1	CO-CHAIR LANG: Great.
2	DR. POLLART: I think the other
3	question was were the appropriate codes included?
4	But, as was mentioned, a number were added that I
5	think are sufficient.
6	CO-CHAIR LANG: Additional comments,
7	other members of the committee, questions to the
8	developers?
9	Seeing none, we will proceed to vote
10	on reliability.
11	MS. AMIRAULT: Reliability for Measure
12	0279, one being high, two moderate, three low or
13	four insufficient.
14	Six high, 13 moderate, three low and
15	zero insufficient.
16	And, based on the percentage, you can
17	move along.
18	CO-CHAIR LANG: Validity? Susan?
19	Rich?
20	DR. POLLART: Yes, I can start with
21	that.
22	So, the validity testing level was at

that measure score and face validity only was 1 2 tested. It was tested within -- from four 3 4 clinical expert panels involving 73 panelists and 5 was convened in 2008 to 2009. The panels indicated the measure was useful. 6 And, I think our group asked whether 7 a panel convened in 2008 to 2009 was -- if those 8 9 recommendations were still applicable? But the 10 panels did indicate it was useful. 11 CO-CHAIR LANG: Rich, any additional 12 13 DR. MURRAY: I guess threats to 14 validity, there are, you know, issues of 15 exclusions. There are issues of miscoding. 16 There's the sickle cell disease. 17 You know, so the question is, is are 18 the exclusions consistent with the evidence and 19 are they sufficient for us to have confidence in 20 the validity in terms of these? Those are the 21 main threats, I think. 22 DR. POLLART: Yes, the point was made
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still about --

2 DR. MURRAY: And coding. DR. POLLART: Yes, there were about a 3 4 little over 69,000 discharges excluded because of 5 the diagnosis in the immunocompromised state which --6 7 DR. MURRAY: Right. DR. POLLART: -- if you replace those 8 9 folks, you'd increase your numerator by over ten 10 percent. So, are they appropriately or 11 inappropriately excluded from the measure when 12 you remove the immunocompromised state? 13 DR. MURRAY: So, the ability to be 14 confident about the presence or absence of 15 immunocompromised state would sort of -- that 16 would probably increase the uncertainty of the 17 measure. 18 CO-CHAIR LANG: Bruno? 19 DR. DIGIOVINE: Yes, I had two 20 questions. 21 One was either for the developer or 22 for others if they understand it. I don't

understand the way the sense of validity is 1 2 reported by the panel. There's four levels of support with 3 different median scores and I'm not sure I 4 5 understand what all of that means. And, the second is, this is now the 6 third measure, the other two statistical tests 7 were done to assess validity, and I'm wondering 8 9 why that wasn't done specifically for this 10 measure? 11 DR. STOCKS: Sure, so when we do the 12 face validity testing, we asked several questions 13 about usability and the different aspects of the 14 measure, very similar to what the NQF panel is 15 doing when we ask, you know, questions of 16 reliability. 17 In this case, we asked them to rate 18 different aspects that would contribute to the 19 face validity of the measure and the usability. 20 In that particular study, we were 21 looking at different levels and different 22 applications of the measure. And so, you'll see

the different ratings there. They just reflect
 the purpose of that study.

In the case of the empirical analysis, the study that we used to assess the empirical validity of the measure was focused on chronic disease measures. And, did not actually include the acute PQI, so that's why they're not included here.

9 DR. DIGIOVINE: So, just on the face 10 validity piece, you're saying you asked the 11 panel, do they fully support the use and over --12 on a 9-point Likert scale? And, their answer was 13 somewhere between seven and nine?

But, then you asked them, again, do they have general support with some concerns, and they had the same degree of agreement?

DR. STOCKS: So, those -- so, we asked them about the overall usefulness of the measure or a different application. In this case, we're reporting on the population health application. And, for that, in comparison between counties, and for that, they rated on a Likert

scale and we used the RAND Appropriateness
 Method, the adaptation of that method to then
 rate the measure. We convened two -- or then
 categorized the support.

5 We convened two panels here, I think 6 that's what you're probably noticing. We're 7 testing kind of a different approach because the 8 nominal panel technique, which is typically used 9 as, you know, a group of, you know, 8 to 15, you 10 know, individuals.

11 There are some chances for bias, 12 depending on the particular folks that you have 13 on that panel. And so, we were testing a 14 different approach where we would combine the 15 nominal group with a delta group.

So, we also convened a much larger group that did not meet in person but they received feedback from the other group, and that study is also published, and it's referenced there.

21 So, that's the reason you see two 22 ratings there, it's because we had two separate

panels that interacted with each other but they
were considered separately.
CO-CHAIR LANG: Is there additional
discussion, questions for the developers?
Yes, Don?
DR. YEALY: You know, I noticed that
the measure is called a measure but focused on
bacterial pneumonia.
But, it actually looks like aside from
the coding, what you're really assessing is
community acquired pneumonia.
I understand that a ton of these may
be coded as bacterial pneumonia. Has there been
any validity check on the frequency in which this
truly is bacterial?
In other words, there was some
microbiologic evidence of it being bacterial?
You know, in my world and most
published world, a third would be about the most
that you had any hard data on.
And, I suspect that those comments
that you got in 2008 were about community

acquired pneumonia, not specifically about 1 2 bacterial pneumonia. We throw the terms around interchangeably, but they're not exactly the same 3 4 things. 5 So, that's my validity question, not are the data sets big enough to be examined again 6 7 and again. Is this really bacterial pneumonia we're talking about? 8 9 DR. STOCKS: That's a fair concern. 10 And, I think we could consider changing the 11 You're absolutely right that this is measure. 12 most reflects community acquired pneumonia. 13 The name of this measure, you know, a 14 legacy name going back to the early 15 conceptualization of ambulatory care sensitive 16 condition. The idea was to -- that, you know, 17 many community acquired pneumonias are bacterial. 18 You'll notice in the code list that we 19 do include unspecified pneumonias and this 20 captures exactly what you're speaking about is 21 that, you know, most pneumonias don't have, you 22 know, either it's not done or we cannot actually

1	obtain a culture a positive culture
2	bacterially, but they're treated empirically.
3	And so, that is something we can
4	certainly consider is, you know, a change to the
5	name to reflect community acquired pneumonia.
6	DR. MURRAY: Just as a follow up
7	question. If you're going to take bacterial
8	pneumonia out of the name, does that mean that
9	we're comfortable having somebody with a viral
10	respiratory tract infection with infiltrates
11	that, of course, cultures nothing bacterial and
12	that that would now be in the numerator?
13	DR. STOCKS: I would like to clarify
14	that we don't actually include codes for virals.
15	So, if the physician does make it as a viral
16	pneumonia, it would not be included in here.
17	DR. MURRAY: Okay.
18	DR. STOCKS: That's, you know, differs
19	from, you know, some of the CMS measures of, you
20	know, pneumonia mortality, et cetera.
21	So, if it's specified as such, then it
22	would not be.

DR. MURRAY: It would not be? Okay.
DR. POLLART: The committee said the
added codes are discussed adding staph,
methicillin-resistant, MRSA staph. But, what
would codes the previous codes?
DR. STOCKS: I'm sorry, I'm not sure
I understand the question.
DR. POLLART: Yes, that's all right.
I'm just kind of you talk about added codes,
the original codes were ICD-9-CM or ICD-10
diagnosis code for bacterial pneumonia.
DR. STOCKS: Yes, all the codes that
are included are included in the technical
specification that's been provided in the Excel
spreadsheet. That has all the codes. These are
just new codes that were added, usually because
they've been introduced into the coding system.
CO-CHAIR LANG: Okay, further
discussion?
All right, we will proceed to vote on
validity.
MS. AMIRAULT: The highest eligibility

1	for validity for 0279 is moderate, so the options
2	are two moderate, three low or four insufficient.
3	One high, 9 moderate, 12 low or zero
4	insufficient.
5	And, based on the percentage, this is
6	grey zone and we'll move on.
7	CO-CHAIR LANG: Okay, feasibility?
8	DR. MURRAY: Feasibility. So, all the
9	data elements are in defined fields in electronic
10	claims. The measure is based on readily
11	available administrative billing and claims data.
12	The AHRQ software is publically
13	available and people have over ten years of
14	experience using it with and there are no fees.
15	So, the feeling should be that it's feasible.
16	CO-CHAIR LANG: Any concerns, members
17	of the committee, regarding feasibility?
18	Seeing none, we'll proceed to vote,
19	feasibility.
20	MS. AMIRAULT: Feasibility for Measure
21	0279, one for high, two moderate, three low or
22	four insufficient.

Seventeen high, 3 moderate, 2 low and 1 2 zero insufficient. Based on the percentage, we'll move 3 along. 4 5 CO-CHAIR LANG: Feasibility? DR. POLLART: The current use of the 6 measure is publically reported, and it's used in 7 accountability programs. 8 9 Improvement results were reported. 10 There are -- the PQI 11 hospital admission rate 11 decreased by 87,000 fewer hospitalizations from 12 2011 to 2013. 13 The committee felt that usability and 14 use were -- could be used to further the goal of 15 high quality efficient healthcare. 16 CO-CHAIR LANG: Dale? 17 CO-CHAIR BRATZLER: So, two things, 18 I'll raise my issue about unintended consequence 19 again, because this is one of the measures that, 20 while designed for population level evaluation, 21 it's being used at the practice level, again. 22 And, that's, again, not AHRQ's fault, I

understand that. It's not the measure
 developer's fault.

My second issue, though is, I know 3 4 data that's presented that the rate for this 5 measure is going down. I certainly know in our institution, with the availability of a wide 6 variety of panels to identify viral pneumonia in 7 adults that we're seeing a fairly dramatic 8 9 reduction in the number that have unassigned 10 causes that used to be assumed to be bacterial. 11 And, now, you know, you know, you're 12 finding metapneumovirus and respiratory syncytial 13 virus and all sorts of viruses in adults. And 14 so, perhaps, they're being coded as viral, 15 they're not including the numerator any more, but 16 that reduction in the numerator over time may 17 simply be that we're much, much better in 18 diagnosing viral pneumonia in adults which didn't 19 used to do very consistently. 20 So, I have some questions about

20 so, I have some questions about 21 whether the measure is improving or are our 22 diagnostic ability for viral pneumonia has

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improved a lot over time.

2	Which then raises, for me, the
3	question influenza vaccine clearly an important
4	intervention to improve this metric, pneumococcal
5	vaccine probably important. But, there are whole
6	bunch of viral pneumonias that are being
7	diagnosed now for which we don't see.
8	CO-CHAIR LANG: Further discussion?
9	We'll proceed to vote on usability.
10	MS. AMIRAULT: Usability and use for
11	0279, one high, two moderate, three low or four
12	insufficient.
13	Five high, 11 moderate, 6 low and zero
14	insufficient.
15	Based on the percentage, we'll move
16	forward.
17	CO-CHAIR LANG: Now, we are
18	considering the overall suitability of this
19	measure for endorsement.
20	Is there further discussion?
21	We will proceed to vote.
22	MS. AMIRAULT: Overall suitability for

0279, one for yes, two for no. 1 2 Thirteen yes and 9 no. 3 Based on the percentage, this is grey 4 zone. 5 DR. NISHIMI: Okay, are we ready to take up the next one? 6 CO-CHAIR LANG: Yes, we're proceeding 7 to the next measure, 0708: Proportion of Patients 8 9 with Pneumonia That Have a Potentially Avoidable 10 Complication During the Episode Time Window. 11 Would the -- are the developers on the 12 Would they wish to make a comment? phone? 13 MS. GORHAM: I'm sorry, Karen Johnson? 14 MS. JOHNSON: Yes, I'm here. 15 MS. GORHAM: Okay. Are you starting 16 with the intro? 17 MS. JOHNSON: Yes, if that's how you 18 want me to do it. 19 DR. NISHIMI: No, Karen's going to 20 address during the reliability. So, Amita and 21 Andrew -- not Andrew -- yes, is it Andrew and 22 Francois, go ahead.

Karen, just jump in when we get to 1 2 reliability. 3 MS. JOHNSON: Okay, great. Thanks. 4 DR. RASTOGI: Thank you. 5 This is Amita so with ACHC. We would first like to thank the 6 7 members of the standing committee for the thoughtful review of this measure and the 8 9 comments that we received last week during the 10 call. 11 Before addressing some of the 12 comments, we want to clarify a few points about 13 this measure because this is a resubmission. 14 In the original measure, which was 15 endorsed a few years ago, we had three categories 16 of avoidable complications. We have removed one 17 and kept the other two. 18 The one that we removed dealt with 19 complications associated with comorbidities. A 20 patient that may have other similar conditions. 21 Then we thought that those complications would be 22 best addressed with that main condition itself.

So, in other words, the prior endorsed 1 2 measure had broader complications than this one, 3 you know. 4 Second, we want to address the 5 reliability piece. We created a very high threshold of reliability prior to use of this 6 measure, asking that the measure users determine 7 the appropriate sample size prior to calculating 8 9 a risk standardized score and reporting 10 performance. 11 This sample size is determined by the 12 specific data set being analyzed and 13 significantly reduces the potential of 14 misclassification of a provider. 15 The goal is to create a fair balance 16 between the need for accountability on outcomes 17 of scales and an assessment of the actions of 18 physicians and facilities in influencing those 19 outcomes. 20 The pneumonia PAC measure, or the 21 potentially avoid complication measure, is really 22 centered around the patient's experience with an

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episode of care.

2 PACs measure adverse events that can be experienced by a patient and that when they 3 4 occur lead to poorer overall quality and higher 5 cost of care. As such, they are very useful for 6 7 physicians and facilities in the move to alternative payment models because of reduction 8 9 in PAC's reduces cost of care while improving 10 overall patient outcomes, helping to meet two of 11 the three goals in the tripling. 12 So, up front, we would like to offer 13 a few clarifications from the discussion from 14 last time. 15 Very briefly, the first one are 16 patients are included in the denominator as being 17 hospitalized with pneumonia as the discharge 18 diagnosis on the inpatient claim specifies 19 pneumonia. 20 However, if the discharge diagnosis is 21 amended to be septic shock, the patient is no 22 longer included.

1 If the patient has a pre-existing 2 condition such as bronchiectasis that can be identified in claims prior to the pneumonia 3 trigger date, that pre-existing condition gets 4 5 flagged as comorbidity and is used a risk factor to adjust on. 6 So, we do not count this in the 7 numerator for the measure in the diagnosis even 8 9 if it appears in subsequent claims because now, 10 it's considered as a risk factor and a pre-11 existing condition. 12 The originally endorsed measure 13 included all types of pneumonia in its 14 definition, making it rather heterogeneous 15 population in the denominator. 16 So, we have modified the measure to 17 separate out well defined diagnosis of healthcare 18 acquired pneumonia such as ventilator-associated 19 pneumonia and aspiration pneumonia. 20 However, there are a few diagnosis codes that are less well defined or specific and 21 22 can be used to identify either a community

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acquired or the healthcare acquired.

In certain instances, the diagnosis codes were left in, but then they apply uniformly in the measurement process.

5 And finally, the workbook that is 6 attached within the submission addresses several 7 details including the risk factors that were 8 flagged when present and included in the severity 9 models, they include PAC rates for each provider 10 and their risk standardized rates.

Importantly, this measure is a 11 12 reflection of relative performance, not absolute 13 performance. The extent of which this 14 imprecision in a specific administrative claims 15 data set exists, that imprecision should be the 16 same for all providers and not affect the 17 relative performance rate. 18 Thank you. 19 CO-CHAIR LANG: Thank you. 20 James, Chana? Evidence? 21 DR. O'BRIEN: So, as mentioned, this is an outcome measure. The level of analysis is 22

actually specified as potentially being the 1 2 clinician, the facility or even population. This is adult patients age 18 or older 3 4 who have an encounter, either inpatient or 5 outpatient, that's associated with pneumonia who then are followed for one month and looked at to 6 7 see if they develop one of these what are called PACs, the potentially avoidable complications. 8 9 As the developer mentioned, there are 10 two different types of these. 11 The first one is one that is thought to be directly related to the pneumonia itself. 12 13 The second one are ones that the 14 developers suggest are patients safety failures. 15 This is an outcome measure and so, 16 obviously, it is one up for maintenance, so the 17 evidence discussion is a little bit different 18 than if we were looking at maybe a process 19 measure. 20 And, we'll get to a little bit of the 21 specification. I think that on the face it, 22 reducing preventable avoidable complications

1	obviously is very much directed towards patients
2	and would be appropriate.
3	I think the question for the committee
4	that we'll have to decide is whether or not as
5	specified this measure actually accomplishes
6	that.
7	CO-CHAIR LANG: According to the NQF
8	algorithm for evidence, this is eligible for a
9	pass rating, as the underlying rationale is the
10	same since the last NQF endorsement review.
11	So, we don't have to vote, if the
12	committee agrees.
13	Okay, seeing no objection, we'll
14	proceed to performance gap.
15	Oh, please?
16	DR. YEALY: I guess I'm still a little
17	bit troubled by on the evidentiary basis. It
18	looks to me the PACs would be largely dominated
19	by inpatient care, yet, what's included is both
20	inpatient and outpatient.
21	And, there's got to be an overwhelming
22	ascertainment bias because we just simply don't

look, you know, people don't get pressure sore 1 2 evaluations at home every day. They don't get the pressure sores either, but the truth is, we 3 4 don't look anywhere near as closely as say with 5 DVT and phlebitis, whatever else you pick up. And so, I'm struggling here to see, 6 7 this does -- this looks like a hospital-based measure wrapped in another set of clothing. 8 Not 9 that there's anything wrong with trying to cut 10 back on complications. 11 The other problem I have is that the PACs aren't weighted, so respiratory failure and 12 13 phlebitis count the same. They strike me as 14 dramatically different preventable events. One 15 is, you know, unfortunate, but not a particularly 16 biq deal. The other one is, you know, awful and 17 potentially life-threatening. 18 And so, that's why I have concerns. 19 I wasn't part of the previous evaluation of this, 20 it's just, on face value, it looks -- it doesn't 21 seem right to me. 22 CO-CHAIR LANG: Would the developers

wish to elaborate further on the measure? 1 2 DR. RASTOGI: So, regarding the rating of the PACs, we agree that all PACs are equally 3 rated and the whole idea here is that if a 4 5 patient develops one complication, it quite often sets off a roller coaster and has many, many 6 7 complications. So then, that particular patient will 8 9 still be counted as a yes or a no, so the 10 complication is there. 11 When you're measuring performance of 12 providers, for example, say physicians managing 13 the pneumonia condition, then we will hold them 14 accountable. But then, what percentage of their 15 patients had these complications? 16 If it is one patient who went bad and 17 had a lot of bad complication, then it would not 18 adversely affect them. 19 However, if they are consistently bad 20 and many of their patients or a majority of them 21 had potentially avoidable complications, then 22 they will stick out as an outlier.

1 So, it's a relative performance 2 measure and that's everybody would be measured according to the same yardstick. 3 4 DR. LAMPONE: I just wanted to add a 5 comment on that. As you look at our elder population, 6 more and more of those patients are being treated 7 in the home setting and there may be less 8 9 opportunity to impact, intervene or prevent some 10 of these complications in the home. 11 When you get into a lot of assisted living facilities where you have large 12 13 populations of these, I think those same problems 14 exist, less so in skilled nursing facilities. 15 But, I think you'll have a difficulty 16 and you may find there are cohorts of a medical 17 practice that treat many of these patients in an 18 assisted living or in the home. 19 So, you may have some skewed data in 20 that agreement. 21 DR. YEALY: You know, again, that 22 reply strengthens my concerns.

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So, I'll give you two physicians, one 1 2 who surveils every day for phlebitis and provides wonderful care, the other one does nothing and 3 4 has they both have four events happen, one has 5 four respiratory failures, the other one has four phlebitis, they get patted on the head and they 6 7 look the same by this measure. And, yet, they're wildly different 8 9 levels of care and quality. And I'm just not 10 certain that, as constructed, this dichotomous 11 approach can give us the feedback that we need. 12 DR. O'BRIEN: I suspect that under the 13 scientific acceptability, that will be the 14 opportunity for talking about that. 15 There are other concerns, I think, 16 also around the way this is specified. 17 CO-CHAIR LANG: Todd? 18 DR. DORMAN: Just a simple question of 19 clarity. 20 Is mortality considered a PAC? 21 DR. RASTOGI: No, we don't 22 specifically look for that. Mortality is a

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separate measure.

2 DR. DORMAN: Although the list of PACs 3 that are included, I'm dubious that you can die 4 without having one of them. 5 DR. RASTOGI: That's right. We don't count it separately, but if the patient had, say, 6 7 respiratory failure and died, then the respiratory failure would be picked up as a PAC. 8 9 DR. DORMAN: I asked related to the 10 home mortality. So, we just discussed the 11 attempt to improve quality by outpatient home 12 management of pneumonia in which case I wonder 13 how all of these would be picked up, coded and 14 that's why I asked. 15 DR. RASTOGI: Right, and our measure 16 is tested at the below 65 population. So, yes, 17 these are valid concerns for the entity. 18 DR. NISHIMI: Is there anything else 19 specifically related to evidence? We've kind of 20 skipped ahead a little, so I'm trying to bring us back a little bit. 21 22 And, there didn't seem to be any

indication to vote. Is that the Chair's 1 2 assessment on evidence? CO-CHAIR LANG: My understanding is 3 4 that, based on the NQF algorithms, this is 5 eligible for a pass rating. 6 DR. NISHIMI: Right. 7 CO-CHAIR LANG: But, does the committee believe that it's appropriate to vote 8 9 on the evidence? Yes? No? Maybe? No? No. 10 We'll proceed then to performance gap. 11 The developers don't DR. O'BRIEN: 12 present actual gap. They do present some 13 performance scores for 82 facilities and 170 14 providers that show a median performance for --15 in the 60 percent range, with an interguartile 16 range that varies from in the 40s up to the 70s 17 to 80s. 18 There's not that I could find any 19 analysis related to gender, socioeconomic status, 20 race or ethnicity or geographic differences. 21 MS. WEST: A majority of the data that 22 were provided for gap were related to the

pneumonia itself and not specific to the PACs.
 That was one of the big discussion points that we
 had during our work group meeting.

DR. SCHINDLER: And, Chana, I don't know if this gets at the same point, but is there or are there data -- I guess I'm a little unclear of why we're looking at PACs only in the context of pneumonia. And, maybe I missed that in the beginning.

But do patients with pneumonia look
wildly different from other acutely ill patients
in terms of their PAC rate?

13 MS. WEST: Not that we saw in any of 14 the data that were provided. So, that might be a 15 question for the developer and anything that they 16 saw that the did not provide.

DR. O'BRIEN: And, it might come to usability, what I read, the majority of the PACs that are reported are actually PACs associated things like bypass surgery, so aren't even specific to this diagnosis.

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DR. NISHIMI: Does the developer want

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to address those comments?

2 DR. RASTOGI: So, yes, maybe I'm unclear about the question. Is that related to 3 4 the performance issues? So, I think the question 5 DR. O'BRIEN: was related to why PACs associated with pneumonia 6 7 as opposed to PACs in general or other diagnoses? What's the reason to tie it to pneumonia? 8 9 DR. RASTOGI: Right, right. So, our 10 potentially avoidable complications go beyond 11 just direct pneumonia PACs. 12 So, we mention that, you know, 13 appropriate use antibiotics and up-front care can 14 reduce some of the respiratory kind of 15 complications that are related to pneumonia. 16 And then, the type 2 PACs which are 17 often are seen because of, you know, say, the 18 pressure sores, line sepsis and all that could be 19 avoided by better processes and care. 20 DR. DIGIOVINE: I think that --21 DR. DE BRANTES: This is Francois de 22 Brantes.

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1	If the question is about whether or
2	not there are other measures for similar
3	pulmonary conditions or other pulmonary
4	conditions, other measures of avoidable
5	complications, the answer is yes.
6	We have measures of potentially
7	avoidable complications for dozens of conditions,
8	both chronic, acute and procedural. And, we've
9	submitted those in different stages to the
10	National Quality Forum for review.
11	DR. DIGIOVINE: So, I guess two
12	comments.
13	One is, the data seems or the
14	submission seems to argue that there's a
15	performance gap because there's variability.
16	But, as we've pointed out, the
17	patients are not required to be admitted for
18	pneumonia. So, I think there's going to be
19	natural variability because some patients are
20	going to be outpatient and some are going to be
21	inpatient.
22	Also, a lot, I think, I know James

will get to this later, but a lot of these PACs 1 2 are things that I think a lot of us believe are present on admission. 3 4 So, a patient who gets -- you said you 5 excluded patients with septic shock, but my understanding is, as long as septic shock isn't 6 the first diagnosis, you're not excluding septic 7 shock. 8 9 And so, I think a lot of the 10 variability also could just be based in 11 variability in the way people code and the way 12 people abstract charts. 13 So, I'm not sure what you're positing 14 as the performance gap. 15 So, coming back to the DR. RASTOGI: 16 septic shock situation, yes, if the patient, and 17 as the previous discusser also explained, that 18 the claims data, the discharge diagnosis is the 19 one that the hospitals code and report on the 20 claims. 21 So, if the discharge diagnosis was 22 changed to septic shock, then that patient will

fall out of the denominator as well. It would 1 2 not be considered as a pneumonia admission, but maybe the patient was admitted and it was only 3 4 the in sepsis at the time of admission. DR. DIGIOVINE: But, you're describing 5 administrative data as if it means that the first 6 7 thing we write on a code sheet is the only diagnosis and everything else is a complication. 8 9 And, that's not the way we code charts, certainly 10 not the way physicians diagnose and treat. 11 So, on any given patient, I might say 12 pneumonia with shock and then the second patient 13 I might say septic shock from pneumonia. Those 14 are not different. 15 So, the hospital -- the DR. RASTOGI: 16 septic shock patient will most likely be 17 hospitalized and then the hospital diagnosis will 18 determine whether the patient will be kept in or 19 not. 20 Hospitals alter the claims, the 21 admitting diagnosis is often changed to be the -to be modified and then the discharge diagnosis 22

is what was the final discussion during that 1 2 admission, whatever the physicians said was the real reason that the patient got hospitalized. 3 4 If the septic shock developed while 5 the patient was in the hospital, admitted for pneumonia and then eventually progress and went 6 7 south, then the septic shock would not be the discharge diagnosis. 8 9 CO-CHAIR LANG: Are there additional 10 comments or questions for the developers 11 regarding performance gaps specifically? 12 Seeing none, we will proceed to vote 13 on performance gap. 14 MS. AMIRAULT: Performance gap for 15 Measure 0708, one being high, two moderate, three 16 low or four insufficient. 17 Two high, two moderate, 13 low and six 18 insufficient. 19 So, this does not pass. 20 MS. BAL: And, as mentioned earlier, 21 since this is a maintenance measure, you can 22 choose to move forward with reserve status, but

you heard the stipulations and it's really up to
 you, your decision to make.

CO-CHAIR LANG: Let's take a hand 3 4 The vote is whether to proceed with the vote. 5 understanding that if we do consider -- if we do continue to consider this measure, it would be a 6 7 reserve status or to suspend further consideration of the measure, in which case, the 8 9 measure would have failed. 10 Okay, so all those in favor of 11 continuing to consider the measure with the 12 understanding it may proceed to reserve status, 13 please raise your hands. 14 Those who would wish to suspend 15 further consideration of the measure? 16 Anyone who has not voted or who 17 abstained? 18 I will note that among those present 19 here, the vote was unanimous for option to, to 20 not consider the measure further. 21 DR. NISHIMI: There was one vote to 22 continue by electronic submission.

CO-CHAIR LANG: Give us just a minute 1 2 here. All right, the schedule says that 3 we'll take a break at 10:15. We're a little --4 5 we're going to take a break now until 10:15 and then we will reconvene. 6 7 Thank you. (Whereupon, the above-entitled matter 8 9 went off the record at 10:03 a.m. and resumed at 10 10:21 a.m.) 11 CO-CHAIR BRATZLER: All right, let's go 12 ahead and get started. 13 So the one thing that we need to do 14 that we didn't complete from the initial 15 conversation this morning is talk about 16 discussion of the related and completing 17 measures. So staff has pulled the list here of 18 all the measures that we've reviewed since 19 yesterday on asthma. And there are quite a few 20 There are nine different measures. of them. 21 I can read the numbers if you want. 22 But I think the gist of the conversation is about

are there any other areas of these metrics that 1 2 we want to relate to the developers to think about harmonizing or recognizing some competition 3 between the measures. 4 So two issues that have already been 5 addressed multiple times by this group are that 6 7 some of the measures have different data sources, some of them measure different populations of 8 9 patients. Now there's been a fairly consistent 10 message about asking the developers to look at 11 harmonizing on age ranges where appropriate 12 because there's a number of these measures that 13 have had different age ranges. 14 But any other issues that this 15 committee -- based on the asthma measures that 16 we've talked about -- would like to send back to 17 the developers as consideration to work with 18 other developers around some harmonization or 19 alignments. 20 Yes, Bill. 21 DR. GLOMB: So you mentioned -- you 22 mentioned the data sourcing and you mentioned the

age range harmonization. The only other one that I think that I'd consider is the diagnosis. What constitutes the diagnosis of asthma.

We have had -- we have had single, you know, a single diagnosis. We've had two-plus diagnoses. It would be nice if we could come up with a standardization for what is chronic persistent asthma, what is asthma, what is not asthma.

10 CO-CHAIR BRATZLER: Yeah. So 11 harmonization of the denominators in certain ways 12 of making sure we have consistency of the codes 13 used to identify, particularly things like 14 persistent asthma which the codes are sometimes 15 difficult to -- other things which you recall 16 from the past two days now in discussions of 17 asthma metrics? 18 CO-CHAIR LANG: I don't know if you had 19 mentioned it, but did we have something come up 20 with risk adjustment for these folks? 21 DR. NISHIMI: You didn't have a

standard recommendation. You discussed risk

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1	adjustment for some. Some of them were, you
2	know, the process measures and so it didn't
3	really come up.
4	CO-CHAIR LANG: Okay.
5	DR. NISHIMI: We can make a general
6	comment that those that do have the risk
7	adjustment, they need to take a look at
8	standardizing the approach for risk adjustment.
9	Is that what you're indicating?
10	CO-CHAIR LANG: Sure.
11	DR. NISHIMI: Anything else? Okay.
12	CO-CHAIR BRATZLER: I'm trying to walk
13	through the list just to make sure I recognize
14	all of the measures. We have a host of different
15	measures by different developers, different
16	settings, so.
17	Anything else that we need to talk
18	about that we want to bring back to the
19	developers and then all of that information
20	would then come back to us as a committee on one
21	of our conference calls in the future.
22	DR. NISHIMI: Okay.

1	CO-CHAIR BRATZLER: Ready to move
2	forward?
3	DR. NISHIMI: Yes.
4	CO-CHAIR BRATZLER: Do you want to take
5	it or do you want me to take it? I'll go ahead
6	with this.
7	Okay. So the next measure on the list
8	is 0035. It's Pediatric ICU Unplanned
9	Readmission Rate by Virtual PICU Systems. On the
10	phone, hopefully, is Matt Scanlon to do an
11	introduction of Measure 0035. I'm sorry, 0335.
12	I'm sorry.
13	MS. BAL: First, I would just like to
14	mention that Mitch Harris is also conflicted on
15	these all three of these PICU measures, just
16	so everyone knows. And that Kathy, could you
17	see if Matt from the PICU group is on the phone,
18	or anyone else from PICU Virtual PICU Systems?
19	THE OPERATOR: Matt has not joined yet.
20	And I don't see anyone else on the line.
21	CO-CHAIR BRATZLER: So what we'll do is
22	we'll so as noted, Matt may be expecting the

1	call to start at 10:30, so that may be why he is
2	not here yet. Why don't we go ahead, either
3	David or Bill, and discuss evidence, and then
4	we'll go from there.
5	DR. GLOMB: Okay. I'll just go ahead
6	and start if you're okay with that, David. Then
7	I'll let
8	DR. STOCKWELL: Yeah, sure.
9	DR. GLOMB: I will just let me kind
10	of do a little bit of a mini-discussion of our
11	presentation since we don't have them on yet.
12	Again, this is about PICU unplanned
13	readmission rates, looking at the total number of
14	patients requiring unscheduled readmission to the
15	ICU within 24 hours of discharge or transfer.
16	The rationale is that this measure be used in
17	conjunction with one of the other measures we'll
18	discuss, 0334, which is severity-adjusted length
19	of stay. Because theoretically you could game
20	your length of stay measurements by prematurely
21	discharging patients and then they get readmitted
22	because they weren't really ready to go out the

first time. And this would balance that measure
out.

3	The numerator it's a fairly simple
4	math equation. It's the number of unplanned
5	readmissions within 24 hours after discharge or
6	transfer from the PICU per 100 patients. And
7	it's in children only under 18 years of age.
8	Excluded are all above 18 years of age.
9	DR. SCANLON: I'm sorry to interrupt.
10	This is Matt Scanlon. I just wanted to let you
11	know I have joined the call.
12	CO-CHAIR BRATZLER: Thanks, Matt.
13	DR. SCANLON: Okay.
14	CO-CHAIR BRATZLER: We're going to go
15	ahead and talk evidence and then we'll let you
16	DR. SCANLON: Perfect.
17	CO-CHAIR BRATZLER: give a little
18	brief introduction to the metric.
19	DR. GLOMB: I'm going to throw an
20	asterisk in and ask for discussion by the
21	committee. This is termed as an outcome measure,
22	readmission being is it really an outcome

1	measure or is it a process failure, that's a
2	question that I have for this.
3	This measure was originally endorsed
4	eight years ago and it's up for revisiting at
5	this time.
6	So some of the evidence, outcome
7	measure of unscheduled readmission within 24
8	hours, indirectly measures process, those
9	decisions related to discharging the patient
10	while directly measuring a PICU resource
11	utilization due to unplanned readmissions. So in
12	that sense I suppose it's an outcome, but not
13	necessarily a patient-directed outcome.
14	The developer, again, would like to
15	balance this measure along with 0334 to make sure
16	that those that those are accurate
17	measurements. And I think that's appropriate.
18	One of the questions for the
19	committee, for our work group was, was there at
20	least one thing that the provider could do to
21	change based on the measured result? And there
22	really wasn't anything identified within this, so

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obviously it's thought that an unplanned 1 2 readmission is a failure and, you know, maybe they shouldn't have been discharged yet or 3 there's something missing from the process of 4 5 transferring the patient to a step-down unit or And there the developer tests that the 6 the ward. rationale and evidence of the outcome have not 7 changed since this was last endorsed for review. 8 9 And so that's one of the things we 10 need to decide is whether or not the evidence 11 basis has changed and if there's any need for 12 repeat discussion or vote on the evidence. 13 CO-CHAIR BRATZLER: So, David, do you 14 have anything to add to Bill's introduction there 15 on evidence? 16 DR. STOCKWELL: No. I would just 17 suggest that if used as a measure on its own it 18 probably doesn't make sense, but paired with the 19 other measure as a compliance -- however that 20 gets combined, I'm still not clear how that 21 actually happens or what the process part is. 22 But standing on its own it's probably less of a

useful measure and you may not be able to make 1 2 changes for it. But as used as a balancing measure to tell you whether or not you are overly 3 4 aggressively discharging your patients out of the 5 ICU, it's much more helpful in that regard. CO-CHAIR BRATZLER: Okay. So what I'm 6 going to do at this point is ask -- before we 7 vote on or decide whether we are going to vote on 8 9 evidence or not, I'm going to let Matt give a 10 brief introduction to the measure, which we 11 didn't do before we started that conversation. 12 So, Matt, if you want to go ahead for 13 two or three minutes. 14 DR. SCANLON: Sure. And I apologize 15 I'm working in the ICU this for being late. 16 morning, so it's been juggling things. 17 So as the first speaker that I caught 18 mentioned, the unplanned readmission measure 19 metric was first introduced eight years ago and 20 has been reapproved once in its history. And the 21 intent has always been to use it as a balancing 22 measure to the issue of length of stay.

In the ICU -- in the pediatric ICU 1 2 world, at least using the VPS data, there is a wide range in length of stay between 3 organizations. But one of the factors that could 4 5 influence that is the potential for gaming by prematurely discharging patients and then having 6 7 to readmit them within a short time period. 8 When the measure was originally 9 created, the Joint Commission actually had a 10 metric of unplanned readmission at 48 hours. 11 They've since dropped that. We felt that that 12 was not necessarily sensitive enough to reflect a 13 premature discharge, and so we developed a 14 measure. And there was some literature that 15 suggests 24 hours was a reasonable place to look 16 at. And that was the foundation of that. 17 We have found -- and I apologize 18 because this was done in response to the 19 questions we received, so it's not in the 20 original submission but it's available to provide 21 -- that there was a statistically significant 22 correlation with a Pearson correlation

coefficient of negative .398 between unplanned 1 2 readmissions and severity-adjusted length of That is, organizations that have a shorter 3 stay. 4 length of stay also have higher rates of 5 unplanned readmission, which is not necessarily surprising and is exactly why we felt these two 6 7 measures should go hand in hand. So I can speak more to specific 8 9 But let me stop there and let you questions. 10 take it from there. 11 CO-CHAIR BRATZLER: All right. Thank 12 you, Matt. 13 Then before we go forward with our 14 conversation about evidence I wanted to ask NOF 15 staff that I know it's been mentioned that there 16 is a formal pairing process of saying that one 17 measure doesn't stand without the other. Can you 18 tell me about that? 19 DR. NISHIMI: So in NOF's internal 20 system and in the public-facing material that's 21 exactly what is said. As with other measures, it 22 doesn't prevent, you know, external implementers

from doing what they want to do.

2 In this case, however, because VPS holds the software and there's a proprietary 3 mechanism, they in effect, you know, control much 4 5 more tightly than it would for any other measure the fact that they are paired. But in terms of 6 7 our public-facing information it's very clear that they're paired. 8 9 DR. DiGIOVINE: Can I just ask on that? 10 I'm just noticing on the front of the first page 11 of our measure it specifically when asked -- the 12 statement is if paired, what is the reason the 13 other measure is included? And it says not 14 applicable. And if it says if this measure is 15 paired or grouped give the NQF number and title, 16 and it's blank. 17 DR. SCANLON: So Matt Scanlon here. 18 And this is -- and if I misspeak, please, NQF 19 staffers, correct me, but the implications and 20 connotations of pairing, as I've been through 21 this for eight years, have changed over time. 22 And four years ago I don't remember a specific

reason but there was a reason at the NQF level that they did not want to do a formal pairing. So that's why we carried that forward. That was not because we felt they were disassociated. In fact, the language we use in the measure suggests otherwise.

7 But again, there was some technical 8 reason that at the time that term pairing was 9 felt to be inappropriate. And I can't speak 10 further to what that rationale was.

DR. NISHIMI: Yeah, and I'm afraid I can't help either because I wasn't here. But I can tell you that in the current internal, what we refer to as OPUS, and the external Quality Positioning System search you will see that it's paired.

17DR. DiGIOVINE: So you are saying it --18despite what it says on here, these actually are19paired measures.

20 DR. NISHIMI: It indicates that this 21 measure should be used with 0334, yes.

MS. BAL: Also a clarification. We

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1 started that process after the form was 2 submitted, so that's why. The way that it was submitted it was not paired at the time. 3 But we 4 are in the -- we've processed it to be paired 5 now. CO-CHAIR LANG: We have had other 6 7 measures and we will have this afternoon to reach that line, was made out with the other measure 8 listed with the number. 9 10 CO-CHAIR BRATZLER: So at this point 11 we've had a conversation about evidence. IS 12 there any other discussion of evidence? This is 13 a already-endorsed measure, so it's a maintenance 14 measure so we do not have to vote on evidence if 15 the committee agrees. 16 So how many -- any other discussion? 17 (No response.) 18 CO-CHAIR BRATZLER: Then how many 19 committee -- anybody raise your hand if you think 20 we need to re-vote the evidence for the measure. 21 (No response.) 22 CO-CHAIR BRATZLER: Okay, seeing none,

we will go ahead with discussion of gap. 1 2 DR. GLOMB: David, do you want to take the gap discussion? 3 4 DR. STOCKWELL: Yes. Yeah, sure. So there are recognizable gaps within 5 The range is between zero and 1.6 percent 6 VPS. 7 of patients. And so that I think will satisfy the thing that was concerning that was mentioned 8 9 just a bit ago was that there hadn't been any 10 real change noted over time. But I know that 11 that's something that we will talk about later. 12 And also, just jumping to disparities, 13 there were not really any disparities noted in this measure from VPS. So we will note it in the 14 15 paired measure a little bit later. 16 DR. GLOMB: Yeah, I just want to add, 17 the only thing that came up disparities-wise had 18 to do with whether a child had insurance or had 19 no insurance whatsoever. And the uninsured kids 20 were sicker when they got there. Their lengths 21 of stays were shorter and their mortalities were 22 probably higher. That was the only thing that

stuck out. And not surprising.

2	CO-CHAIR BRATZLER: So I just have to
3	ask the question, is zero to 1.67 percent that
4	substantial of a gap between PICUs? It seems
5	like a fairly narrow range.
6	DR. STOCKWELL: So I guess I would say
7	that it seems that there is and, yes, this is
8	evidence based on what Matt just told us again
9	this morning but if there is a reasonable
10	spread, enough to show that there's a moderate
11	correlation, negative correlation between the two
12	measures then that, to me, would say that it
13	would be at least meaningful enough to show that
14	there is some gap.
15	CO-CHAIR BRATZLER: I think Tom has
16	DR. LAMPONE: And I just wanted to
17	clarify, William had made a comment on
18	disparities. And if I heard you correctly, there
19	was a disparity between insured and uninsured.
20	Uninsured presented with more advanced or more
21	complicated disease, but had a shorter length of
22	stay and had a higher mortality.

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1	DR. GLOMB: Not necessarily related.
2	Those last two are not necessarily related.
3	That's not proven by the evidence. So that's not
4	
5	DR. LAMPONE: Okay.
6	DR. GLOMB: clear to us from the
7	evidence.
8	DR. LAMPONE: Okay.
9	DR. GLOMB: And you'll see that same
10	statistic throughout all three of these measures
11	we're about to talk about.
12	DR. LAMPONE: Okay. And did we see any
13	statistics that looked at readmission to the ICU
14	in those populations.
15	DR. GLOMB: Yes. Between insured and
16	uninsured.
17	DR. LAMPONE: Okay. So there was a
18	disparity there with the
19	DR. GLOMB: There was a disparity
20	there.
21	DR. LAMPONE: base of the measure
22	which is looking at readmissions.

1	DR. GLOMB: That's correct.
2	DR. LAMPONE: Okay.
3	DR. GLOMB: That's correct. It wasn't
4	huge but it was statistically significant.
5	DR. DiGIOVINE: I think throughout this
6	I'm going to be struggling with the idea that
7	this is I think we are saying this isn't an
8	important measure by itself but it's important
9	because it's balancing something else, which I
10	struggle with.
11	And I guess I just wonder whether the
12	developer has ever thought to do what I think we
13	still do, which is if the patient is readmitted
14	to the ICU within 24 hours, just to count that
15	all as the same admission and then make their
16	length of stay admission A plus admission B and
17	use one measure as the quality measure around
18	length of stay.
19	DR. SCANLON: So there's a couple
20	factors there. One is that not all readmissions
21	to the ICU can be viewed as a breakdown in care
22	or as management-related. Some are calculated

decisions that patients are transferred and then 1 2 for a change in the condition, unrelated, or maybe because of a bed crisis within a unit they 3 4 move a patient out with full knowledge that the 5 patient is coming back, which is why we have been very careful in the software and in the data 6 7 dictionary to break down what the definition of scheduled versus unscheduled is. 8

9 I think we also know anecdotally, and 10 this was true at the time these measures were 11 originally developed, that some of the centers 12 that had very short lengths of stay admitted that 13 they pushed kids out to keep those numbers low. And so I think the issue is -- I don't know that 14 15 we could presume to just staple all within 24 16 hours together. And, you know, I guess we could 17 say unscheduled readmissions should be compiled 18 onto the original one.

But having said that, that's not been what's been described at least in our review of the literature. And so that would be really almost creating a new metric for length of stay

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1	which is for ICU length of stay which I don't
2	know that we that would be breaking new
3	ground. That doesn't mean we shouldn't do it,
4	but I think that would take a lot more reflection
5	and investigation of just the validity of that,
6	never mind how the community would view that.
7	CO-CHAIR BRATZLER: So back in the
8	room. Edgar?
9	DR. JIMENEZ: Yes. Just I'm
10	completely in agreement with the statement they
11	made.
12	But one more thing is that we have
13	been seeing readmission rates that are potential
14	problems with even the hand-off of patients, you
15	know, where that's not appropriate, you know,
16	transference of care. So it's something that we
17	are paying attention very closely.
18	CO-CHAIR BRATZLER: James?
19	DR. O'BRIEN: I'm wondering and the
20	developer maybe can comment about this, in the
21	adult ICU literature there's certainly
22	appreciation for a combined end point of ICU-free

days, which is days alive not in the ICU, which does incorporate both the possibility of people being readmitted to the ICU, how long they're in the ICU, and mortality all in one measure. I don't -- if you can comment whether or not that's reached the pediatric literature?

7 DR. SCANLON: Not that I'm aware of. And I think, at least from the standpoint of 8 9 measure development one of the challenges is that 10 the data from administrative data sets is often 11 problematic because of the lack of specificity 12 about hours spent in the ICU and rather making 13 determinations by midnight census as to where a 14 patient is. You know, if you could admit a kid 15 to the ICU, transfer them out, admit them and 16 transfer them out again, and if all that happened 17 within a single day it wouldn't show as an ICU 18 admission at all.

19 The VPS is a clinical database. And 20 because we don't have currently the hospital days 21 but rather just the ICU days, it was technically 22 not feasible without trying to use the data

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source that we felt was more problematic. And 1 2 again, to my knowledge, although certainly there's some smart people on your panel who may 3 4 feel otherwise, I have not seen the ICU-free days 5 make it into the pediatric literature very far. CO-CHAIR BRATZLER: So I'm going to 6 pull us back just a little bit. So we've made 7 several suggestions that almost sound like 8 9 material changes to measures that would require 10 us to go through the whole process that we went 11 through yesterday about whether a whole new 12 measure should be developed. So I'm going to 13 pull us back to discussing the measure that we 14 are presented with, which is what we have to 15 decide today. 16 So are there any other discussions 17 about gap? Yes, Bruno. 18 DR. DiGIOVINE: Just let me just then 19 clarify. Everything we're going to ask, are you 20 asking is there a performance gap in, for 21 example, in readmissions as a standalone measure?

Or are we asking is there a performance gap for

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1	length of stay for which readmissions would be an
2	important thing to look at?
3	DR. NISHIMI: They stand alone.
4	CO-CHAIR BRATZLER: Any other questions
5	or clarifications?
6	(No response.)
7	CO-CHAIR BRATZLER: Okay. Let's move
8	forward and vote on gap.
9	MS. AMIRAULT: Performance gap for
10	Measure 0335, 1 being high, 2 moderate, 3 low, or
11	4 insufficient.
12	(Voting.)
13	MS. BAL: Ella, could you please resend
14	your vote.
15	(Voting.)
16	MS. AMIRAULT: Zero high, 12 moderate,
17	eight low, one insufficient.
18	We're going to do a re-vote.
19	DR. STOCKWELL: Does that mean even for
20	the folks on the phone?
21	CO-CHAIR BRATZLER: Yes.
22	DR. NISHIMI: No, they're fine. No, we

1	have the phone votes. So, we're looking for 22.
2	MS. BAL: Just give us one second.
3	MS. AMIRAULT: Okay, performance gap
4	for 0335, 1 being high, 2 moderate, 3 low, or 4
5	insufficient.
6	(Voting.)
7	MS. AMIRAULT: Zero high, 13 moderate,
8	eight low and one insufficient.
9	Based on the percentages you have gray
10	zone. And we'll move along.
11	CO-CHAIR BRATZLER: Okay, so we'll go
12	ahead with the conversation. The next will be
13	reliability.
14	DR. STOCKWELL: So reliability that the
15	numerator is total number of all of this is
16	stuff you would expect total number of
17	unplanned readmissions within 24 hours of
18	discharge or transfer from the ICU. The
19	denominator is 100 PICU discharges for those less
20	than 18 years of age. And then the exclusions
21	are older than 18 18 and older.
22	Data selection is essentially

electronic clinical data as well as some 1 2 administrative data. And during our discussions there weren't concerns about the reliability for 3 4 the specifications and for the testing. There is 5 not new data. The developer noted that a separate proportion using previously-established 6 7 methods, therefore no further reliability assessment is indicated. 8 9 CO-CHAIR BRATZLER: Any other --10 DR. STOCKWELL: I don't. 11 CO-CHAIR BRATZLER: Yes? 12 DR. LAMPONE: This is for the 13 developer. When you look at the data, what 14 percentage of it is administrative? Could you 15 tell us? 16 DR. SCANLON: Zero. 17 DR. LAMPONE: Okay. So it's all --18 DR. SCANLON: We --19 DR. STOCKWELL: I'm sorry about that. 20 DR. SCANLON: I'm sorry. 21 DR. STOCKWELL: Sorry Matt, that was 22 just -- this is the challenge of looking at this

as an individual, versus some of the other ones 1 2 that we are going to discuss in a little bit. So that's my fault, sorry about that. 3 4 CO-CHAIR BRATZLER: All right, so go 5 ahead. 6 DR. SCANLON: Oh, I'm sorry, is there a question I didn't answer? 7 I'm just --DR. LAMPONE: So none of the data is --8 it's all administrative data? 9 10 DR. SCANLON: No. None of the data is 11 administrative. 12 DR. LAMPONE: Okay. 13 DR. SCANLON: No. It is clinical data. 14 It's entered by clinicians. We have, to the 15 minute, times of entry and departure from the 16 ICU, which is why we can provide very detailed 17 calculations. 18 CO-CHAIR BRATZLER: So just to clarify, 19 because there's no new reliability data 20 presented, because the measure is broadly in use 21 and already endorsed, we don't have to vote on reliability either. We can make the decision to 22

1	move on with the conversation about validity.
2	So anyone who wants us to go ahead and
3	vote on reliability, raise your hand.
4	(No response.)
5	CO-CHAIR BRATZLER: Seeing none, we
6	will go ahead and discuss validity.
7	DR. GLOMB: I'll go ahead and talk
8	about that.
9	Again, under the validity testing I
10	guess one of the the question before our
11	committee is, are the specifications consistent
12	with the evidence. And I guess I have a counter-
13	question. And that is, does unscheduled
14	readmission equal poor quality of care.
15	The assumption is there, intuitively
16	suggested. I don't think that I would oppose
17	that. I just wonder whether the evidence is there
18	and, therefore, that would mean that the validity
19	would be in question if it's not. I know we
20	voted on the evidence not being necessary. I
21	just think we're making a jump looking at this
22	measure in isolation.

CO-CHAIR BRATZLER: Chana and then 1 2 we'll go to David. MS. WEST: So I was looking through all 3 the documentation and I didn't see a clear 4 5 indication on what they're characterizing as planned versus unplanned in terms of the PICU 6 admission, so. 7 8 CO-CHAIR BRATZLER: Matt, can you 9 comment on that, planned versus unplanned? 10 DR. SCANLON: Absolutely. The 11 operational definition that we -- in fact is part 12 of our ongoing inter-rater reliability -- was the 13 admission to the ICU, whether it's an admission 14 or a readmission, known about 12 hours before it 15 occurred? 16 So, for example, if we have a kid that 17 12 hours before they're coming to the ICU that 18 someone calls and says we need a bed for this, 19 that reflects that this is a conscious choice. 20 It's not a -- either a deteriorating child or a 21 child that was prematurely transferred out and 22 needs to come crashing back to the ICU.

So while you could argue that the 12-1 2 hour window of knowledge -- the foreknowledge about a child is arbitrary, there was some 3 literature -- and I apologize, I don't have the 4 5 reference in front of me -- that supported that. And then as part of the ongoing -- as 6 7 I said, the inter-rater reliability -- that, as well as the internal validation checks of the 8 9 software, we look for those. And anything that 10 seems out of -- potentially misclassified, so for 11 example, an unscheduled patient admission from 12 the PACU triggers a review at the site level to 13 make sure that that was properly classified. MS. WEST: So this is reliant on manual 14 15 documentation that's then entered in the 16 software? Or am I missing something in the work 17 flow. 18 DR. SCANLON: No. So at the unit level 19 all ICUs know who is scheduled to come into their 20 ICU. That's part of running an ICU. And if we 21 know if they are essentially scheduled for a bed 22 greater than 12 hours in advance, that's treated

as a scheduled readmission versus an unplanned - I'm sorry, a scheduled admission rather than an
unplanned admission.

4 Then separate from that is the 5 question of were they just discharged from the So a patient who left the ICU could come 6 ICU. 7 back to the ICU for either planned reasons, and thus scheduled, or unplanned reasons which would 8 9 be the unplanned readmission to the ICU. 10 Did I answer your question? 11 MS. WEST: Yes and no. So the time 12 period that you're looking at -- and just, you 13 know, to clarify, I'm a NICU nurse so I 14 understand all the processes. 15 DR. SCANLON: Okay, sure. 16 MS. WEST: But in terms of the 12-hour 17 time frame that you're talking about, is there 18 some literature --19 DR. SCANLON: Yes. 20 MS. WEST: -- that speaks to it being 21 a 12-hour time window or --22 DR. SCANLON: Again, at the time of the measure development there was a -- there was at least one reference that we used. I don't -- and I apologize, I don't recall what that is at this point. But the rationale being that in our world it's not uncommon for a patient to be discovered to have a problem and they need an ICU bed. And so the question was what cut-off would constitute having enough warning to manage the patient.

9 And part of this also gets to the 10 larger macro issue of providing adequate nursing 11 and other resources to care for the patient. So 12 there's wide ranges -- just speaking of -- and 13 this may be a little off topic, but in our ICU in 14 Milwaukee, which is a 72-bed pediatric ICU with 15 three floors, our pure medical floor, the 16 unplanned -- or unplanned admission rate is 90 17 percent, meaning 90 percent of patients we don't 18 know they're coming 12 hours in advance, which is 19 a giant care issue because it's hard to plan for 20 a party if you don't know who's coming. 21 In the case of readmissions, we use

the same definition to say was this readmission

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1	planned to come, in other words, an elective,
2	conscious decision, or not. And there was a
3	reference for the 12 hours. I apologize, I don't
4	recall what that is and would have to go back and
5	see if I can pull that for you.
6	CO-CHAIR LANG: So, Matt go ahead,
7	Bruno.
8	DR. DiGIOVINE: Sorry, David.
9	Matt, certainly in the adult world it
10	is not uncommon for people to hang out in our
11	wards for 12 hours waiting for a bed. Does that
12	not happen in pediatric hospitals?
13	DR. SCANLON: Oh yeah, oh definitely.
14	Wait, waiting for an ICU bed?
15	DR. DiGIOVINE: Yes.
16	DR. SCANLON: I think that that is
17	I don't know that there's any there may be
18	literature. I'm not familiar with any literature
19	about that being an ongoing problem in the ICUs
20	in the pediatric world. Getting into the ICU is
21	not an issue. Getting out of the ICU back to the
22	floors is more of a problem in our world. And I

would defer to the other intensivists on the 1 2 panel to speak to that, the pediatric intensivists. 3 DR. STOCKWELL: David Stockwell. 4 5 That's our experience as well. CO-CHAIR LANG: Yeah. 6 So, Matt, this 7 is David Lang. Appreciate your elaborating on these issues. And I'm coming at this from -- I'm 8 9 not a critical care physician so I don't have the 10 kind of content expertise that others do around 11 the table. But looking at this from more of a 12 distance, I actually looked up and Googled the 13 definition of an intensive care unit. 14 It's a designated area of a hospital 15 facility dedicated to the care of patients who 16 are seriously ill. 17 It would seem to me -- I'll just throw 18 this out there because it's going to come up, you 19 know, later today we're dealing with other ICU 20 measures, and your measure is coupled with a 21 length of stay and a mortality measure -- it 22 would seem to me that the intensive care unit

setting in terms of what characterizes the 1 2 designated area, and also the nature of the patients who are seriously ill would vary 3 4 substantially from the referral center to the 5 community hospital, yet they are both classified as quote, unquote ICUs or, in your case, PICUs. 6 7 We have dealt with a number of measures where we have adjusted for socio-8 9 demographic factors. But how are you adjusting 10 for the case mix and other variation in, you 11 know, the different ICUs? 12 DR. SCANLON: So there's a couple 13 things. Let me -- that's a great question. 14 Thank you. 15 First of all, all the unplanned 16 readmissions are not risk adjusted, but the 17 length of stay measure and the mortality measure, 18 our SMR measure, are risk adjusted using peer-19 reviewed published algorithms for severity of 20 illness to a handle for that aspect. 21 At the software level and in our 22 reports one of the things we can do is look at,

by organization type, other differences. 1 So you 2 could look at SMR or unplanned readmission by both hospital type and unit type. And we can 3 4 break that down by is this a community hospital, 5 an academic hospital, a free-standing children's hospital. Granted, if people don't participate 6 in the software, which is how I can obtain data 7 and look at these differences, then obviously I 8 9 can't comment on an organization that isn't 10 submitting.

But what we do, if anything, is stratify by like characteristics when we are doing internal comparisons for benchmarking to say, is a hospital or is a given ICU performing on par with its peers? Because of, as you said, the wide difference.

I think -- but as a larger community of providing critical care services to children, that begs the question of should you be in the business at all? And that's more, it's not necessarily -- well, I think it's actually very germane to the NQF process because you can have

1	hospitals that open up a community hospital
2	that opens up a PICU just to say they have a
3	PICU, but that doesn't mean they should be caring
4	for sick kids there.
5	And so by looking at differences in
6	length of stay, unplanned readmissions and
7	mortality, you can start to say, is this
8	appropriate care for a child in that setting, or
9	should that care even be offered.
10	CO-CHAIR BRATZLER: Okay, so we're
11	discussing validity at this point. Any other
12	yes, Bill.
13	DR. GLOMB: If I can ask the developer
14	to comment on one other aspect in the validity
15	section here that will apply to the next two as
16	well, it has to do with questions that were
17	raised at our work group meeting about the IRR
18	process.
19	DR. SCANLON: Yes.
20	DR. GLOMB: You didn't go into a lot of
21	detail.
22	DR. SCANLON: I can provide that today.

DR. GLOMB: If you could do that. 1 And 2 what are you doing in terms of inter-rater reliability ongoing testing, or was there --3 DR. SCANLON: Oh, yeah, I can address 4 5 both of those. So when a given center is coming on 6 7 board to use the software, first of all there's a training process for data collectors. And the 8 9 data collectors have to be a nurse by background 10 or a physician, so that we're not having 11 administrative clerks, for example, extracting 12 charts. 13 The initial IRR process is that they 14 are provided with five patient records which are 15 de-identified. And then they do their 16 abstraction. And we review that compared to the 17 gold standard answers to see how they're doing. 18 And all sites that come on board have to do that 19 and meet a certain threshold of concordance 20 greater than 90 percent before they'd even be 21 allowed to start submitting data. 22 That process is then done quarterly

with each data submission where they do at least 1 2 one chart each quarter to make sure that they're maintaining their quality. If there's any 3 4 question about the accuracy or the -- or if 5 there's essentially discordance in that, that data is quarantined and they go through a re-6 7 training process. And until they maintain -- get their IRR up, there's no more flow of that data 8 9 into the data pool. 10 Right now our quarterly aggregate IRR 11 rates are greater than 96 percent. The last two 12 quarters are 96.81 and 97.76 percent. 13 So I don't know if that answers your 14 question. 15 DR. GLOMB: It does, thank you. 16 DR. SCANLON: Okay. 17 CO-CHAIR BRATZLER: All right. So any 18 other conversations or questions about validity? 19 (No response.) 20 CO-CHAIR BRATZLER: Okay. At this time 21 we will go ahead and vote. 22 MS. AMIRAULT: Validity for 0335, 1
1	being high, 2 moderate, 3 low, 4 insufficient.
2	(Voting.)
3	MS. AMIRAULT: Three high, 13 moderate,
4	five low, and zero insufficient. And based on
5	the percentage we can move along.
6	CO-CHAIR BRATZLER: Okay. So we move
7	to discussion of feasibility. And I did want to
8	note that, as all of you are aware, this is a
9	proprietary measure. So we'll go to the
10	discussion of feasibility.
11	DR. STOCKWELL: So it's David, I'm
12	going to start. The feasibility aspect of this is
13	really, as you've heard, a simple process of
14	gathering the data. There is I think low
15	feasibility questions in that regard.
16	The other item to consider in this
17	section is that proprietary item. And we
18	clarified during our work group meeting that
19	proprietary measures are certainly something that
20	the NQF allows. And I Matt can give you the
21	real numbers, but I know that the vast majority
22	of the ICUs across the country PICUs across

the country participate in this. And so I just -1 2 - we note that challenge to feasibility. But if you wanted to do this, I think 3 we have to consider this as a standalone measure. 4 5 If you wanted to calculate your own unplanned readmissions rate, there are certainly no 6 7 barriers to doing that in and of itself. CO-CHAIR BRATZLER: Anything to add, 8 9 Bill? 10 DR. GLOMB: No. Just that it is very 11 feasible for those who are members of the 12 software program, for which there are varying 13 fees. And more time intensive, perhaps more room 14 for variation in scoring for those who are not on 15 board, who would have to do a manual review. 16 CO-CHAIR BRATZLER: James. 17 DR. O'BRIEN: So, again, as an adult intensivist, I would love to have somebody do 18 19 some of this data for us. And I don't think we 20 would ever be able to get the funding to have 21 somebody collect all this data. 22 Is this -- so I guess, obviously, this is done a lot in pediatric ICUs. What percentage
 of pediatric ICUs currently have this software?
 And how much of this is chicken and egg. How
 much do they have the software because NQF has
 these measures, and how much did they have the
 software before NQF had these measures.

7 DR. SCANLON: The software has been in 8 existence since roughly -- well, the first 9 generation of software started in 2004 and 10 predates the NQF -- our involvement with the NQF 11 measures. Or, I'm sorry, the creation of these 12 NQF measures.

13 The percent -- and I've got people 14 from VPS with me on the call, so someone may 15 email me -- but I don't know the percent of ICUs 16 in the nation that have it. We have over 100 17 ICUs -- pediatric ICUs participating. The 18 majority -- the overwhelming majority are U.S. 19 There's actually some pediatric ICUs in Saudi 20 Arabia and one Canadian ICU that are on board 21 also.

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There is a separate software that's

being used by cardiac ICUs, or some cardiac ICUs. 1 2 And some cardiac ICUs -- pediatric cardiac ICUs are actually using both software. 3 But I would 4 say -- I would venture to say the majority of 5 pediatric ICUs is correct. I just got an email. 6 It's currently 7 135 sites are using the software. So I just don't know the denominator of how many pediatric 8 9 ICUs there are in the U.S. 10 CO-CHAIR BRATZLER: So I'm just going 11 to throw out that this fee-based registry type 12 data submission is not uncommon. American College 13 of Surgeons, American College of Cardiology --14 there's a host of it's fee-based where you 15 actually have to pay somebody to capture your own 16 data and then pay a fee to participate, so. 17 James? 18 DR. O'BRIEN: Does the developer have 19 any sense of what the cycle time is for 20 completing a patient record? 21 DR. SCANLON: I don't know. That 22 actually depends on how long the patient stays.

There's a number of strategies. 1 And it varies. 2 We ask the patient to be registered in the software shortly after admission. 3 But then 4 completion, if a patient -- and as you look at 5 the length of stay data which is truncated at 30 days, it's not unheard for pediatric patients to 6 7 stay the better part of a year. Those are outliers. But so while there's ongoing updating, 8 9 the patient is not submitted into the finalized 10 data pool until their clinical experience is 11 complete, be it through death or discharge. 12 So I can't give you a specific answer 13 because of the range of length of stay. 14 CO-CHAIR BRATZLER: Any other --15 DR. SCANLON: Having said that, for 16 every discharge the data is then submitted within 17 a quarter. 18 CO-CHAIR BRATZLER: Any other 19 conversations about feasibility? 20 (No response.) CO-CHAIR BRATZLER: We'll go ahead and 21 22 vote.

1	MS. AMIRAULT: Feasibility for 0335, 1
2	being high, 2 moderate, 3 low, or 4 insufficient.
3	(Voting.)
4	MS. AMIRAULT: Three high, 13 moderate,
5	five low and zero insufficient. Based on the
6	percentage we'll move along.
7	CO-CHAIR BRATZLER: And we'll go on to
8	discussion of usability and use.
9	DR. GLOMB: I'll go ahead and start off
10	usability.
11	I think this is probably where some of
12	our discussion came in our on work group.
13	Currently the measured data are not aggregated
14	and publicly reported. There are a couple of
15	hospitals that do put that up on their websites.
16	And I suspect it's because they're doing well in
17	the scoring, so it's a useful selling point.
18	The public funding body in California
19	does require that any PICUs involved they put
20	this up publicly through the children's pediatric
21	healthcare California Children's Services. And
22	we've heard about the number of centers involved.

I guess one of the biggest questions 1 2 -- and again maybe this is as a standalone, if we're looking at this by itself -- is that a two-3 4 year data collection from January 1, 2012 to the 5 end of December 2014 -- I'm sorry, that's three years -- showed that there was no increasing or 6 7 decreasing trend for the overall rate of unscheduled readmissions. So with that much data 8 9 we've not seen any movement in the rates going 10 on. 11 In terms of potential harms, the developer had said previously that there's a risk 12 13 of miscapturing the time of the original 14 discharge. Since this is a time-dependent 15 measure, you know, missing it by a minute could 16 mean that you get a different score one way or 17 the other. 18 CO-CHAIR BRATZLER: David, any other 19 comments about use or usability? 20 DR. STOCKWELL: No. I think it's well 21 covered. 22 CO-CHAIR BRATZLER: One question I did

have to your point about no change in the trends 1 2 over time. I know this measure is not risk The other two are but this one is not. 3 adjusted. 4 So do you have any sense, Matt, about 5 overall risk for the patient population over In other words, if you have a sicker 6 time? population over time, no trend may actually 7 reflect some improvement, the patients are sicker 8 9 now than they used to be when they get to a 10 pediatric ICU. 11 DR. SCANLON: I don't know the answer 12 to that off the top of my head. I would have to 13 -- I have looked at that for given ICUs as part 14 of developing reports for them, but I honestly 15 can't tell you off the top of my head. Again, I 16 have people in the background who are probably 17 trying to answer that for you and I can share it 18 as soon as I get that. 19 But I don't know that there's been a 20 dramatic upswing in severity of illness over 21 time. I don't know, David, if you have any sense 22 of that.

DR. GLOMB: I have two comments. 1 One 2 has to do with the -- and Chana brought it up and we had brought that up before -- PICUs are really 3 4 not cookie cutter. As a PICU and NICU doc, I can say that they're not cookie cutter in the same 5 way that a NICU tends to be somewhat cookie 6 7 cutter. Because it revolves around what specialists are available at a specific 8 9 children's hospital, what types of illness and 10 disease they deal with primarily. 11 Different -- across Texas for 12 instance, different children's hospitals have a 13 completely different spectrum of disease that 14 they might take care of. If you've got a patient 15 who needs this, they go to that children's 16 hospital, a patient who needs this, they go to a 17 different one. 18 So it's bothered me that without risk-19 adjusting that it's a little bit of an apples and 20 oranges comparison across the way. 21 The other thing is -- the other 22 question is this doesn't point to a specific --

it doesn't get us in the direction of where do I 1 2 need to improve to get my rate down. It just says my rate's too high, comparably. 3 DR. SCANLON: So this is Matt Scanlon. 4 5 I would agree with that last point. I think at a individual level, you know, what's helpful is 6 7 looking at this and then reviewing those unplanned readmissions. Once, originally in the 8 9 -- I think it was the first set of endorsed 10 measures -- there was actually a systematic 11 review of unplanned readmissions as a mandate or 12 as a measure through the NQF process. And that 13 was dropped at the last cycle. And I don't 14 recall the specifics of why. 15 So, yeah, I think the number in and of 16 itself is only as useful as what you do with it. 17 The reason we provide this in peer review or 18 peer-type summary data to institutions as part of 19 participation is so that they can look and see 20 how they're doing compared to peers. And then 21 they have to dig in and figure out why. Just as 22 any quality improvement process.

1 CO-CHAIR BRATZLER: Edgar. 2 DR. JIMENEZ: Just a comment here that we try to take into consideration the statistics 3 -- demographic statistics with the pressure on 4 5 And it's going to be pretty stable for PICUs. the next few years, whether it's actually in the 6 7 population over 65, I think we'll see as we talk over the next few measures. We're going to have 8 9 a much, much higher ratio or a disproportionate 10 ratio of demand for acuity of care in the older 11 population. This is going to be something that 12 we're going to be seeing over the next ten years. 13 DR. SCANLON: I think the other thing 14 where there's an implication which may affect 15 these numbers is with the change in reimbursement 16 model and a move from fee-for-service, I think 17 there's going to be increasing pressure to move 18 children out of ICU, which may lead to unintended 19 consequences. 20 CO-CHAIR BRATZLER: That's a very good 21 point. Any other conversation about usability 22

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or use? Yes, Todd.

2	DR. DORMAN: I guess I will just share
3	a local. So actually for 27 years we have been
4	tracking readmission rates to adult ICUs. We
5	started with definitions of 72 hours. Found that
6	to be overly-sensitive. Forty-eight hours, and
7	then probably for about 15 years have been
8	looking at 24 hours. And find them very useful,
9	not as the raw rate but as the drive towards the
10	gap analysis that Matt is referring to to
11	understand. And it clearly identified hand-offs
12	mentioned by Edgar as a significant player.
13	But there are others, including the
14	tie to high-volume, high-pressure days and the
15	pressure for early discharge. Not that anybody
16	would move somebody out that they believe was
17	unstable, but you have those unknown patients
18	that get impacted. And that has led to a change
19	in health system resources in order to deal with
20	those days, which has then been reflected by a
21	decrease in the unscheduled readmission rates.
22	So I think there have been some hard

examples of the data driving beneficial change. 1 2 CO-CHAIR BRATZLER: Any other conversations about use or usability? 3 4 (No response.) 5 CO-CHAIR BRATZLER: Okay. We'll go ahead and vote. 6 MS. AMIRAULT: Usability and use for 7 0335, 1 being high, 2 moderate, 3 low, or 4 8 insufficient. 9 10 (Voting.) 11 DR. NISHIMI: David. David, can you 12 resubmit your vote? 13 DR. STOCKWELL: I didn't submit it yet 14 but I had to send it by email. Do you see it 15 there? 16 (Voting.) 17 MS. AMIRAULT: Zero high, 14 moderate, 18 seven low and zero insufficient. Based on the 19 percentage we can move forward. 20 CO-CHAIR BRATZLER: And then we'll have 21 our final vote on overall suitability, 22 recognizing remember when we discussed gap that

this measure was in the gray zone. So there will 1 2 be further discussion down the road because of that point. 3 4 MS. AMIRAULT: Overall suitability for 5 0335, 1 being yes and 2 being no. 6 (Voting.) 7 MS. AMIRAULT: Twelve yes, nine no. And based on the percentage this is in the gray 8 9 CO-CHAIR LANG: Okay, Dale and zone. 10 I are continuing to do a tag team here. So I'm 11 going to take the next measure, 0334, PICU 12 Severity-adjusted Length of Stay. 13 Matt, or would you, would developers 14 wish to make a brief statement regarding this 15 measure before we proceed? 16 DR. SCANLON: Yes. The concept of 17 severity-adjusted length of stay was initially 18 put forward by Dr. Murray Pollack who has been a 19 pioneer in real metrics around the ICU, both in 20 terms of severity-adjusted algorithms and looking 21 at utilization. And we have been using this for 22 a number of years to allow for risk adjustment,

but also look at utilization as a -- and the 1 2 impact on, potentially, patients and families. Again, in our minds to look at this 3 4 without looking at unplanned readmissions is 5 short-sighted and leads to the potential for gaming, which I think for any national measure is 6 7 always a potential concern. So I think that sums up the overview 8 9 and then we can take it based on individual 10 questions. 11 CO-CHAIR LANG: Thank you, Matt. 12 David, Dale, you're up. 13 DR. STOCKWELL: Sure. It's David, I'll 14 do it. 15 So it sounds this is an maintenance 16 evaluation of an outcome measure. There is not 17 really new evidence presented at this time, 18 although there is, you will hear about an updated 19 adjustment, severity wellness adjustment 20 algorithm, but the data is internally adjusted 21 and there's evidence to that point. But in terms 22 of evidence of the use of this, the focus on the

ICU and the length of stay has been well-1 2 documented as something that is worthy of reflection for any medical director of an ICU. 3 CO-CHAIR LANG: Thank you, Matt. 4 5 Evidence. CO-CHAIR BRATZLER: And the only thing 6 7 I would add is this is reported as an, essentially, an observed to an expected ratio 8 9 based on severity of illness with the child. 10 CO-CHAIR LANG: Thank you. I meant to 11 Thank you, David, and thank you, say David. 12 Dale. 13 The underlying rationale for this 14 outcome measure hasn't changed since the last NQF 15 endorsement review. So this also is appropriate 16 to proceed without a vote, unless anyone wishes 17 to do otherwise. Please raise your hand, if so, 18 otherwise we will proceed. 19 (No response.) 20 CO-CHAIR LANG: Thank you. 21 Performance gap. Dale, David. 22 DR. STOCKWELL: So in the performance

gap the data that the developer provides shows a severity-adjusted length of stay ratio between .66 and 1.8, with the median being 1.01. And they note that there is no decrease or increase in trends over time. So that part I think is fairly well satisfied.

7 The question about disparity really is highlighted here, even further compared to the 8 9 last measure, where again you see that uninsured 10 children have a disparity with shorter length of 11 stay in the PICU. They note that there is also a 12 greater physiologic derangement on admission, and 13 that may lead to a higher mortality.

14 And the developer also notes that it 15 may reflect pre-hospital practice independent of 16 the care provided by the ICU. They do then move 17 into stratifying by rates next to the age groups, 18 gender and insurance again. And there were 19 several differences amongst all those. We can go 20 through that if the committee would like. 21 Ultimately the committee felt that 22

there was a performance gap but using this as

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something for disparities may not be, may not be 1 2 as useful as it is for just the overall ICU performance. 3 CO-CHAIR BRATZLER: And the only thing 4 5 I'll add is that I think when we talked we were actually -- you know, I was impressed that there 6 is much more substantial variation in risk 7 severity-adjusted length of stay between units 8 9 than we saw with the previous measure. I mean 10 the ratios were substantially different across 11 the various PICUs. 12 CO-CHAIR LANG: Further discussion? 13 Questions for the developer? 14 (No response.) 15 CO-CHAIR LANG: Seeing none, we will 16 proceed to vote. Janine. 17 MS. AMIRAULT: Performance gap for 18 0334; 1 being high, 2 moderate, 3 low, and 4 19 insufficient. 20 (Voting.) 21 MS. AMIRAULT: Six high, 13 moderate, 22 2 low, and 0 insufficient. Based on the

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percentage we move on.

2 CO-CHAIR BRATZLER: So we'll go on to discuss reliability. Reliability, essentially 3 the same conversation that we had about the last 4 5 The measure site is captured, all of measure. the measures, but the three measures that this 6 group produces come out of the same data set. 7 So based on inter-rater reliability testing we heard 8 9 the conversation early, the reliability testing 10 is done at the data element level. And they 11 provided the evidence of the consistency of the 12 data collection across programs. And they have 13 ongoing continuous reliability testing as a part 14 of submitting and participating in the database. 15 CO-CHAIR LANG: Additional discussion? 16 MR. STOCKWELL: I have nothing further. 17 CO-CHAIR LANG: David, were you going 18 to say something? 19 MR. STOCKWELL: No, sorry. Just that 20 I didn't have anything further. 21 CO-CHAIR LANG: Okay, thank you. 22 Okay, we will proceed to vote

1 reliability. 2 MS. AMIRAULT: Reliability for Measure 0334; 1 being high, 2 moderate, 3 low, 4 3 insufficient. 4 (Voting.) 5 MS. AMIRAULT: Nine high, 12 moderate, 6 7 0 low, 0 insufficient. Based on the percentage we'll move forward. 8 9 CO-CHAIR LANG: Validity. 10 DR. STOCKWELL: So with validity the 11 developer, as you said, had taken an established, 12 published method called the PRISM III, and has 13 now updated that with their own internal data and 14 provided validity testing of that. They 15 essentially just compared a training data set to 16 an independent validation set and found that they 17 had reasonable validity after looking at the 18 various different components of that. 19 And I believe that the committee was 20 comfortable with the assessment that was 21 provided. 22 CO-CHAIR BRATZLER: And I don't have

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anything to add.

2 CO-CHAIR LANG: Further discussion?
3 Yes, Bill?

DR. GLOMB: I have a question for the developer.

6 There was a decision to truncate the 7 length of stays at 30 days. And I know why that 8 is, because all of our units have that one child 9 who's been there for 9 months, 10 months, a year-10 and-a-half. But is there any validity in the 11 literature for doing that? I have not seen it 12 and I just wondered how you made that decision?

DR. SCANLON: That decision was not our decision. That was the decision of Dr. Pollack based on his review of his -- the collaborative database he was part of or headed up. And that was the, I think that was the PICU use project that led to that originally.

19 And so why they chose 30, I don't 20 recall, recall the exact rationale, but it was 21 based on analysis of their data that they drew 22 the line at 30 days to deal with those outliers

that you mentioned. And again, that's a peer-1 2 reviewed manuscript that we essentially used the methodology of. 3 4 DR. GLOMB: Thank you. CO-CHAIR LANG: Further discussion? 5 6 (No response.) 7 CO-CHAIR LANG: We'll proceed to a Janine. 8 vote. 9 MS. AMIRAULT: Validity for 0334; 1 10 being high, 2 moderate, 3 low, and 4 insufficient. 11 12 (Voting.) 13 MS. AMIRAULT: Six high, 13 moderate, 14 1 low, and 1 insufficient. Based on the 15 percentage we'll move on. 16 CO-CHAIR LANG: Feasibility. 17 CO-CHAIR BRATZLER: So for feasibility, 18 exact same conversation as the previous. This is 19 a proprietary measure. We heard that about 135 20 different PICUs are actually participating. The 21 data abstraction happens at the level the 22 individual unit captures the patient level, and

is submitted via a registered software that's 1 2 used. So I don't have anything different to 3 4 add from the previous discussion. DR. STOCKWELL: Yes, it's David. 5 Ι 6 agree. CO-CHAIR LANG: Bruno? 7 DR. DiGIOVINE: I just think in the 8 9 prior discussion we did make the point that you 10 could probably get your readmission rates without 11 having the software. I think there is no way to 12 get a severity-adjusted length of stay without 13 having the software. 14 DR. SCANLON: I'm not sure -- this is 15 Matt Scanlon -- I'm not sure that I would agree 16 with that. I think that, again, you would have 17 to have, you would have to track your length of 18 I am nervous about the use of stay. 19 administrative data for those purposes, but 20 that's just my perspective. 21 And separate from that you can 22 calculate severity of illness on all of the

children and then do the math accordingly. 1 It 2 would be an odious task, which is why we built the software and automated it, but there is no 3 4 barrier to actually doing it long-hand, if you 5 will. CO-CHAIR BRATZLER: And I think, you 6 7 know, you're right that the risk model actually is in the public domain; it has been published 8 9 several times. 10 CO-CHAIR LANG: Further discussion? 11 (No response.) 12 CO-CHAIR LANG: If not, we'll proceed 13 to vote. 14 MS. AMIRAULT: Feasibility for 0334; 1 15 being high, 2 moderate, 3 low, or 4 insufficient. 16 (Voting.) 17 MS. AMIRAULT: Three high, 13 moderate, 18 5 low, and 0 insufficient. Based on the percentage we'll move forward. 19 20 CO-CHAIR LANG: Usability. 21 DR. STOCKWELL: So the usability is 22 There are no also very similar as the last time.

publicly-supported measures utilizing this. 1 2 Although there are a large number of ICUs that do 3 report it. 4 Sorry for the background noise, by the 5 way. So very similar to the last 6 conversation we had on the last measure. 7 CO-CHAIR LANG: Further discussion? 8 9 Going once. Going twice. 10 (No response.) 11 CO-CHAIR LANG: Janine. 12 MS. AMIRAULT: Usability and use for 13 0334; 1 being high, 2 moderate, 3 low, or 4 insufficient. 14 15 (Voting.) 16 MS. AMIRAULT: Zero high, 14 moderate, 17 6 low, and 1 insufficient. Based on the 18 percentage we'll move on. 19 CO-CHAIR LANG: We are now considering 20 the overall suitability of the measure for 21 endorsement. 22 Comments from members of the

committee, questions for the developer? 1 2 (No response.) CO-CHAIR LANG: Seeing neither, we will 3 4 proceed to vote. 5 MS. AMIRAULT: Overall suitability for 0334; 1 being yes and 2 being no. 6 (Voting.) 7 MS. BAL: David, did you vote? 8 9 DR. STOCKWELL: I did. I need to do it 10 by email though. 11 MS. BAL: Okay. 12 MS. AMIRAULT: Eleven yes, 10 no. This 13 is in the gray zone. 14 CO-CHAIR BRATZLER: Okay. So we'll 15 move on to the next measure, which is the third 16 of the measures from Virtual PICU Systems. 17 CO-CHAIR LANG: If I could just 18 interrupt you for a moment. There is an issue 19 regarding scheduling that I just want to raise. 20 And it is that after, if you could look ahead 21 beyond this measure which is the third of three 22 that relate to PICU, we have two measures, 703

1and 702, that are related: one concerning2mortality, the other concerning length of stay.3It would seem that it would be I4mean to me it would make more sense to couple5those measures and either do them both before or6both after lunch rather than splitting it up.7We also have a member and public8comment session. I just wanted to get the views9of the group as to whether there was a preference10as to how to proceed and deviate from the11schedule as it, as it exists.12MR. BENSON: I would suggest we do the13two coupled after lunch. We are a half hour off14from the schedule anyway.
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14 from the schedule anyway.
15 CO CUATE LANCE Encollors To that a
15 CO-CHAIR LANG: Excellent. Is that a
16 motion, Ken?
17 Does somebody want to second?
18 (Motion seconded.)
19 CO-CHAIR LANG: Very good.
20 All in favor.
21 (A show of hands.)
22 CO-CHAIR LANG: Excellent.

1 **Opposed?** Extensions? 2 (No response.) CO-CHAIR LANG: Very good; motion 3 4 carries. Thank you, Ken. 5 CO-CHAIR BRATZLER: All right. So we'll proceed with Measure 0343, PICU 6 7 Standardized Mortality Ratio or discuss -- well, Matt, do you have any initial introduction? Very 8 9 similar to the previous ones. 10 DR. SCANLON: Yes, it's a variation on what we've discussed. I mean the concept of 11 12 standardized mortality ratio is well-published. 13 It's been adopted by the IHI as part of their 14 Move Your Dot campaign. And essentially it's a 15 way of looking at observed over expected 16 mortality based on appropriate risk-adjustment 17 modeling. 18 And so that's what we've been doing, 19 providing that both at a unit level. It's 20 available at a patient level, although it's 21 really inappropriate to use for an individual 22 patient as it's more of a population metric.

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And then for comparisons across 1 2 clusters of units. CO-CHAIR BRATZLER: Okay. 3 So our discussants are Bill and Ella. 4 DR. GLOMB: Ella, do you want me to 5 start or do you want to start? She's not on? 6 7 CO-CHAIR BRATZLER: It's the Bill show. DR. GLOMB: It's me. Okay, let's roll. 8 9 So essentially this is using the PRISM 10 III software which has, again, been used, 11 identified, not only measures but in literature, 12 to calculate a predicted mortality based on 13 physiological risk: vital signs, chemistries, et 14 cetera. And that is the numerator. 15 And then the denominator is all deaths that occur within the unit. So your predicted 16 17 rate should ideally be the ones who are dying. And those who are not predicted, shouldn't be, to 18 19 put it succinctly. 20 It's all children under 18 years of 21 age who have been in the unit for greater than two hours, with at least two consecutive sets of 22

life-compatible vital signs. So you're not dying when you roll through the doors of the ICU. If you are, you don't get counted in this, in this study.

5 And moving on to the evidence, again 6 this relates only to that single outcome, 7 mortality. I think we can all agree this is an 8 outcome measure here. And there's discussions 9 here about summary of the evidence and the use of 10 the tool, the PRISM III tool, looking at the 11 morality ratios.

I will just read through that real quickly. There's three caveats from the developer with regard to the literature on the value of using this SMR calculation. Use of a calibrated tool for severity adjustment has been identified as important.

18 Recent publication in "Critical Care 19 Medicine" 2012, identified that the use of a 20 physiology-based tool in calculating standard 21 mortality ratio is superior than using any 22 administrative data, and that the premature

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1 transfer of patients from the ICU can lower the 2 SMR -- guess people are dying elsewhere --3 creating a potential gaming. But use of this, of 4 Measure 0343 in combinations with this one also 5 then addresses that potential.

6 So the question for the committee, is 7 there at least one thing the provider can do to 8 achieve a chance for the measure results. This 9 doesn't specifically point to something you can 10 do differently other than not let them die if 11 they weren't expected to.

12 You know, that's, that's the evidence13 basis.

14CO-CHAIR BRATZLER: So again, since15this is a maintenance measure, really no change16in the evidences is there that -- since the17previous endorsement. And we have to decide18whether or not we vote on the evidence or not.19DR. GLOMB: That's correct. The only20evidence that changed is the addition of another

21 tool. I believe that came along chronologically 22 since the last endorsement.

1	CO-CHAIR BRATZLER: Right. The updated
2	algorithm.
3	DR. GLOMB: Right.
4	CO-CHAIR BRATZLER: Right.
5	DR. YEALY: Yes, and that's my
6	question. Do we know that this stratification
7	tool retains its precision and accuracy over time
8	or if it drifts away and, therefore, any
9	differences are really not good care but just the
10	tool not performing well? I don't know if the
11	developer has information about that.
12	DR. SCANLON: We have actually
13	recalibrated the tool, as I understand it, for
14	exactly the reason of drift over time. And while
15	it wasn't published in a peer review, there has
16	been a white paper that I believe was presented
17	at a meeting on that issue by a number of the
18	physicians involved with the software product.
19	So we are keenly aware of that and the
20	need for recalibration. The original, one of the
21	initial severity of illness tools, PRISM II,
22	which was the obvious predecessor to PRISM III,

suffered that exact issue. So it got to a point 1 where Dr. Pollack and others were telling members 2 of the community not to use it because it hadn't 3 been recalibrated. 4 5 So we've got a very large number of patients in the data set now. And because of 6 that we are able to reassess and recalibrate as 7 needed. 8 9 CO-CHAIR BRATZLER: Any other questions 10 or comments about the evidence? Bruno? 11 DR. DiGIOVINE: It's not about 12 evidence. I don't know if you want me to hold. 13 I can hold it. It's about the definition of 14 mortality. 15 My only question is you talk about 16 gaming with pediatric -- counting a death only if 17 it happens in the ICU. Why not use hospital 18 mortality? Or is there background that you could 19 share with us as to why just ICU and not 20 hospital? 21 DR. SCANLON: There's a couple 22 different reasons. And again, I would also ask

that the other panel members weigh in if they
 disagree with me.

The majority of deaths in pediatrics 3 4 that are non-hospice-related deaths occur in 5 pediatric ICUs. Deaths outside the ICU are relatively rare phenomena. And actually while 6 7 there were some centers that have published that they had a problem with that, the institution of 8 9 rapid response teams have made those incredibly 10 rare. 11 So other than hospice patients, I'll 12 tell you the patients who are other status, who 13 are palliative and moved out of ICUs in a subset 14 of organizations that have those resources, most 15 pediatric deaths occur in ICUs, right or wrong. 16 CO-CHAIR BRATZLER: Any other questions 17 of conversations about evidence? 18 (No response.) 19 CO-CHAIR BRATZLER: So I'm going to ask 20 for a hand vote. Do raise your hand if you want 21 to re-vote the evidence base here. 22 (No response.)

1	CO-CHAIR BRATZLER: Okay, seeing none,
2	we will go on and discuss the performance gap.
3	DR. GLOMB: I'm going to go ahead and
4	talk about gap here.
5	This current performance data came
6	from 79 PICUs, as we learned earlier, up to 135
7	using software.
8	And the unit level standardized
9	mortality rate was fairly broad, between almost
10	none to 2, which is twice what would be expected.
11	So during 2014, the median unit level mortality
12	rate was .92, and the mean level was .97; so
13	pretty much right where you would expect them to
14	be at the 1.0, which is what is predicted based
15	on the tool.
16	The patient level mean SMR for 2014
17	was not statistically different from 1. So
18	again, using the tool, looking at the individual
19	patient, predictions were pretty accurate.
20	For performance over time, similar to
21	the previous two measures there has been no trend
22	noticed, no increasing or decreasing trend over

the three years of data collection for this particular measure.

The disparities are similar to what 3 we've seen all along, that the uninsured children 4 5 have significantly shorter lengths of stay, greater physiological derangement on admission, 6 and that the hospital mortality was higher. 7 In terms of race, ethnicity, age 8 groups, gender, insurance, payer, the younger the 9 10 child, the higher SMR -- though not very much 11 higher. And if you were a teen in a kids' ICU, 12 your rate of mortality was slightly lower, .89. 13 But there were no statistically significant 14 differences in race, in the race or ethnic 15 There were no statistically significant groups. 16 differences in managed care versus commercial 17 insurance, versus Medicare, managed care, self-18 pay, et cetera. And there were no statistically 19 significant differences found in gender or sex. 20 So that, at least looking at 21 disparities, there doesn't appear to be a gap.

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There is a gap if you run this across units.

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1	CO-CHAIR BRATZLER: Yes, I was shocked
2	by the breadth of the gap, or at least the SMR.
3	I think it does need to be in the public domain.
4	But anyway.
5	Don, I think your name's been up and
6	you didn't have anything. Yes, nothing.
7	So any other conversation or questions
8	or discussions about gap?
9	(No response.)
10	CO-CHAIR BRATZLER: Okay, seeing none,
11	we will go ahead and vote.
12	MS. AMIRAULT: Performance gap for
13	0343; 1 being high, 2 moderate, 3 low, and 4
14	insufficient.
15	(Voting.)
16	MS. AMIRAULT: Four high, 11 moderate,
17	5 low, and 0 insufficient. Based on the
18	percentage we'll move on.
19	CO-CHAIR BRATZLER: Okay. Discuss
20	reliability.
21	DR. GLOMB: So under reliability I
22	think we've discussed the logistics of the

There is no calculated algorithm 1 measure. 2 That's part of the proprietary software stated. 3 package here. With regards to reliability testing, 4 5 this takes us back again to that inter-rater reliability review, which is an ongoing process. 6 7 I don't have anything else. Again, we had those, we had those concerns expressed --8 9 we've discussed them already -- that different 10 units have different characters, different types 11 of disease processes which might alter the 12 predicted unit, unit-based predicted mortality. 13 But I think that's been explained pretty well by 14 the developer because that's done at the patient 15 level. 16 So I think we were pretty comfortable 17 with reliability. 18 CO-CHAIR BRATZLER: So any questions or 19 other comments about reliability? 20 (No response.) CO-CHAIR BRATZLER: Seeing none, we'll 21 22 vote.

MS. AMIRAULT: Reliability for 0343; 1 1 2 CO-CHAIR BRATZLER: So I'm going to ask 3 real quick, do we need to vote? Raise your hand 4 5 if you think we need to vote on reliability because it hasn't changed. 6 7 (No response.) CO-CHAIR BRATZLER: So we'll go on and 8 9 discuss validity 10 DR. GLOMB: Again, these are all standardized definitions. It's an established 11 12 method, established in the literature, and has 13 been part of multiple measures in the past. Ιt 14 relates to some of the measures we have already 15 discussed today. The IRR seems to speak to that. 16 In terms of threats to the validity, 17 let's talk a little bit about the exclusions. 18 For the purposes of this measure, and I think 19 within the software utilized to calculate the SMR 20 itself, it's relegated to children under 18 years of age only. Those who have been in the unit 21 over two hours and/or more than two consecutive 22

sets of vital signs consistent with life. 1 2 And they exclude the palliative care cases, those who were likely to die. 3 Those patients are left out of this mix. It also does 4 5 not include the pre-term infants, post-gestation 36 weeks and below because the tool was not 6 7 validated on that population. Again, it kind of takes us a little 8 9 bit back though to the character of the unit. 10 There are some pediatric ICUs that are an extension of the neonatal intensive care unit. 11 Α 12 lot of their volume relates to former preemies 13 moving up either post-operatively or at a cut-off 14 time designated in the hospital. That might play 15 into the statistics a little bit. 16 I think that our concerns, there is 17 some concern that missing data could also skew 18 results in a small volume PICU and make some big 19 changes. And that, again, doesn't really point 20 us to a specific actionable change that one might 21 see in care.

22

That's all.

1	CO-CHAIR BRATZLER: And then I
2	actually, so I have one other issue that I think
3	I'd raised on the work group. And I don't
4	imagine that you guys have looked at it, but I
5	was struck by the fairly wide distribution of the
6	SMR and wondered if we needed, if there needed to
7	be some consideration of hierarchical modeling at
8	the unit level, such as is done by a number of
9	other mortality and other measures for different
10	programs, which might take into account some of
11	that difference in case mix, but also some of
12	that difference in maybe just issues related to
13	pure quality of care.
14	DR. SCANLON: Yes, we've started to
15	look at that. And I think that's worth
16	exploring.
17	In part, one of the issues that the
18	algorithms that the calculations are based on
19	were not developed with any hierarchical
20	modeling. So part of it is do we
21	understanding what are the implications of
22	applying that. Where we handle it at an

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individual unit level is presenting like data to like in terms of unit characteristics.

3 So when we report data, units pick, 4 for the purpose of ongoing quality, units pick 5 characteristics where they want to match to other 6 ICUs, such as number of beds, do you offer this 7 service versus that service. And then we 8 benchmark against those to provide accurate 9 reporting but not at the national level.

10Again, the issue varies. This is not11necessarily nationally reported because there is12no -- and while we can publish that on the VPS13website, there is no market for that data, sadly.

When we looked at variation within the 14 15 SMR, we certainly found that the standard 16 deviation within the lowest performing set, those 17 with SMRs 1.2 to 3, have actually more variation 18 but and they don't, they drift within that area. 19 But in the lower SMRs, .8 to 1.2 diversity, 0 to 20 .8, there is very little movement of those ICUs, 21 suggesting that those ICUs are fairly stable in 22 their outcomes. But it's the low performers that

1 tend to have a lot of variation from period to
2 period.

3 CO-CHAIR BRATZLER: Edgar. MR. JIMENEZ: Just a quick thing. 4 In 5 the adult population and something that we'll be seeing in the public reporting will be an issue 6 7 with initiatives playing leapfrog and stuff like They're looking at using the standardized 8 that. 9 reporting algorithms as seeing ICU performance 10 because there needs to be, we probably get the 11 problem has been we haven't had a good tool so 12 far to do it, but there needs to be a 13 stratification, as you were mentioning, of 14 systems, you know, that would allow basics, 15 programs there where they can handle basic things 16 and more sophisticated move over to higher acuity 17 centers.

CO-CHAIR BRATZLER: Don.

DR. YEALY: I have a question for the developers about the palliation exclusion. Are there any guardrails around that with respect to either timing or location? I don't, we don't

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have a pediatric unit in our place.

2	Are there similar measures in an adult
3	way if you one way to change your mortality
4	measure is to get everybody on palliation pretty
5	quickly. They still die, they just die
6	differently. That may be a wonderful thing but
7	it's probably not the intent of the measure isn't
8	to improve, you know, the deployment of
9	palliation.
10	So my question is how do you handle
11	that? Are there some guardrails around when
12	someone's excluded for palliation? Had to be X
13	amount of time before the time of death or
14	location of it?
15	DR. SCANLON: So I'm going to have to
16	have my behind-the-scenes people send me the
17	operational definition. But my understanding is
18	these are patients admitted to the ICU purely for
19	palliative reasons, not a patient who has altered
20	code status or limitations on support in the ICU.
21	So if a patient came in because of
22	some devastating event, was cared for, and then

was proceeding to or heading towards death and 1 2 was placed in palliative status, that was not -those are not excluded. Those are incorporated 3 4 in the model so that we don't have that problem 5 of gaming there. It's patients that -- there's a few 6 centers, and this is where this came in, who 7 would admit patients purely for palliative 8 9 purposes. And that's where the exclusion 10 applies. 11 CO-CHAIR BRATZLER: Any other questions 12 about validation, validity testing? 13 (No response.) 14 CO-CHAIR BRATZLER: Okay, we can go 15 ahead and vote. 16 MS. AMIRAULT: Validity for 0343; 1 17 being high, 2 moderate, 3 low, or 4 insufficient. 18 (Voting.) 19 MS. AMIRAULT: Two high, 15 moderate, 20 3 low, and 0 insufficient. Based on the 21 percentage we'll move on. 22 CO-CHAIR BRATZLER: And I think the

last question is about -- oh, I'm sorry, yes,
 feasibility.

3 DR. GLOMB: So feasibility is similar 4 to the previous two measures. You have access to 5 the software because you're a member of the group 6 or you have an electronic medical record, then 7 you'd be able to get this data.

If you have no electronic medical 8 9 record you could do -- well, like what Matt said, 10 it was an odious manual review and data entry. 11 And obviously they're paying for the man hours 12 for that. And you could have access to scoring 13 as well. But it is certainly doable in both 14 environments; one easily and one less easily. 15 CO-CHAIR BRATZLER: Any other 16 discussion of feasibility? 17 (No response.) 18 CO-CHAIR BRATZLER: Okay, we'll vote 19 it. 20 MS. AMIRAULT: Feasibility for 0343; 1 21 being high, 2 moderate, 3 low, or 4 insufficient. 22 (Voting.)

1	MS. AMIRAULT: Three high, 14 moderate,
2	3 low and 0 insufficient. Based on that
3	percentage we're moving on.
4	CO-CHAIR BRATZLER: And then
5	usability/use.
6	DR. GLOMB: So nothing new on the
7	usability. The statistics are the same. This
8	really isn't being publicly reported. Some
9	hospitals might use this voluntarily, and others
10	in California Children's Services if this is
11	posted information.
12	No changes in the trends over time.
13	I'm curious if the developer has any
14	thoughts about why we've not seen any movement
15	there based on their data collection.
16	DR. SCANLON: I'm sorry, movement in
17	the SMR or movement around public reporting?
18	DR. GLOMB: No, movement in the SMR
19	itself. I'm sorry.
20	DR. SCANLON: Well, again I think at a
21	unit level the SMR, the median should be around 1
22	if the calculation is accurate. I think that the

1 issue is that you wouldn't -- first of all I
2 would say compared to adult mortality in ICUs,
3 pediatric mortality is about 2.7, I think,
4 percent, so it's pretty low to start with. So
5 moving that dot is, in a statistical fashion is
6 pretty challenging.

7 I think a second issue is the question
8 of whether all deaths are, one, preventable and,
9 two, whether a death is appropriate or
10 inappropriate. There are, at the risk of being
11 controversial, one could argue there are such a
12 thing as good deaths.

13 But I think the other issue is that 14 because of the lack of a mandate for public 15 reporting of this, while NQF has to date provided 16 a mechanism to publicly report these, or a 17 validated metric, there is not a market force. 18 And while one of the previous speakers spoke to 19 leapfrog demanding that from the adults, the 20 relative cost of pediatric ICUs, while very 21 expensive, pales in comparison to adult care. 22 And so we're not on their radar, rightly or

wrongly.

2	I think, looking at the range of the
3	SMR that we one of the previous speakers
4	commented on, it's disturbing to me that there's
5	not attention to this and that you could actually
6	see that SMR would at least be 1 across the
7	board, if not below 1. And there has certainly
8	been dramatic improvement in CLABSI rates in
9	pediatric ICUs. We're pretty good at keeping
10	those kids alive. Even if they did a CLABSI for
11	this, I don't know that that was a big source of
12	mortality.
13	So that's a multi-pronged answer. But
14	I think the lack where there is room for
15	improvement, the lack of national attention to
16	this, be it by joint commission or any public
17	reporting body with the exception of the
18	California system, certainly has not put any
19	pressure for centers to improve.
20	CO-CHAIR BRATZLER: James.
21	DR. O'BRIEN: I think some of this also
22	just goes back to recalibrating or respecifying

the model, is that you're going to wind up then 1 2 again regression to median, you're going to get back to a 1 as every time you do it, which makes 3 4 it challenging with these risk-adjusting models 5 as we change the model year over year of knowing whether or not there's actual improvement. 6 7 CO-CHAIR BRATZLER: Kenneth. MR. BENSON: As I understand the 8 9 purpose of these measures is to help the process 10 improve, improving the guality of healthcare. 11 And what I find troubling in this and the two 12 previous ones has to do with gathering 13 information and presuming the data is correct, 14 and it comes to conclusions that could lead other 15 people to improve their healthcare. that that 16 information is not being gotten out there. 17 Now, the developer said there's a lack 18 of interest. I don't understand this. I'm just 19 at a loss on how, if we're going to take the time 20 to do this, there is not a mechanism to get it 21 out to the people who could use this to improve 22 their quality. Keeping it locked in a box

doesn't help anybody.

2	CO-CHAIR BRATZLER: Yes. So I mean I
3	will simply comment that for I think Matt made
4	the point very well for programs like
5	Medicare, the adult population, which are very,
6	very expensive and they use a lot more ICU care
7	and other extensive care, lots and lots of payers
8	now are mandating, whether it's Medicare or other
9	private payers, mandating that this data be put
10	into the public domain.
11	That simply hasn't happened, it
12	doesn't sound like, for pediatric ICU care, and
13	there just aren't payers out there mandating that
14	this information the payment models haven't
15	pushed it to go to the public domain. So.
16	DR. SCANLON: This is Matt again. I'm
17	sorry. I couldn't agree more with your
18	frustration. We would love that, not just
19	because we have this software package, but as
20	someone who is passionate about improving the
21	care of children, it's very frustrating to me
22	that there's no national hunger for this.

1 So, you know, you can use the NQF sway 2 or whatever within the bailiwick of NQF, but use your sway to influence it. That would be great. 3 4 I would love to have an audience let's say with a 5 national metric that needs to be on the newspaper and whatnot because, you know, the range from 0 6 7 to 2 for an SMR is, is disturbing. DR. O'BRIEN: So I guess for the 8 9 developer then you mentioned a requirement that 10 for participating centers they have to pay a fee. 11 They have to have a nurse or a physician who is 12 specifically trained and show that they are able 13 to abstract this data correctly. Is it possible 14 for you to include in your participation 15 agreement that those organizations that are going 16 to participate have to publicly report their 17 performance?

DR. SCANLON: I don't know the answer to that. And I say that as I am one of the clinical developers. I am not one of the officers of the program. And so I need to be very careful not to speak outside my range of

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expertise and authority.

Is it possible? Yes.

I don't know what that would mean for 3 4 participation. And I think one implication is 5 that programs that have a poor SMR may just choose to drop out so they don't have to report. 6 I think, you know, saying that's the terms of 7 using the software, again, people who look good 8 9 will use it, people who have problems, the 10 quickest way is just quit paying to use the 11 software and then you don't have a problem. 12 And that's a cynical view but I think 13 that's where having nationally-mandated public 14 reporting, be it by payers or other bodies, is 15 what's missing here. 16 CO-CHAIR BRATZLER: Steve. 17 DR. GROSSBART: I think one of the 18 quandaries here is that this NQF endorsement is 19 for a proprietary product. And, you know, the 20 cynic in me says this is a marketing strategy. 21 The data is not really being used for what the 22 NQF expects the data to be used for, which is for public reporting, accountability. And it's just it's we're giving an endorsement and it's going nowhere except within the confines of the vendor's, of the developer's business as a vendor.

And so when we talk about usability, 6 7 but it may place significant limits on usability. DR. SCANLON: Well, as a self-avowed 8 9 cynic I can tell you that the organizations are 10 But I think that there would be -- to blinded. each other in the software because of the legal 11 12 implications of sharing and whatnot at the 13 present.

I think that it is entirely feasible for us to publish the range of SMRs on the website at a site level but it's not within our current ability without rewriting a bunch of contracts. Which, again, I'm not saying we're not opposed -- or we're opposed to, to identify those organizations.

21 But that doesn't address the issue of 22 what happens if someone is a poor performer, and

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why would they be incentivized to pay to report poorly. And so while you, you know, you can say that we are not being good stewards by keeping this data in a lockbox, that's not the spirit of what this is for.

And again, I'm not trying to sound 6 7 Pollyannaish here but our goal is to get the data out there. But in the absence of an audience for 8 9 it, or some external pressure, we're not -- we 10 are currently not able to publish un-blinded 11 results in a public fashion. Maybe that's a 12 fatal flaw in the mechanism, but that result was 13 necessary to get programs up and running in this 14 in the first place.

And this has been an iterative
process. As I said, the software has been
existence since before 2004. Certainly we can
push for that.

19 I think the pediatric community at
20 large has been in the forefront of transparency.
21 And so we can push that envelope. But, again,
22 you may just drive poor performers, if it's at

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the level of the VPS we may just drive poor 1 2 performers to drop out and hide their problems. CO-CHAIR BRATZLER: So I'm going to let 3 Todd have the last word here on this before we 4 5 vote on usability. DR. DORMAN: Well, I was just going to 6 7 add a comment that's maybe an academic comment and sounds a little bit strange when you first 8 9 hear it. But there is -- I'm not aware of data 10 that says that you can use such a measure to 11 compare ICU to ICU. They're internal quality 12 So publicly reporting would create the measures. 13 impression that a unit that is at 1.5 is somehow worse than a unit that is at .7. And I don't 14 15 believe that there is data that has actually 16 supported that fact. They are different and 17 there are many reasons why they may be different. 18 And so I think there is an unintended 19 consequence that has led people to be concerned 20 about transparency with these numbers because then the utilization of the number becomes 21 22 potentially misused based upon our understanding.

1	And I know that sounds crazy because
2	it's compared to predicted and so, but.
3	CO-CHAIR BRATZLER: Steve, one last.
4	DR. GROSSBART: But isn't the ability
5	to create consensus measures that allow for
6	comparisons across different users, different
7	facilities, different populations, I mean isn't
8	that an expectation of NQF consensus measurement
9	development?
10	DR. NISHIMI: Yes.
11	CO-CHAIR BRATZLER: So that all goes
12	into your decision about how you vote on
13	usability and use. So any other conversations
14	there?
15	(No response.)
16	CO-CHAIR BRATZLER: We'll go ahead and
17	vote on usability.
18	MS. AMIRAULT: Usability and use for
19	0343; 1 being high, 2 moderate, 3 low, or 4
20	insufficient.
21	(Voting.)
22	MS. AMIRAULT: Zero high, 8 moderate,

12 low, and 0 insufficient. So based on the 1 2 percentage this is in the gray zone. CO-CHAIR BRATZLER: All right. 3 The 4 last one is overall suitability for endorsement. 5 Any other comments or questions? 6 (No response.) 7 CO-CHAIR BRATZLER: If you would call the vote. 8 9 MS. AMIRAULT: Overall suitability for 10 0343; 1 being yes and 2 being no. 11 (Voting.) 12 MS. AMIRAULT: Nine yes and 11 no. 13 This is in the gray zone. 14 CO-CHAIR BRATZLER: All right, thank 15 Thanks, Matt, for your conversations today. you. 16 DR. SCANLON: Yes, thank you. 17 CO-CHAIR BRATZLER: So we're a little 18 behind schedule. We have one more measure that 19 we were supposed to do before lunch but it's 20 almost time for public comment. 21 So I think the suggestion up here is 22 to get the pulse of the committee to let's go

ahead and do public comment. And then, as we did 1 2 yesterday, get our lunch and then do a working lunch to keep moving so that we can do the best 3 4 we can to get all the measures done today before 5 we leave. Does that seem reasonable? 6 7 MS. BAL: Operators, any public comment? 8 9 THE OPERATOR: At this time if you 10 would like to make a comment, please press star 11 then the number one. 12 (No response.) 13 THE OPERATOR: There are no public 14 comments at this time. 15 CO-CHAIR LANG: Also, we're going to 16 draw straws to determine whether the term that 17 each of us will serve on the Standing Committee 18 will be two years or three years; is that 19 correct? 20 MS. BAL: That's correct. 21 CO-CHAIR LANG: So it's either two or 22 three. I don't think there are any other

1	possibilities, are there?
2	CO-CHAIR BRATZLER: Two.
3	MS. BAL: Oh, sorry. Your name and the
4	years.
5	CO-CHAIR BRATZLER: Dale Bratzler, two.
6	CO-CHAIR LANG: David Lang, three.
7	DR. NISHIMI: Into the mike you need to
8	announce it.
9	MR. BENSON: Ken Benson, three.
10	DR. DORMAN: Todd Dorman, two.
11	DR. GLOMB: William Glomb, three.
12	MS. WEST: Chana West, two.
13	DR. OHTAKE: Patricia Ohtake, three.
14	DR. ELLIOTT: Kim Elliott, two.
15	DR. RILEY: Crystal Riley, three.
16	DR. YEALY: Don Yealy, two.
17	DR. LAMPONE: Thomas Lampone, two.
18	DR. COLLINS: Curtis Collins, three.
19	DR. DIGIOVINE: Bruno DiGiovine, two.
20	DR. BAULDOFF: Gerene Bauldoff, three.
21	DR. JIMENEZ: Edgar Jimenez, two.
22	DR. GROSSBART: Stephen Grossbart,

1 three. 2 DR. O'BRIEN: Jim O'Brien, three. 3 DR. MURRAY: Richard Murray, three. 4 DR. SCHINDLER: Christine Schindler, 5 three. MS. BAL: So for the people on the 6 7 phone, for Mitch Harris is two; Susan Pollart is two; David Stockwell is three; and Ella is two. 8 9 DR. NISHIMI: Thank you. Lunch is 10 ready. 11 CO-CHAIR BRATZLER: So let's take about 12 10 minutes, 10-15 minutes max and then by 12:30 13 we'll get back and get started again. 14 MS. BAL: Adam, we'll be back at 12:30 15 and we'll go over your measures. Thank you. 16 (Whereupon, the above-entitled matter 17 went off the record at 12:15 p.m. and resumed at 18 12:30 p.m.) 19 CO-CHAIR BRATZLER: All right. Is 20 everybody ready to get started again? And, 21 Adams, are you on the line? 22 (Pause.)

1	DR. NISHIMI: Operator, is Adams
2	Dudley on the line?
3	THE OPERATOR: No, they haven't joined
4	yet.
5	(Pause.)
6	CO-CHAIR BRATZLER: So, we're waiting
7	on our developer to get on the line. If it's
8	okay, I guess we can go ahead and start.
9	Okay. So, this is a maintenance
10	measure. So, our two discussants are Edgar and
11	Patricia and we'll go ahead and do the
12	conversation about evidence. And then once Adams
13	rejoins the call, we'll ask him to give an
14	overview of the measure.
15	DR. OHTAKE: Thank you. So, this is
16	Measure 0703, Intensive Care In-Hospital
17	Mortality Rate. And it's for all adult patients
18	admitted to the ICU and the percentage of
19	patients whose hospital outcome is death, both
20	observed and risk-adjusted mortality rates are
21	reported with predicted rates based on the
22	Intensive Care Outcomes Model-Mortality.

And so, the rationale is that death is 1 2 the reason -- preventing death is the reason why people are admitted to the ICU. This is an \$81 3 4 billion enterprise to care for our patients in 5 the ICU and we certainly want to be sure we're doing the best -- providing the best care 6 7 possible. The numerator is all of -- the total 8 9 number of eligible patients whose hospital 10 outcome is death. And the denominator is the 11 total number of eligible patients who are 12 discharged, and this includes both deaths and 13 transfers out to other hospitals. And this is an 14 adult measure. So, individuals less than 18 15 years of age at the time of ICU admission are 16 excluded. 17 ICU readmissions are excluded. Short 18 stays in the ICU are excluded, less than four 19 hours, or primary admission for trauma burns or 20 immediately post-coronary artery bypass grafting, 21 or admitted with a diagnosis of rule-out MI. 22 It's an outcome measure and currently

it's being -- the data is being abstracted from 1 2 paper medical records, although the developer indicated that an eMeasure is in development and 3 4 they hope to have that available in 2016. And 5 the level of analysis is at the level of facility. It was first endorsed in 2001. 6 7 As far as the evidence goes, the developers have indicated that there was some new 8 9 evidence. But when the NQF staff reviewed that, 10 there didn't seem to be a lot of updated 11 literature available. 12 And when we discuss this in our 13 workgroup, our workgroup agreed with that that the evidence seems to be consistent with what was 14 15 available at the previous endorsement. 16 DR. JIMENEZ: Nothing to add, except 17 that it is paired with 0702, right? Just to keep 18 in mind as we go through that this is a paired 19 measure. 20 Thank you. DR. OHTAKE: 21 CO-CHAIR BRATZLER: Todd. 22 DR. DORMAN: So, really a point of

clarification. So, it's not really an evidence 1 2 question, but this point of it moving to an eMeasure, does that impact our discussion? 3 And if we -- will they then dovetail 4 5 that under this and be allowed to continue with if we approve this as an eMeasure, or does that 6 7 have to come back? DR. NISHIMI: You aren't approving it 8 9 as an eMeasure. You're approving what's before 10 you. 11 They would have to bring an eMeasure, 12 because there are some very specific criteria. 13 DR. DORMAN: Okay. Thank you. 14 CO-CHAIR BRATZLER: So, Operator, can 15 you tell us -- oh, I'm sorry. James, go ahead. 16 DR. O'BRIEN: So, the one evidence 17 that I might suggest that has some relevance is a 18 paper from Jack Iwashyna in Michigan, which looks 19 at confounded by indication risk adjustment. 20 The foundation of that is based around 21 observational studies, but I think has 22 applicability when it comes to benchmarking, but

suggests that when there is -- is truly 1 2 confounded by indication, which may be the case in ICUs that sicker patients may be transferred 3 or present to different hospital. 4 Risk adjustment really doesn't help 5 you to overcome that and you still wind up with 6 misclassification as far as the actual underlying 7 effect. 8 9 CO-CHAIR LANG: I just wanted to 10 clarify since Edgar mentioned this, that the next 11 measure that we're going to be considering 12 concerning length of stay in the ICU, it was 13 stated on our phone call by Adams Dudley that 14 that measure, the length of stay measure, is only 15 to be used if you're also doing mortality 16 reporting. So, that clearly is not a standalone 17 measure. 18 DR. DIGIOVINE: And I just want to make a comment to James' point. I just want to 19 20 make sure I understand it. 21 I think Jack Iwashyna's research is 22 around transfers from another hospital, which I

understand is an exclusionary criteria for this 1 2 I just wanted to be sure that was measure. 3 correct. 4 DR. JIMENEZ: That's correct. 5 So, I think the other DR. O'BRIEN: applicability, though, I can certainly see with a 6 7 tertiary care hospital in urban environment, there may be a different indication for patients 8 9 who are admitted to ICUs there relative to a 10 hundred-bed hospital in a rural area. 11 DR. NISHIMI: Adams, have you 12 rejoined? 13 THE OPERATOR: Adams has not rejoined 14 yet. 15 DR. NISHIMI: I think we just have to 16 qo ahead with the --17 CO-CHAIR BRATZLER: So, at this point 18 we have to decide whether we're going to vote on 19 The subcommittee actually recommended evidence. 20 that we didn't need to vote on evidence, but I'll 21 leave it up to the group. So, raise your hand if 22 you think we should go ahead and vote on evidence

or move forward.

2	Do you think we should vote on
3	evidence? So, we have two votes. So, are we
4	doing this as a majority or majority, okay.
5	So, I guess we will not vote on
6	evidence at this point and go on and discuss gap.
7	DR. OHTAKE: Okay. So, the developers
8	provided information of performance scores from
9	data collected between 2010 and 2011. And it
10	looked at almost 70,000 patients and there were
11	just over 8,000 deaths for an overall ingested
12	mean mortality rate of 11.67 percent.
13	This is down 2.18 percent from the
14	previous data period. So, there has been some
15	movement in performance. However, there still is
16	felt in our discussion that there's definitely a
17	gap that a performance gap that can be
18	addressed by continuing to use this measure.
19	As far as disparities, there is
20	were not disparities of actual patient
21	measurements reported. However, the literature
22	information identified that was presented

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identified that there is disease-specific racial 1 2 variation among African-Americans. There's also disparities for the 3 4 elderly. Particularly, the older women seem to 5 fare worse than men. And also based on insurance status as well. 6 7 Edgar, is there anything else you want to add? 8 9 DR. JIMENEZ: Nothing to add. 10 DR. DUDLEY: Hi. I just wanted to let 11 you know I'm here. This is Adams Dudley. 12 CO-CHAIR BRATZLER: Yes, Adams, this 13 is Dale Bratzler. So, we're going to in just a 14 moment have you give a brief overview of the 15 measure. 16 DR. DUDLEY: Okay. 17 CO-CHAIR BRATZLER: Don, can you --18 DR. YEALY: Just one question for the 19 The most recent data we have are four developer. 20 plus years old. There's nothing more recent that 21 we can sink our teeth into regarding the gap? 22 DR. DUDLEY: No, we do not have more

recent data.

2 DR. YEALY: Any particular reason why that is? 3 4 DR. DUDLEY: We have not -- right now 5 we are not collecting this data. We're waiting for CMS evaluation for the possibility of 6 7 national adoption. So, there isn't a current dataset. 8 9 CO-CHAIR BRATZLER: Bruno. 10 DR. DIGIOVINE: Yes, just sort of 11 relative to what we talked about last time, your 12 -- what is being shown here is crude mortalities 13 and you talked a little -- we talked a little bit 14 about a prediction score. 15 So, is the measure a raw mortality 16 score, or a standardized mortality score? 17 DR. DUDLEY: It's a risk-adjusted 18 mortality score. 19 DR. DIGIOVINE: Can you elaborate on 20 what you mean by that? 21 DR. DUDLEY: We use the measures that 22 were originally reported in what's called the MPM

Model, Mortality Prediction Model. It's one of 1 2 three major models used in ICU risk adjustment. There are hundreds of published papers 3 4 with the three models. And what we did in 5 developing the model that was used for public reporting is to compare the work required to 6 collect the data for each of the three models and 7 also to compare the performance assessments one 8 9 would generate using each of the three models. 10 We found very high correlation between 11 the performance assessment for the three models 12 above 0.9. And found that the model we're 13 currently using required much less work to get 14 the data collected than other models, less than 15 15 minutes a patient. 16 So, in the balance of the burden of 17 data collection and the benefits in terms of 18 prediction, it seemed like it fell towards the 19 model that we're currently using. 20 DR. DIGIOVINE: I'm sorry, Adams. 21 Maybe I didn't ask my question clearly. So, if 22 you're MPM and you have a predicted mortality for

every patient, why don't you report for our 1 2 review standardized mortality ratios rather than just crude mortality rates? 3 4 DR. DUDLEY: Report to you for your 5 review, or report to the -- we report both to the -- to the hospitals that are part of the program, 6 7 and we'll report to you anything you would like. So, the numerator is 8 DR. DIGIOVINE: 9 the number of deaths. The denominator is the 10 number of patients. 11 DR. DUDLEY: Right. 12 DR. DIGIOVINE: So, the score would be 13 a percentage. How does that percentage then 14 become risk-adjusted? 15 DR. DUDLEY: So, we calculate -- so, 16 that's the raw data. And then for each patient 17 we have all the variables that go into the risk-18 adjustment model we calculated and expected 19 mortality rate. And we also report and observe 20 to expected mortality rate. 21 CO-CHAIR BRATZLER: So, other 22 questions about performance gap?
1	(No response.)
2	CO-CHAIR BRATZLER: So, before we vote
3	on performance gap, Adams, I was wondering if you
4	wanted to just give a brief we kind of jumped
5	into the measure without you, but if you wanted
6	to give any brief introduction to the measure?
7	DR. DUDLEY: And I apologize for not
8	being here at the beginning. I didn't catch the
9	schedule change.
10	So, the obviously mortality in the
11	ICU is extremely important. And we decided in
12	a group of volunteer hospitals in California
13	started measuring this in 2006 and publicly
14	reporting it in 2007.
15	And along with the public reporting,
16	developed some performance improvement
17	collaboratives. And that is it's from those
18	groups that this data comes.
19	It eventually expanded to every
20	hospital with at least 200 beds in California.
21	CO-CHAIR BRATZLER: Is it being used
22	outside of California, Adams?

1	DR. DUDLEY: It is not being used
2	outside of California.
3	CO-CHAIR BRATZLER: Okay. All right.
4	So, we've had a conversation about performance
5	gap.
6	Any other conversations about
7	performance gap? And if not, we'll go ahead and
8	vote on performance gap.
9	MS. AMIRAULT: Performance gap for
10	0703. One being high; two, moderate; three, low
11	and four, insufficient.
12	(Voting.)
13	MS. AMIRAULT: If everyone could just
14	do it one more time? Sorry about that.
15	(Voting.)
16	MS. AMIRAULT: Five high, 13 moderate,
17	two low and two insufficient. Based on the
18	percentage, we'll move along.
19	CO-CHAIR BRATZLER: Okay. And so,
20	we'll move to a discussion of reliability.
21	DR. JIMENEZ: With reliability, there
22	was about 94 percent with a range of 85 to 97

percent.

2	The difference in performance can be
3	identified and requires quality data collection,
4	though. I mean, it is an intensive, manual, at
5	this point in time, operation.
6	And then at the level it performs, it
7	can be varying in quality outcome. So, based on
8	our algorithm, it can be rated as high in
9	quality.
10	DR. OHTAKE: I just add that they
11	looked at inter-rater reliability, as Edgar said,
12	with trained auditors compared to the hospital's
13	data abstracters.
14	CO-CHAIR BRATZLER: And did as
15	we've discussed with previous measures, is there
16	any ongoing periodic reliability testing to
17	participate in the database?
18	DR. OH TAKE: I think we'd have to ask
19	the developer that. But from the measure, they
20	indicated that this was a critical point, as you
21	bring up. So, perhaps the developer could tell
22	us about any ongoing quality checks on the

particular hospital abstracters or data
 collectors.

3 DR. DUDLEY: It is important. And, 4 actually, even when someone new comes on to learn 5 to collect the data, I would -- we strongly 6 recommend training beforehand.

7 The training isn't terribly onerous, 8 but it is important. And then we would recommend 9 approximately every year or two, we found with 10 every two-year auditing that the data stay pretty 11 well on track.

12 CO-CHAIR BRATZLER: James. 13 DR. O'BRIEN: Can the developer just 14 clarify -- I saw that transfers into a hospital 15 are excluded from the denominator. Transfers out 16 of the hospital, though, look like remain and are 17 considered a patient who survived the 18 hospitalization; is that accurate? 19 That is correct. DR. DUDLEY: 20 CO-CHAIR BRATZLER: Any other 21 questions/comments about reliability? 22 (No response.)

	2
1	CO-CHAIR BRATZLER: Okay. All right.
2	So, we'll go ahead and vote on reliability.
3	MS. AMIRAULT: Reliability for 0703.
4	One being high; two being moderate; three, low or
5	four, insufficient.
6	(Voting.)
7	MS. AMIRAULT: Four high, 15 moderate,
8	three low and zero insufficient. Based on the
9	percentage, we'll move along.
10	CO-CHAIR BRATZLER: All right.
11	Validity testing.
12	DR. JIMENEZ: To validity. Great.
13	The risk adjustment follows a Bayesian
14	statistical model. The areas under the curve are
15	0.81. And if you correlate with others, the
16	system measure as 0.92. And they allow
17	differentiation across the measured entities.
18	The exclusion criteria are appropriate
19	through SDS parameters. And the usual groups
20	that have been excluded also like burns, trauma,
21	cardiothoracic are included in the database and
22	usually are seen by more specialized hospitals,

	∠
1	too. So, it qualifies for moderate validity.
2	I don't know, Patricia, if you have
3	anything else.
4	DR. OHTAKE: I have nothing further to
5	add other than the risk adjustment variables.
6	There are 15 of them that are pretty commonly
7	used in risk adjustment with this particular
8	patient group.
9	CO-CHAIR BRATZLER: So, any committee
10	conversation or
11	DR. O'BRIEN: Does the developer have
12	any information on the number of patients who are
13	excluded due to transfer and then also the number
14	of patients who are transferred out and
15	considered alive that are included in the
16	dataset?
17	DR. DUDLEY: Both are quite small. We
18	actually in the the issue of transfers came
19	up when this was first endorsed. And the
20	particular concern was raised by the American
21	Thoracic Society that academic medical centers
22	would be penalized by accepting in transfer

patients who were particularly ill.

2 The -- we analyzed at that time, we have not reanalyzed since, the impact of 3 excluding all transfers, or just transfers in 4 5 each direction, and the performance score correlations were about 0.95 with -- comparing 6 7 with transfers versus without transfers. And so, the decision was made since 8 9 the area of particular sensitivity was transfers 10 into centers that were accepting high-risk 11 patients, that was the part that we decided to 12 exclude. 13 But as of the analyses when we went 14 through the initial endorsement, there is 15 essentially no impact on performance ratings. 16 Would this be an opportunity for me to 17 add another piece of information back on 18 performance gap? Is that okay? 19 CO-CHAIR BRATZLER: You can. It's 20 already passed on that criterion. 21 DR. DUDLEY: Sure. I just wanted to 22 get out there for future consideration, because I

know there will be more levels, I think perhaps -1 2 - I was surprised by the low number of people who thought the performance gap was high. 3 4 And then I thought about the context 5 and in reality it might look that way because we've been measuring this and reporting it for 6 7 six years, but when we started, there were large groups of hospitals that were three-fold 8 9 difference in risk-adjusted mortality. 10 So, I think that in thinking about the 11 performance gap, it might be worth considering we're assessing that in a group of hospitals that 12 13 have been working on this for a long time, but 14 where talking about application of it almost all 15 the hospitals in the country haven't yet had this 16 applied. And so, the performance gap will be 17 much larger in that as it were a naive 18 population. 19 CO-CHAIR BRATZLER: And that will be 20 relevant to our conversation about use. 21 Todd, I know you had --22 DR. DORMAN: Yes, I'm not sure if you

-- if you stated this earlier or if I missed it 1 2 in the paperwork. Which version of MPM are you using for the -- Three? 3 3-0? 4 DR. DUDLEY: Actually, what we 5 recommend is using the variables and then recalibrating the coefficients to the new 6 population frequently. 7 So, we actually recalibrate quarterly, 8 9 because treatment changes and sort of the essence 10 of what puts someone at risk doesn't change, but 11 the relative contributions of particular risks do 12 change over time. 13 And so, we actually recommend that you 14 recalibrate to the new population and the new 15 data frequently. CO-CHAIR LANG: Yes, for your 16 17 calculation algorithm you stipulate on S-18 that 18 the death rate for each hospital is adjusted 19 according to average case mix. 20 Could you elaborate on that for us so 21 it can help me understand better how that's done? 22 DR. DUDLEY: Sure.

CO-CHAIR LANG: That would seem to be 1 2 a critical element of this measure. DR. DUDLEY: Sure. So, I'll explain 3 the -- I'll start back with the last comment 4 5 about the recalibration. So, what we do is we take all the data 6 7 from all the patients across all the hospitals and calculate the impact of each risk factor 8 9 across all of the hospitals. 10 And then each of those variables 11 contributes to for an individual patient, 12 calculated risk of mortality. 13 And then looking at a particular 14 hospital you add up the predicted risk for each 15 of its patients. And that gets you an estimate 16 of what the predicted mortality should be. 17 And then you look at the number of 18 observed deaths and compare the observed to 19 expected. 20 So, for hospitals that have more risk 21 factors, you're applying to each of the individual risk factors the average weight of 22

that across the state as recalibrated each 1 2 quarter. And then, therefore, they're getting a 3 higher predicted death rate per hundred patients that they have and capturing their severity of 4 5 illness in that way. Is that clear? 6 CO-CHAIR LANG: 7 Yes. Any other 8 CO-CHAIR BRATZLER: 9 questions or comments about validity? 10 (No response.) 11 CO-CHAIR BRATZLER: Okay. Seeing 12 none, Janine, go ahead and vote. 13 MS. AMIRAULT: Just a note that the 14 highest eligibility for validity for 0703 is 15 moderate. So, options are two, moderate; three, 16 low and four, insufficient. 17 (Voting.) 18 MS. AMIRAULT: If you could just do it 19 one more time? Thank you. 20 (Voting.) 21 MS. AMIRAULT: Zero high, 13 moderate, 22 nine low and zero insufficient. And based on the

percentage, it's grey zone.

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CO-CHAIR BRATZLER: Okay. We'll go
ahead and discuss feasibility.

DR. JIMENEZ: Okay. With the feasibility, this is pretty much basically chart abstraction and manual. So, that's a burden in the collection, but the usefulness has been referred to as outweighs the burden of the collection.

10 And that's pretty much what I have. 11 I mean, it's the, you know, it's the, I mean, it 12 has been used in California extensively with no 13 problems at all reporting, except for the manual 14 collection.

DR. OHTAKE: I'd just like to add to bring attention to the fact that there's no costs or licensing requirements with this particular measure. So, it's freely available.

19CO-CHAIR BRATZLER: Is there any20sampling in cases, or is this a hundred percent21of the population at the ICU?

22

DR. DUDLEY: We request the first 400

consecutive -- sorry -- 100 consecutive patients 1 2 per quarter for a rolling annual sample of 400 patients. 3 4 CO-CHAIR BRATZLER: Thanks. Any other 5 conversation/questions about feasibility? 6 (No response.) 7 CO-CHAIR BRATZLER: Okay. Janine. MS. AMIRAULT: Feasibility for 0703. 8 9 One being high; two, moderate; three, low and 10 four insufficient. 11 (Voting.) Two high, 14 moderate, 12 MS. AMIRAULT: 13 six low and zero insufficient. And based on the 14 percentage, we will move forward. 15 CO-CHAIR BRATZLER: All right. Then 16 usability and use. 17 DR. JIMENEZ: The measure has, like we 18 said, has only been used in California. It is 19 expected to have some acceptability from CMS as 20 it moves to an electronic format, but it's not 21 there yet. 22 So, besides the California

participating hospitals, there hasn't been any other usability.

Now, I know from discussions that I've 3 4 had with the Leapfrog Group, that they are 5 looking for some measures that would eventually -- would -- in the public format of reporting 6 7 would supply information on ICUs for the intensivist physician standard, but -- and this 8 9 has been looked at by the -- will probably have 10 to be in electronic format before that. 11 DR. OHTAKE: I just add that the 12 developer stated that it was -- the measure was 13 discontinued use in 2013 because there are other 14 measures -- or in favor of measures required by 15 CMS. So, I guess my question for the 16 17 developer is, is this measure currently available 18 for use as paper-abstracted literature should --19 All of the DR. DUDLEY: Yes. 20 requirements to collect the measure are available 21 for free. 22 DR. OHTAKE: Thank you.

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1 CO-CHAIR BRATZLER: So, I just want to 2 make sure I understand. So, in 2013 because of competing priorities, it's just not being -- I 3 4 think, Adams, you said it was being voluntarily 5 collected by a number of California hospitals and actually publicly reported by some. 6 7 DR. DUDLEY: Right. CO-CHAIR BRATZLER: 8 That's not 9 happening anymore? 10 DR. DUDLEY: The concern was that the 11 CMS data collection burden was increasing and 12 would push hospitals on their resources and they 13 were going to focus on those things, but we want 14 to move this over to a CMS-preferred format. 15 CO-CHAIR BRATZLER: Any other 16 questions/comments about use or usability? 17 (No response.) 18 CO-CHAIR BRATZLER: All right, Janine. 19 MS. AMIRAULT: Usability and use for 20 0703. One being high; two, moderate; three, low 21 and four insufficient. (Voting.) 22

MS. AMIRAULT: One high, 11 moderate, 1 2 10 low and zero insufficient. And based on the percentage, this is in the grey zone. 3 CO-CHAIR BRATZLER: All right. 4 Our 5 last question is overall suitability for endorsement. 6 7 Any other -- yes, Bruno. So, I'll make my --8 DR. DIGIOVINE: 9 Todd made the comment earlier about using 10 mortality ratios as quality. And I just happened 11 to come across a quote from Dr. Hofer at the 12 University of Michigan who said that publication 13 of hospital mortality rates misinforms the public 14 about hospital quality and described them as 15 seriously inaccurate. 16 So, I just thought it would be -- I 17 think that's weighing on -- certainly weighing on 18 how I vote and thought the developer at least 19 should have an opportunity to respond to that. 20 DR. DUDLEY: Sure. I think -- so, I 21 publish with Tim on that topic and I do think 22 it's hospital to do hospital mortality reporting

wrong.

2	That's why you see us; A, having
3	tested the various available risk adjustments
4	very carefully to risk adjustments allow us
5	very carefully to be sure that we the one we
6	used performs adequately, and; B, using a
7	relatively largish sample size.
8	So, when you end up with 400 patients
9	per hospital, that's a much larger sample size
10	than what you're getting with most of the
11	currently publicly reported measures. So, most
12	hospitals that have MI reports and so forth from
13	CMS don't have 400 patients in the measure.
14	So that we reduce the risk of
15	misclassification both by having better risk
16	adjustment by far than the currently used CMS
17	models and by having large enough sample sizes
18	that the probability of risk adjustment is I'm
19	sorry of misclassification is much lower than
20	would be expected.
21	CO-CHAIR BRATZLER: James.
22	DR. O'BRIEN: I think probably in a

similar vein working in a health system that has 12 hospitals that are connected by an eICU in which we're collecting APACHE IV measures, we see that in our lowest acuity hospitals despite adjustment, those have the lowest also observed to expected mortality rates.

7 Part of that is due to the fact of them being extreme outliers and the indication 8 9 bias for where they wind up being. And then the 10 performance of the risk adjusting focusing on the 11 middle part. And so, these extreme outliers of 12 hospitals even within, again, a 12-hospital 13 system, it just doesn't perform well. And so, it 14 doesn't even have face validity within our 15 system.

DR. DUDLEY: We -- again, we're publicly reporting with this measure and we didn't have an instance of the hospitals complaining to the media that we were being unfair to them or that we had misrepresented their patient population.

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I think it's possible that within a

system you get even more dramatic shifts in where the patients go because it's within system issues and that could be perhaps dealt with by transfer rules.

5 But overall despite public scrutiny, 6 we did not actually have a problem with hospitals 7 complaining about the data, the accuracy of the 8 data, the accuracy of other people's data or how 9 they were rated.

Again, I think a lot of that comes down to making sure people are carefully trained to collect the data correctly and that you're auditing them to make sure they're doing that as well.

15 CO-CHAIR BRATZLER: And you have a big16 sample size per hospital.

DR. DUDLEY: That does help.

18 CO-CHAIR BRATZLER: Yes. Any other19 conversations before we vote on suitability?

(No response.)

21 CO-CHAIR BRATZLER: All right, Janine.
22 MS. AMIRAULT: Overall suitability of

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1	0703. One being yes, and two being no.
2	(Voting.)
3	MS. AMIRAULT: Would you mind just one
4	more time? Thank you.
5	(Voting.)
6	MS. AMIRAULT: 13 yes, nine no. And
7	based on the percentage, this is also a grey
8	zone.
9	CO-CHAIR BRATZLER: All right. Thank
10	you guys very much. So, we'll move on. We're
11	about back on schedule, and go to Measure 0702,
12	Intensive Care Unit Length-of-Stay.
13	Adams, we'll let you introduce the
14	measure and then our two discussants will be Todd
15	and David.
16	DR. DUDLEY: Sure. So, first thing,
17	this measure comes from the exact same variables
18	and the exact same data collection as the prior
19	measure so that one ends up with both an outcome
20	a clinical outcome and an efficiency measure
21	from the same data collection.
22	We do not recommend that this measure

be used without the mortality measure, because we wouldn't want people to focus only on length of

wouldn't want people to focus only on length of stay without having the clinical outcome also on the dashboard because of potential unintended consequences.

6 The approach to risk adjustment is 7 similar in that the exact same variables are 8 used. The modeling is slightly different because 9 it's a continuous variable that's skewed instead 10 of a binary outcome variable.

11 Because it's the same data, it's the 12 same training and it's the same auditing that we 13 recommend. And I think that's all I have to say 14 unless there are other questions.

15 CO-CHAIR BRATZLER: All right. Todd. 16 DR. DORMAN: I'm going to start. So, 17 Intensive Care Unit Length-of-Stay is the measure 18 title. It's an outcome measure. Paper medical 19 Level of analysis is at the facility records. 20 level. 21 It is a maintenance measure that was

22 previously endorsed in 2011. It is, I guess,

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1	technically a paired or at least it's
2	recommended to be paired with the previous
3	measure that we just finished discussing.
4	Under evidence, which is where we're
5	starting, the developer tested that there is new
6	evidence since the last NQF review in 2011, but
7	only really provided explanatory information and
8	we'd like to hear a little bit more about that.
9	It should be pointed out that I guess
10	the phrase was used, "efficiency." This is
11	really connected to a contributor to cost, not
12	patient outcome at least as presented here.
13	And I think I'll stop there. I don't
14	think we saw any other than the comment from
15	the developer that there's new evidence that they
16	didn't provide a lot of information, I don't
17	think we were aware of any new evidence.
18	CO-CHAIR BRATZLER: Adams.
19	DR. DUDLEY: New evidence about I'm
20	sorry.
21	DR. DORMAN: The evidence.
22	DR. NISHIMI: New evidence for the

underlying rationale.

2	DR. DUDLEY: So, we the new
3	evidence perhaps I misunderstood the form.
4	The new evidence is just their updated validity
5	and reliability reports that we discussed with
6	the last variable the last measure, I mean.
7	CO-CHAIR BRATZLER: All right. Since
8	this is a measure that's for maintenance, does
9	the committee want to vote on evidence, or not?
10	If you do, raise your hand. Okay.
11	We'll go ahead then and discuss gap.
12	CO-CHAIR LANG: Data were collected
13	between 2010-2011. 224 hospitals contributing,
14	about 70,000 patients and more than a quarter
15	million ICU days.
16	The overall unadjusted mean length of
17	stay was 3.4 days with the standard deviation of
18	0.8 days.
19	The developer does indicate that
20	disparities exist among different population
21	groups, diagnosis, level of care and reported
22	racial disparities such that African-Americans

have an adjusted ICU length of stay that was 1 2 significantly shorter than that of Caucasians. 3 CO-CHAIR BRATZLER: Anything else, 4 Todd? 5 DR. DORMAN: I'd like to hear the developer comment a little bit on the size of the 6 gap here and the difference in interguartile 7 ranges is 2.8 to 3.9, which is quite small. 8 9 DR. DUDLEY: Again, so this gets at 10 the gaps that you see in data that's been 11 reported to hospitals for six years. 12 In the beginning, the gaps were quite 13 a bit larger, but I think overall we found that 14 the length of stay gaps were less than the 15 mortality gaps. 16 So, in the original mortality pilot 17 study that we did back in 2006 -- 2005 and '06, 18 there were threefold differences between stable 19 groups of hospitals, you know, ten hospitals --20 compared the top ten hospitals with the bottom 21 ten hospitals. There was threefold difference in 22 observed-to-expected mortality ratios. There

were not gaps that large in the length of stay. 1 2 Nonetheless from a payer perspective the gap that is present even now is very 3 4 It's a very big difference to pay for important. 5 an extra -- even an extra half day on average of ICU stay versus ward stay is very large. 6 If the developer maybe 7 DR. O'BRIEN: can just comment on that in the world of DRGs how 8 9 the payer winds up being on the hook, and then 10 also maybe considering Jeremy Kahn's work looking 11 at the effect of reducing ICU length of stay and 12 whether that actually impacts total cost. 13 DR. DUDLEY: The -- taking the second 14 one last, of course it's all part of a, you know, 15 it's ICU days are one input into a total cost of 16 care, but I think they're a very expensive input. 17 And so, to the extent that one can 18 optimize the use of that input, one is better 19 off. 20 Sometimes payment is based on a DRG. 21 That is true. In that case in the short term, 22 the savings don't accrue to the payer. But in

the long term, they recalibrate DRG rates based on cost reports.

In addition, there are many payers, for instance, many Medicaid programs that are paying still on a per diem basis where the per diem is higher if it's an ICU day than if it's not.

8 So, we have a very eclectic approach 9 to payment, but in the long term it all comes out 10 in the end. We want to optimally use our 11 resources and if there's a way to use less and 12 get the same clinical outcomes, which is why we 13 always would use this with the mortality measure, 14 then that ought to be sought.

So, we manage to reduce statewide risk-adjusted mortality substantially over the reporting period while reducing the variation of length of stay.

DR. DORMAN: Thank you. So, the question I'm going to ask really I was going to deal with under one of the other sections. But since you brought up that the gap is growing, I

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feel like I have to ask it now. 1 2 I'm trying to get at a better understanding of what's being tracked and how 3 chart reviewers are figuring out whether a 4 5 patient in the ICU is actually an ICU patient or a patient in the ICU. 6 7 And I don't think that that's something that's commonly documented in a note. 8 9 I don't know how they would abstract that. And 10 so, it would not surprise me that ICU length of 11 stay is growing, but with patients who are 12 actually floor status patients who are staying in 13 the ICU. 14 So, since you brought it up under gap 15 even though it's probably closer to validity, I'm 16 trying to understand how you know these patients 17 are actually ICU patients and not step-down 18 patients, telemetry patients or floor patients 19 who happen to be physically located in an ICU. 20 DR. DUDLEY: So, it's part of the 21 training. It's something that we strongly 22 recommend is a matter of ongoing discussion among

the hospitals participating in any system.

2 We -- actually, let me go back for a I don't think I said that the gap is 3 second. 4 increasing. In fact, the gap isn't increasing. 5 It's actually decreasing because we've been reporting it for a long time. What I meant was 6 7 that the mortality gap was greater than the 8 length of stay gap.

9 But at any rate, who meets criteria 10 for being an ICU patient is a very important 11 issue. And we discuss with the hospitals what 12 constitutes telemetry, how they've renamed their 13 units. We try not to just use walls and instead 14 talk about the intent of the care.

And the -- part of the rationale for doing it a hundred consecutive patients at the start of each quarter is to get the data capture in real-time so that you don't have to go back and figure out from the chart backwards was the patient in the ICU.

eMeasures are also bad in this respect
in that it can be difficult to tell when the

patient officially left ICU-type care. 1 2 So, this will be an ongoing issue that applies to any kind of ICU measure, but, again, 3 4 was something that the hospitals reporting this 5 were not as concerned about. Certainly didn't complain to the media about any of this or 6 7 anything. CO-CHAIR BRATZLER: Bill. 8 9 DR. GLOMB: I was going to ask whether 10 you'd consider using one of the commercially 11 available authorization and claims programs like InterQual or Milliman to help you make those 12 13 determinations. 14 Those are used by everybody from 15 payers to hospital claims departments now. 16 They're universally reproducible in their 17 results. It's not geared toward the payer base 18 or the provider base and it seems like that might 19 solve part of that problem. 20 I'm frequently having to tell folks 21 who are unhappy with their claims resolution that 22 geography, where the patient is located in a

hospital, is not what constitutes level of care. 1 2 It's level of care that constitutes level of 3 care. 4 And so, that would avoid this question 5 about whether someone truly meets the ICU level 6 of care or not. 7 DR. DUDLEY: Right. So, the issue there is that NQF measures can't have any 8 9 proprietary component to them or aren't supposed 10 to have any proprietary component to them. And CMS isn't supposed to adopt things that have a 11 12 proprietary component to them. 13 So, we have tried to mimic those 14 without using official intellectual property of 15 someone else. 16 DR. NISHIMI: I just wanted to clarify 17 for you, Adams, actually NQF has for quite a 18 while now accepted measures that have proprietary 19 components. 20 DR. DUDLEY: Okay. 21 DR. GLOMB: And CMS does endorse, I 22 think, both -- I know InterQual, but I think they

also endorse Milliman.

2 CO-CHAIR BRATZLER: All right. So, 3 I'm going --DR. DUDLEY: Well, that could be here. 4 5 CO-CHAIR BRATZLER: I'm going to bring our conversation and make sure we're focused on 6 7 gap before we go on to some of these issues that I think are around validity. 8 9 Any other issues around gap? 10 (No response.) 11 CO-CHAIR BRATZLER: Then let's go 12 ahead and vote. Janine. 13 MS. AMIRAULT: Performance gap for 14 0702. One being high; two, moderate; three, low 15 and four insufficient. 16 (Voting.) 17 MS. AMIRAULT: Two high, ten moderate, 18 ten low and zero insufficient. And based on the 19 percentage, this is grey zone. 20 CO-CHAIR BRATZLER: Reliability. 21 DR. DORMAN: So, the developer attest 22 that there's been no change in the

1	specifications. The measure is risk-adjusted.
2	The developer used data element reliability
3	testing that's been published with about 11,000
4	patients out of 35 California hospitals.
5	Inter-rater reliability was assessed
6	and was 91 and a half to 98.8 percent.
7	Reliability testing was both at the measure
8	squared and the data element, as I mentioned.
9	I'm not sure that that's let's see.
10	I think I'm going to leave it at that. And the
11	algorithm comes out to being eligible rating as
12	moderate.
13	CO-CHAIR BRATZLER: Bill, did you have
14	a comment?
15	(Off microphone comment.)
16	CO-CHAIR BRATZLER: So, I assume
17	reliability here is largely the same as the
18	measure we discussed previously, same data
19	elements.
20	Any other questions/comments about
21	reliability?
22	(No response.)

1CO-CHAIR BRATZLER: Okay, Janine.2MS. AMIRAULT: So, reliability for30702. Two, moderate; three, low or four,4insufficient.5CO-CHAIR BRATZLER: Remember you can6only vote two, three or four here.7MS. BAL: I'm sorry. Before we8continue, I just want to make an announcement9that Mitch Harris is actually conflicted with10this measure. So, he won't be voting. Thank11you.12(Voting.)13MS. AMIRAULT: One high, 14 moderate,14seven low and zero insufficient. And based on15the percentage, we can move along.16CO-CHAIR BRATZLER: So, we'll discuss17validity.18CO-CHAIR LANG: Validity. So, again,19this is not an eMeasure, but the data are20obtained from paper records.21The developer stipulates that	I	
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	19	this is not an eMeasure, but the data are
21 The developer stipulates that	20	obtained from paper records.
	21	The developer stipulates that
22 agreement was assessed between trained auditors,	22	agreement was assessed between trained auditors,

the authoritative source and hospital data 1 2 collectors for all individual risk model elements and the percent agreement was 94 percent. 3 There are a number of potential 4 5 threats to validity, including a handling of transfers, which was mentioned, and appropriate 6 case mix and risk adjustment. 7 And there are a number of individuals 8 9 who I should preface my comment by stating have 10 more content expertise than me, but -- or than I 11 do, but my understanding is that APACHE has some 12 limitations for risk adjustments as reflected on 13 Page 27 where there's -- or 28, rather, where 14 there's an r-square of 0.42. 15 The argument here that there's a 16 strong correlation coefficient r of 0.89 between 17 a simplified method and APACHE and I guess if the 18 developer could help me understand the -- whether 19 this fully addresses the lower independent r-20 square of 0.28 for the simpler model. 21 DR. DUDLEY: So, our focus is on the 22 public reporting of this. And so, if your -- and

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1	where it's the r-squared and that sorry.
2	Our focus is on the public reporting
3	and that focus then is what's the score for a
4	hospital?
5	R-squared is a measure of the
6	explanation of variation in predicted scores for
7	a patient.
8	So, if there is noise at the patient
9	level that cancels out when you get up to the
10	hospital level, it's possible to have a lower r-
11	squared at the patient level and still have good
12	correlation between two different methods of
13	assessing risk and performance.
14	And so, the r of 0.89 is between the
15	simpler model and the APACHE model and is an
16	indication of very high correlation for the
17	hospital-level score between the two models.
18	And since our focus is on what in the
19	end do we say about the hospital's performance,
20	we find that helpful.
21	CO-CHAIR BRATZLER: Other comments
22	about validity?

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1	DR. LAMPONE: I just had one comment,
2	and this was brought up earlier about the actual
3	length of stay.
4	I think we're talking about the
5	validity and reliability of the risk adjustment.
6	So, whether you have a patient that is admitted
7	to the ICU, continues to need to be at is
8	appropriate for that care setting.
9	Moving forward, how do you know to
10	your point that you have patients in the ICU that
11	weren't continued ICU stay, which seems to be the
12	driver of the of the basic question that the
13	measure is supposed to be answering.
14	And without having some structured
15	criteria, I think you get a lot of noise in the
16	measure, because there may be patients waiting
17	for a bed to open in the step-down unit, patients
18	where they're waiting on care decisions or things
19	aren't being delivered care isn't being
20	delivered efficiently that may skew this.
21	So, I wonder not only the committee's
22	ideas about that, but also the developer and
whether that is felt to be relevant enough to
 play into this measure.

3 DR. DUDLEY: So, if the patient -- so, 4 there are two types of I'm in the ICU, but in the 5 heads of the ICU doc, for instance, I'm not an 6 ICU patient. There are two types of situations 7 you just described.

8 If the patient has been -- it has been 9 agreed that the patient should be discharged and 10 go to another floor and it's just that the bed 11 isn't there, then those orders are written and 12 our data collectors would not count the patient 13 as in the ICU.

14 If some care decisions have not been 15 made or other things have occurred that are --16 potentially reflect inefficiency and it is not 17 clear that the patient is to leave, then we count 18 them and I think the perspective -- so, these 19 measures were developed and vetted by a group, a 20 multi-stakeholder board that oversees the whole 21 thing and it includes consumer and payer groups 22 as well.

And I think their perspective would be 1 2 if you haven't made the care decisions that another hospital would have, then we want to hold 3 4 you responsible for that, because we're paying 5 for the lower efficiency and getting people to talk to each other or whatever it is that it 6 takes to get to the care decision. 7 Yeah, the only thing I 8 DR. LAMPONE: 9 would add is that I think you see many times 10 those patients who have had complex issues and 11 they're in the ICU still getting some treatment, 12 but basically being monitored. And there's a 13 subjective decision made that that level of 14 monitoring could not occur in another portion of 15 the hospital in another setting. So, I think 16 that's where it gets a little grey. 17 DR. DUDLEY: Right. And I've heard 18 preference for some of the proprietary methods of 19 assessing a patient's level of care, but I think 20 there's no way in the end that there isn't some

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But I think that from a management

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subjectiveness left in these decisions.

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standpoint we have to pick a decision and -- or a
 point at which we implement the idea that the
 length of stay is ended.

And the orders are a clearer thing that someone can abstract and be confident about. And much of the other stuff that's uncertain and varies and is subjective isn't stuff that we would necessarily want to take account for and we might even want to hold the hospital responsible for that.

CO-CHAIR BRATZLER: James.

So, just a -- it may be 12 DR. O'BRIEN: 13 -- I'm not sure if it's an error related to what 14 we have as far as the data dictionary, but what's 15 included on the NQF website says that the date of 16 discharge from the ICU is that latest documented 17 data of the patient being physically in the unit, 18 not when there's an order for discharge or 19 transfer.

20 DR. DUDLEY: I will look into the data 21 dictionary, but it -- they have to physically be 22 in the unit and -- I'm trying to think of how

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that plays out differently. I'm not -- I'm not
 sure about that.

CO-CHAIR BRATZLER: Bruno.

DR. DIGIOVINE: We just finished reviewing a similar measure for pediatric ICUs where they felt it was important to have readmission data as a balancing measure when looking at length of stay.

9 Do you think that is a threat to 10 validity in your -- in looking at it as an adult 11 ICU without knowing whether there may be 12 premature discharges that are leading to 13 readmissions?

14 DR. DUDLEY: Yeah, I thought that was 15 I think there's a big difference in interesting. 16 the importance of that in the pediatric arena where mortality often is lower and -- but even 17 18 so, I wondered about that. I mean, what we care 19 about in the end is the clinical outcome, most 20 important clinical outcome, and then efficiency 21 in getting to that clinical outcome.

22

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So, I think that at least from the

perspective of participants in our group, it was 1 2 not thought that going to the effort of collecting readmission data was worth it and that 3 4 it was most important to have the clinical 5 outcome and then some efficiency measure. CO-CHAIR BRATZLER: Other comments? 6 7 (No comments.) CO-CHAIR BRATZLER: So, hearing none, 8 9 we'll go ahead and vote on validity. 10 MS. AMIRAULT: Validity for 0702. 11 One, being high; two, moderate; three, low and 12 four, insufficient. 13 (Voting.) 14 MS. BAL: Ella, can you please resend 15 your vote? 16 (Voting.) 17 MS. AMIRAULT: Zero high, 12 moderate, 18 10 low and zero insufficient. And based on the 19 percentage, it's in the grey zone. 20 CO-CHAIR BRATZLER: All right. 21 Feasibility. 22 DR. DORMAN: So, feasibility, I think

is -- gets us back into the same discussion to 1 2 some extent we've had. It's chart abstraction and the primary concern really exists around that 3 4 It was discussed -- or concerns were concept. 5 raised around the statement that chart abstractors took between 11 and 15 minutes. 6 And 7 we've just spent a lot of time talking about the complexity of figuring out whether the patient 8 9 was critically ill and required a critical care 10 service. 11 And I think the developer said earlier 12 that the people are trained to look for the 13 Seems like it would take longer than 10 intent. 14 to 15 minutes to do that. So, there was 15 significant concern about that aspect. 16 CO-CHAIR BRATZLER: Any other --17 DR. DUDLEY: I may have been unclear. 18 So, obviously looking for an intent is impossible 19 to do from a chart. I -- so, the -- I'm not 20 certain right now because I haven't gone through 21 an auditing process in a while, about the use of 22 orders versus use of the physically in the ICU,

but both of those are relatively easy to
 implement.

3 CO-CHAIR BRATZLER: Yes, Chana. 4 MS. WEST: I was trying to be quiet 5 here, but in the -- in my past life I actually was responsible for the people that were 6 7 collecting the data on this measure and the previous measure. And it did take a significant 8 9 amount of time for them to pull the data from the 10 records. And it was an electronic measure -- I'm 11 sorry -- an electronic record. So, it wasn't 12 paper where they're having to flip every single 13 page in the chart. It was electronic, which is 14 easier to navigate and it did take a significant 15 amount of time to extract.

16 CO-CHAIR BRATZLER: Other comments?17 Feasibility.

(No comments.)

19 CO-CHAIR BRATZLER: Okay. Hearing
20 none, Janine.
21 MS. AMIRAULT: Feasibility for 0702.
22 One, high; two, moderate; three, low and four,

18

insufficient. 1 2 (Voting.) Zero high, 11 moderate, 3 MS. AMIRAULT: 11 low and zero insufficient. Based on the 4 5 percentage, this is in the grey zone. CO-CHAIR BRATZLER: And use and 6 7 usability. CO-CHAIR LANG: Usability. 8 Until 9 2013, the measure was used for internal QI in 10 California. In 2013, the developer transformed -11 - began transforming the measure into an eMeasure 12 for consideration by CMS. Currently, a model 13 using data from two hospital EMRs is in progress. 14 Among the potential unintended 15 consequences from this measure, one was mentioned 16 previously, a premature discharge from ICUs. 17 Another potentially could be that hospitals may 18 seek to avoid high-risk patients who due to their 19 severity of illness may require longer ICU stays. 20 CO-CHAIR BRATZLER: Do you have 21 anything else, Todd, or anything? 22 (No response.)

1 CO-CHAIR BRATZLER: Any other 2 questions/comments about use or usability? 3 (No comments.) 4 CO-CHAIR BRATZLER: Okay, Janine. MS. AMIRAULT: Usability and use for 5 0702. One, high; two, moderate; three, low and 6 7 four, insufficient. 8 (Voting.) 9 Zero high, 10 moderate, MS. AMIRAULT: 10 12 low and zero insufficient. So, this is also a 11 grey zone. 12 CO-CHAIR BRATZLER: And then our last 13 question about overall suitability for 14 endorsement. 15 Any other comments? I think we've 16 chatted with the developer quite a bit about 17 suggestions, concerns particularly about level of 18 care versus location of care, particularly about 19 whether there needs to be a balancing measure on 20 readmission or not. So, I think we've covered 21 all those points. 22 Any other comments, and then we'll go

1	ahead and vote on overall suitability?
2	(No comments.)
3	MS. AMIRAULT: Overall suitability for
4	measure 0702. One yes, two no.
5	(Voting.)
6	MS. AMIRAULT: Six yes, and 16 no.
7	So, this fails.
8	DR. NISHIMI: So, measure 0702 is not
9	recommended for endorsement.
10	CO-CHAIR LANG: We will be proceeding
11	with Measure 0468, Hospital 30-day, all-cause,
12	risk-standardized mortality rate following
13	pneumonia hospitalization.
14	Please.
15	DR. OHTAKE: I just have a quick
16	question. Since 0702 is meant to be paired with
17	0703 that failed, I'm just curious how that's
18	handled from a procedural, like
19	DR. DUDLEY: No, 070 the mortality
20	measure is fine on its own. The length of stay
21	measure is the one we would not recommend being
22	used by itself.

1	CO-CHAIR LANG: So, we will readdress
2	the mortality measure on our phone call since
3	it's in the grey zone.
4	So, we're proceeding with Measure
5	0468. Are there developer representatives on the
6	phone who wish to comment or describe?
7	Wow. All day we've had people on the
8	phone and you're here. Thank you for being here.
9	Wow. You're right here.
10	Please, would you like to describe or
11	discuss the measure for two to three minutes to
12	introduce it to us?
13	DR. BERNHEIM: I'm going to let Karen
14	do that. This is Susannah Bernheim. I'm the
15	project director.
16	DR. DORSEY: I'm Karen Dorsey and so
17	I'll start by saying that this measure we are
18	sending back with some changes since the last
19	endorsement.
20	Specifically, we've expanded this
21	measure's cohort to include patients with sepsis
22	who have a diagnosis of pneumonia that's present
•	

on admission and to include patients with
 aspiration pneumonia. Those two sets of patients
 were not included last time we came before the
 committee.

5 This measure is an outcomes measure measuring 30-day mortality. It has been in the 6 IQR program for several years. We present new 7 information about measure reliability, new 8 9 testing for the risk adjustment model because 10 we've expanded the cohort. So, there's quite a 11 bit of new testing in this endorsement 12 maintenance application.

13 The -- I think that we're sort of 14 prepared with questions that came up from the 15 working group to talk a little bit about 16 rationale for expansion of the measure cohort. 17 And so, we're eager to get into that discussion 18 with you all.

19 CO-CHAIR LANG: Great. Thank you very 20 much. I want to mention that we have two 21 individuals on our committee who are conflicted 22 and will not be participating. That's Mitch

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Harris and Dale Bratzler.

2 And the measure will be reviewed for us by Chana and Rich. Take it away. 3 Benson, 4 please speak closer to the mic. 5 DR. MURRAY: Not the work, but that should be a winning strategy. Okay. So, this is 6 7 hospital 30-day, all-cause, risk-standardized mortality rate following pneumonia 8 9 hospitalization. 10 The steward is CMS. And so, mortality 11 is defined as death for any cause within 30 days 12 after the date of admission for the index 13 admission discharged from the hospital with a 14 principal discharge diagnosis of pneumonia. 15 And as was said, some of the 16 subcategories here we can get to in more detail 17 probably during validity. And CMS annually 18 reports this measure for patients who are 65 and 19 older although this, as I understand it, this can 20 be used to present data for over 18 or older than 21 65. 22 The level of analysis is the hospital

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or acute care setting. And the data source for the measure is administrative claims.

There is quite a bit of information that has been reviewed for previous documentation of the evidence and I don't think a huge amount has been added since. Although, there have been a couple of papers that are more recent that have been cited and they are said to support some of the changes in the numerator.

10 So, basically the rationale for this 11 is that the healthcare -- this healthcare outcome 12 developer states hospitals are able to influence 13 mortality rates through a broad range of clinical 14 activities, including preventing complications, 15 provision evidence-based care, discharge 16 planning, management of care, transitions, 17 medication reconciliation and patient education. 18 So, this is eligible for a pass 19 So, I guess we're asked at this point rating. 20 whether you want to actually review the incremental evidence. 21

22

I think the question is, is how

important is the incremental evidence to the 1 2 decision to change the numerator? I know it helps justify it, but the 3 4 change in the numerator was actually driven by, I 5 think, expert input. And so, there was some 6 DR. DORSEY: 7 evidence that we allude to in the materials of changes in coding practices or increased use of 8 9 sepsis coding for patients who also have 10 pneumonia when they present to the hospital. And that was -- well, I describe that 11 12 as sort of the starting point, what brought our 13 interest to looking into this in the fee-for-14 service population specifically related to this 15 measure. 16 So, then we conducted a great deal of 17 analysis to look at whether or not this expansion 18 was good and whether the validity of the measure 19 would be enhanced. And so, it was that kind of 20 coupling of the evidence and our own 21 investigation. 22 CO-CHAIR LANG: So, unless --

1 DR. LAMPONE: I just had a 2 clarification on that. When you included sepsis you said "not severe." Did that include hard 3 4 clinical evidence, or was that based upon 5 presentation evidence of hypotension, tachycardia, etcetera, etcetera? 6 Do they have to have a bacterial or 7 culture positive data? 8 9 DR. DORSEY: So, this is all claims-10 based. So, when we refer to severe sepsis, we're 11 referring to having received a principal 12 discharge diagnosis of severe sepsis according to 13 the current kind of coding guidelines. 14 DR. MURRAY: So, you don't know what's 15 behind that in any individual case, right? 16 DR. DORSEY: Only what the coding 17 quidelines instruct. 18 DR. MURRAY: And since we're talking 19 about sepsis, I understand there's been a recent 20 change sepsis-3 to the definition. 21 Is that something that we should be 22 discussing at some point? Are there any threats

1 to validity or now or --2 DR. DORSEY: At some point I think for certain that I think is not two weeks old yet --3 4 DR. MURRAY: Right. DR. DORSEY: -- that change to 5 So, it wouldn't change our sort of 6 quidance. conclusions about the appropriateness of this 7 cohort expansion right now, but it's certainly 8 9 something that we would have to revisit and come 10 back to the committee as hospitals begin to 11 uptake the new guidelines and if that requires 12 changes to what we're proposing today. 13 DR. YEALY: Maybe that's something I 14 could comment on. I just wrote an editorial on 15 this. 16 I'm not certain how broad the uptake 17 will be on the new sepsis-3 definitions. And essentially all that happened in them was getting 18 19 rid of the term "severe sepsis." 20 DR. MURRAY: Right. 21 DR. YEALY: You're either septic or 22 septic shock. And I think there will be some

coding changes, but I don't think fundamentally 1 2 it will change it. May I ask one question? How do you 3 4 restratify here? It says that they're risk 5 adjusted. We risk adjust for a 6 DR. DORSEY: 7 series of patient co-morbidities -- I'm sorry. 8 DR. YEALY: Okay. So, how exactly do 9 you do it? 10 DR. DORSEY: Well, we select variables 11 using the hierarchical condition categories which 12 group similar ICD-9 codes according to their, 13 sort of, likeness and condition. 14 So, we use the -- for this version of 15 the measure, the ICD-9 compatible map, which is 16 Version 12. And that's what makes up the 17 candidate risk variables. 18 And then we select which of those 19 variables are sort of the best predictors in our 20 models. We use a hierarchical model that 21 22 adjusts for clustering of similar patients in

individual facilities. 1 2 DR. YEALY: So, I guess my concern is two things would -- all right. 3 4 MR. SPEAKER: Get back to threats to 5 validity, I guess. CO-CHAIR LANG: Focusing on evidence. 6 7 So, unless there is sentiment among the group that we should vote, we'll pass and move to 8 9 performance gap. 10 MS. WEST: So, the developer ran four 11 years of data in order to calculate and see if 12 there were any discernible differences in 13 performance. And when they ran the data, it 14 seemed that there were some discernible gaps. 15 It seemed that African-Americans were 16 disproportionate in terms of -- in terms of 17 performance and -- but I think one of the things 18 that we talked about and we only discussed this 19 very briefly, this entire measure at the end of 20 the workgroup call due to timing constraints, but 21 the question was whether or not the measure was 22 actually having any impact, because the mortality 1

rates were actually increasing.

2	It went from with the initial or,
3	I'm sorry with the last evaluation in 2012 it
4	went from 11.7. And then with the most recent
5	data run it went to 16.4 percent. So, that was
6	one of the discussion points.
7	CO-CHAIR LANG: Please go ahead.
8	DR. DORSEY: So, the increase that
9	you're speaking of is directly and wholly related
10	to the expansion of the cohort.
11	So, the patients who have a principal
12	discharge diagnosis of sepsis or aspiration
13	pneumonia carry a higher mortality risk.
14	And so, when we brought them into the
15	cohort, it increased the average mortality rate
16	for the entire cohort, but we also present the
17	trend in mortality rates over three years.
18	And with the expanded cohort, you do
19	see a decrease in the mortality rates in the
20	national sample over the three-year period.
21	So, it decreased, but it the whole
22	thing increased because we included sicker

patients in the cohort. 1 2 CO-CHAIR LANG: Additional discussion or questions for the developers? Yes, Bruno. 3 4 DR. DIGIOVINE: Yeah, so I'm trying to 5 understand the disparity issue. And this will come up for the next one as well. 6 7 So, I'm reading this as every group you point out has the same median rate of 8 9 mortality. So, that would strike me as a lack of 10 disparity. 11 And so, on what data are we using to 12 say there's a gap in performance? I don't know 13 what we would say would be the appropriate 14 mortality for patients admitted with pneumonia 15 for over 30 days. 16 DR. BERNHEIM: So, this has been 17 something that's actually always confused me 18 about this NQF form as well. So, I'll just admit 19 that. 20 So, there's two things about 21 performance gap. One is just as this measure is 22 used, do we think there's evidence that there's

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still room to improve, that it's useful to report 1 this because we think there's evidence that 2 hospitals can improve and we're seeing that in 3 4 two ways. 5 One, there's still a substantial distribution among all hospitals in mortality 6 That is a hint that there's some room to 7 rates. improve. And we're seeing some decreases over 8 9 the last three years and we think there's 10 probably still room to move. 11 The disparities piece is kind of stuck 12 in that same section of the application, but 13 you're right in this case. We're not seeing huge 14 disparities among hospitals based on their mix of 15 patients. 16 There's still a performance gap 17 nationally on this measure, but we don't see a 18 huge disparities gap. 19 Does that help? 20 DR. DIGIOVINE: So, just that last --21 you said there's a performance gap on this 22 measure nationally based on what?

1 DR. BERNHEIM: So, based on the two 2 things I noted before that what -- how I interpret the question of performance gap is, do 3 we think that there's evidence that there is room 4 5 for our nation's hospitals to do better? And so, the fact that they have been 6 7 improving in recent years and that there's a wide distribution across all hospitals suggests that 8 9 there is a gap in performance nationally, but 10 it's sort of distinct from the disparities 11 question even though those are lumped in the 12 form, which I think often confuses committees 13 and, quite honestly, developers. 14 DR. NISHIMI: Just as a point of 15 clarification why they're together. We have seen 16 measures for which if you were just to look at 17 the performance overall, one might conclude that 18 there's no longer a gap and no room for 19 improvement. But when you drill down and look at 20 disparities by race and ethnicity, there's a 21 clear breakdown. 22 So, in other words, there is room for

1	improvement. That's actually why it's very
2	important to look at those together.
3	DR. DORSEY: Thank you.
4	DR. YEALY: So, I'm again, it's
5	hard to know about a gap or disparities based on
6	care if we can't be certain that the illness
7	burden at presentation is the same, not illness
8	burden that eventually develops. That's a whole
9	separate that's actually what you're trying to
10	measure is the care quality.
11	So, absent using a pneumonia-specific
12	tool, which is virtually impossible to do from an
13	administrative dataset, how do we know that these
14	all that different collections of patient have
15	the same illness burden to start off with? I
16	don't that's why I was asking other questions
17	about how do you risk adjust.
18	What I'm hearing I don't think would
19	fully embrace all these and disparities could
20	just be different groups of people with different
21	initial illness burdens.
22	DR. BERNHEIM: All right. So, I think

you're asking -- and I'll just build off of what 1 2 Karen said, you know, how do we handle the fact that either individual patients, subgroups of 3 4 patients or hospitals are going to have different 5 case mix of patients when they come in. And so, you know, we have a model that 6 takes for each patient that links back to the 7 prior 12 months and collects all diagnoses from 8 9 their both inpatient and outpatient settings. 10 We have a fair amount of information about patients, it's claims-based information, 11 12 but we have a fairly good sense for patients 13 about how sick they are and that is -- that risk 14 of adjustment is built in. 15 And in the original measure, we were 16 able to then validate it against the model using 17 clinical data for severity and show that the 18 hospital profiling was the same if you use the 19 claims data for the risk adjustment or the 20 clinical data. 21 Does that answer your question? I'm 22 not sure that I understood the question. So, I

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just want to make sure I answered it. 1 2 DR. YEALY: It still doesn't sound pneumonia-specific to me. 3 I mean, so some of the 4 things you'd never be able to know. 5 For example, the respiratory rate is a big driver of initial illness burden. 6 You'd 7 never pick that up in a million years. Minor alteration in sensorium you 8 9 would never -- is the single biggest driver. 10 Beyond that, you'd never pick that up. 11 DR. BERNHEIM: Right. So, very 12 important point. So, what we don't have is 13 exactly what you said, is we do not in this 14 measure have, you know, minute clinical data on -15 - we don't have respiratory rate, we don't have 16 oxygen saturation. And that's why the original 17 chart validation was so critical. 18 So, in that case, what we did was we 19 took the exact same set of patients from the same 20 hospitals and we ran a model that used the claims 21 data for risk adjustment, and we ran a model that 22 did have that clinical data, and we asked the

question whether or not it profiled hospitals similarly.

So, even if it doesn't get each exact 3 4 patient identical when you're at the aggregated 5 level of trying to understand the risk burden of the patients even though it's a little bit 6 7 counterintuitive, we've done this with many of our measures, we find that at the aggregate level 8 9 of the hospital the claims data does equate the 10 job at the risk adjustment. And so, we get very, 11 very similar outputs in the model as if we had 12 clinical data. 13 Not that we aren't eager to move 14 towards clinical data, but that's what we can do 15 with these measures. 16 DR. LAMPONE: I'm sorry, can I just --17 I was just going to ask and I saw it in some of 18 the data provided in one document I couldn't 19 open, what are your age bands for risk 20 adjustment? 21 And the reason why I ask, I think, you 22 know, and this is a CMS measure, as you get

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higher in age with co-morbidities, chronic renal failure, even Stage 2 or 3 is not the same as chronic renal failure, you know, in a younger patient, because that's often coupled with other co-morbidities such as congestive heart failure, diabetes and other things that have been longstanding.

So, how does your model adjust for 8 9 Because my experience with that age band that? 10 of over 65, they tend to bounce back to the 11 hospital much more frequently mainly in many 12 instances not because of the initial diagnosis, 13 but because the initial diagnosis exacerbated an 14 existing co-morbidity that wasn't really evident 15 at the time of discharge.

DR. DORSEY: Yeah, we do include ageas a continuous variable in our risk model.

18DR. LAMPONE: And so, what is that?19What are those age bands? That's what I was20interested in.

21 DR. DORSEY: I don't -- I don't think
22 I understand your question, what are the age

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bands? 1 2 DR. LAMPONE: What were the age 3 cutoffs? What are the different individual age -4 5 DR. DORSEY: So, we use it as a continuous variable for --6 7 DR. LAMPONE: Okay. DR. DORSEY: -- all fee-for-service 8 9 patients over 65. 10 DR. LAMPONE: Okay. 11 DR. DORSEY: That's who's in the 12 measure. 13 DR. LAMPONE: Does your risk model 14 take into account age into those -- into the risk 15 model? 16 DR. DORSEY: Yes. 17 DR. LAMPONE: Okay. 18 DR. DIGIOVINE: So, just because I 19 just want to make sure I understand this, your 20 data is again showing us no difference in 21 mortality rates over the period of time that 22 you're reporting. I thought I heard you say

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that's because the definition changed.

2 I thought the definition change was from here forward -- if the definition changed in 3 4 the past, when did it change? And can you show -5 - do you have data using the same definition over a period of time that is in our packet somewhere? 6 7 DR. DORSEY: So, the way that we report the measures is that we use claims from 8 9 previous years. Right? So, we use claims for 10 three years previous to whatever year it's 11 reported in. 12 So, when we did the retesting of this 13 measure, we're actually using data from 2012 14 through 2015. So, that's why we're talking about 15 what's happened over the past few years. 16 So, we can change the definition of 17 the cohort, look at those years in the past, and 18 we can see the trends in the mortality rate in 19 2012, 2013, 2014. 20 And so, that's what we mean by a 21 decline over those past years even in the -- with 22 the expanded cohort definition.

1 Does that answer your question? So, 2 overall the mortality went up over that same period of time from 2012 to 2015, because we 3 4 expanded the cohort and brought sicker patients 5 or patients with a higher risk of mortality into the cohort over the -- compared to our old 6 7 definition that did not include sepsis or aspiration pneumonia. 8 9 DR. DIGIOVINE: But it is true that 10 between 2011 and 2015 there's been no improvement 11 in --12 DR. DORSEY: No, there has been, or 13 improvement in the outcome --14 DR. DIGIOVINE: But the data you have 15 in front of us have a mean of 17, 17, 16 and 16. 16 DR. DORSEY: So, that's the -- that's 17 actually the between group of comparison. When 18 you look at the table right above that in the 19 summary document here, you can see the rates over 20 each year of measurement. 21 DR. DIGIOVINE: Right. And they go 22 16.8, 16.7, 15.5, 16.4.

1	DR. DORSEY: Right.
2	DR. DIGIOVINE: You're interpreting
3	that as an improvement?
4	DR. DORSEY: Yes.
5	DR. DIGIOVINE: Okay.
6	DR. BERNHEIM: The 16.8, 16.7, 15.5,
7	the 16.4 is mislabeled. That's the three-year
8	combined.
9	DR. DIGIOVINE: I see.
10	DR. BERNHEIM: So, just look at those
11	first three columns. That's the trend, that's
12	those first three columns.
13	DR. DIGIOVINE: I see.
14	DR. BERNHEIM: The fourth column is
15	the three-year
16	DR. DIGIOVINE: Okay. Thank you.
17	DR. BERNHEIM: combined.
18	CO-CHAIR LANG: Is there additional
19	oh, go ahead. I'm sorry.
20	DR. GLOMB: Just for clarification,
21	that's a statistically significant improvement?
22	DR. DORSEY: We actually don't test

1	the statistical significance of it.
2	DR. GLOMB: Okay.
3	CO-CHAIR LANG: Are there additional
4	comments or questions for the developers
5	pertaining to performance gap?
6	(No response.)
7	CO-CHAIR LANG: As I see no further
8	comments/questions indicated, we'll proceed to
9	vote on performance gap.
10	Janine.
11	MS. AMIRAULT: Performance gap for
12	0468. One, being high; two, moderate; three, low
13	and four, insufficient.
14	(Voting.)
15	MS. AMIRAULT: One high, 11 moderate,
16	eight low and one insufficient. Based on the
17	percentage, it's grey zone.
18	CO-CHAIR LANG: Reliability.
19	DR. MURRAY: Do you want to continue,
20	or do you want me to go? I can go. So,
21	reliability has been tested. And the testing
22	shows that the measure data elements are

repeatable producing the same results a high 1 2 proportion of the time when assessed in the same population and same time period. 3 4 The developer has conducted 5 reliability testing at the measure score level. And as mentioned, there have been updates to 6 7 testing. And the data being used include a more 8 recent cohort from 2011 to 2014 Medicare fee-for-9 10 service in 4600 hospitals or so. 11 They used a split sample methodology 12 and reported the statistic of the intraclass 13 correlation coefficient which had a numerical 14 value of 0.79 which we're told is a strong 15 number, but perhaps you can speak to that. And 16 given the algorithm, it is potentially eligible 17 for a high rating. 18 So, could we ask the developers to say 19 a little bit more about the statistical method 20 and reliability testing? 21 DR. DORSEY: Sure. We actually have 22 one of our analysts on the phone and maybe she

can weigh in if the operator could open up her 1 2 line, but I'll say that we take the full three-3 year measurement period and we randomly split it into two equal -- two equal parts, two equal 4 5 samples, and then we look at the characterization of hospitals in each sample and compare them. 6 And we calculate the intraclass 7 correlation coefficient in the hospital 8 9 performance. 10 DR. MURRAY: And this is on the raw 11 data, or is this on the risk --12 DR. DORSEY: No, this is adjusted. 13 DR. MURRAY: This is adjusted. Okay. 14 Thank you. 15 Any other questions on this? 16 DR. NISHIMI: Operator, can you open 17 Jackie's line? 18 THE OPERATOR: I did not see that 19 Jackie is on the line. 20 CO-CHAIR LANG: Okay. 21 DR. NISHIMI: Only if the committee 22 has more questions about it.

So, the question is, do 1 DR. MURRAY: 2 the results demonstrate sufficient reliability so the differences in performance can be identified? 3 CO-CHAIR LANG: Are there additional 4 5 comments/questions for our developers? 6 (No response.) CO-CHAIR LANG: Going once. 7 Going We will proceed to you, Janine. 8 twice. 9 MS. AMIRAULT: Reliability for 0468. 10 One, being high; two, moderate; three, low and 11 four insufficient. 12 (Voting.) 13 MS. AMIRAULT: Five high, 13 moderate, three low and zero insufficient. Based on the 14 15 percentage, we'll move along. 16 CO-CHAIR LANG: Proceeding to 17 validity. 18 DR. MURRAY: Do you want to take that 19 Go ahead. one? No? 20 MS. WEST: Okay. I'll take this, but 21 I will say that I'm not a methodologist or a 22 statistician. So --
1 MR. SPEAKER: That's okay. That makes 2 two of us. MS. WEST: -- I'll definitely need 3 4 some other people to jump in here. So, with the 5 specifications as I noted earlier, several changes were made. 6 7 They expanded the definition in terms of the cohort, added "aspiration pneumonia," as 8 9 well as "severe sepsis." 10 They document inside of -- inside of the measure information form where the literature 11 12 supports the increase in -- or the broadening of 13 the definition in adding severe sepsis in there. And I know that we discussed on the 14 15 workgroup that there was some earlier reasons for 16 why they added aspiration pneumonia in there as 17 well. 18 In terms of the actual testing, the --19 they conducted additional testing of the risk 20 adjustment model and the broadened definition --21 I'm sorry -- they -- excuse me -- they conducted 22 additional tests of the risk adjustment model,

but did not conduct additional testing on the
 respecified measure itself.

In terms of threats to validity, they examined frequencies and proportions of the total cohort use for each exclusion criterion and provided percentiles for each of those used there.

8 I'm not sure if anybody else wants to 9 jump in and be able to explain some of the 10 numbers that we're actually seeing in there, but 11 that was on page 7 of the actual document if we 12 wanted to post it for everyone to take a look at 13 it.

14 So, I guess a couple DR. MURRAY: 15 questions for the developers. The validity 16 testing results, are these -- they're not a 17 testing of the validity, they're a testing of the 18 risk stratification scheme, is that -- are they a 19 testing of just the risk stratification, really? 20 DR. DORSEY: So, we describe what we 21 do for measure validity. We describe the risk 22 model validation that was done as part of

original measure development and that we've
 replicated from many of our claims-based measures
 around other conditions.

And we talk about sort of our vigorous adherence to the methodology around the development of the measure itself. So, yeah, it's mostly focused around the validity of the risk model.

9 DR. MURRAY: So, I guess the question 10 stands as to whether the validity construct is 11 different now because the numerator has changed 12 so much and you've seen such a change actually in 13 the actual numerical value that comes from that 14 computation.

DR. BERNHEIM: And so, I think the key thing there is that we felt like the expansion of the cohort was largely a response to a threat to validity.

So, the literature was indicating that
as hospitals were increasingly coding pneumonia
patients as septic and they were doing this at
very different rates at different hospitals, we

were losing many pneumonia patients in the 1 2 measure and we were losing different proportions of them across hospitals. 3 4 And so, there was a threat to the 5 validity of the measure without these patients. And so --6 DR. MURRAY: 7 Right. DR. BERNHEIM: -- the other thing we 8 9 think is that it makes the measure a lot more 10 valid to bring these sepsis patients in who based 11 on the coding guidance before two weeks ago, 12 really anyone who was sick enough to be 13 hospitalized with pneumonia would meet criteria 14 for sepsis. 15 So, it was sort of just a choice for 16 hospitals whether to call these exact same 17 patients sepsis or not. So, we really needed to 18 bring them into the measure to keep the measure 19 valid. 20 The one other test we did, which isn't 21 sort of typical measure of validity, but I think 22 helped us feel very sure we were moving in the

right direction, is that we did an examination of 1 2 the relationship between a hospital's proportion of pneumonia patients that were coded as sepsis 3 4 and how they did on this measure. And what we saw in the old measure was 5 that hospitals that had a very high proportion of 6 their seeming pneumonia patients coming in with a 7 diagnosis of sepsis and therefore excluded from 8 9 our prior measure, tended to have pretty low 10 mortality rates because we were losing their 11 sickest patients. 12 And there was a relationship between 13 your tendency to code and how you performed on 14 the measure, which isn't clinically sensible. 15 And when we changed our approach, we no longer 16 saw this relationship. 17 Now, there's not a strong relationship 18 between what proportion of your patients are 19 septic or not and your performance. 20 Now, there's still a lot of variety in 21 the proportion, but we think we're getting a more 22 coherent and consistent population across

hospitals.

2	So, that's not a classic validity
3	test, but for us it was a sign of validity of the
4	change we had made to the measure.
5	DR. MURRAY: Thank you.
6	CO-CHAIR LANG: Bruno, go ahead.
7	DR. DIGIOVINE: Yeah, certainly a key
8	part of this measure is having pneumonia
9	identified as present on admission. I don't know
10	I know very little about coding, but how
11	reliable or how valid is coding to actually
12	identify those things that are present on
13	admission, and those things that truly do develop
14	later in the hospitalization?
15	DR. DORSEY: We have done some
16	analysis of present-on-admission coding and said
17	that there's, you know, been a good uptake since
18	it was mandated to be used for hospital-inquired
19	conditions. And those hospitals used these and
20	they applied them according to the guidelines and
21	they are applied correctly.
22	DR. LAMPONE: I just have one closing

On the risk adjustment, I saw in the 1 comment. 2 documentation where you do have a number of diagnoses that are used in the age range over 65, 3 4 which I think is good. The question I have about this as it 5 relates to validity is when you have patients 6 7 that score high risk that come in with pneumonia and they die, is there any adjustment in the 8 9 reporting where you would have patients that 10 would have a high expectation of nonsurvival of 11 that event within 30 days? Because I think you're going to have 12 13 hospitals depending upon their geographic area, 14 they may have -- or just the demographic area of 15 that hospital where they may have higher numbers 16 of these folks coming in. 17 DR. DORSEY: So, the purpose of the 18 risk adjustment that we apply in the measure is 19 to account for differences in-house, patients are 20 at some hospitals versus others. Their burden of 21 disease when they walk in the door. When they 22 first get/seek treatment at the hospital. So,

that's the purpose of the risk model. 1 2 And what the measure does is it 3 basically takes into account how sick the 4 patients are at each individual hospital and it 5 assesses what we would predict the mortality rate would be given how sick the patients at that 6 7 hospital are. And then it compares it to a calculated national average of how -- an average 8 9 hospital would do with that patient -- with that 10 hospital's case mix. 11 DR. LAMPONE: So, you can predict the 12 mortality --13 DR. DORSEY: Right. We predict it 14 based on -- and then compare it to the nation. 15 MS. BAL: Anyone listening on the 16 phone, please mute your computer. We're getting 17 a little bit of feedback of an echo. Thank you. 18 CO-CHAIR LANG: Additional 19 comments/questions concerning validity. 20 Bruno. 21 DR. DIGIOVINE: One more. 22 CO-CHAIR LANG: Go for it.

DR. DIGIOVINE: Mortality. So, in the 1 2 Medicare data patient population that I think is easier for you to gather, how confident are you 3 4 that you have a valid way of assessing mortality 5 in patients under the age of 65? So, to address that I'll 6 DR. DORSEY: 7 basically explain how we developed our all-payer model for the measure. And we actually did 8 9 retest it in the expanded cohort, but we use 10 state data from California which is one of the 11 states that has an all-payer database that 12 combines mortality information with inpatient 13 claims information. 14 So -- and outpatient claim -- just 15 inpatient claims information. So, we're able to 16 look at -- we're able to look in that setting in 17 California state, 18 and over, we're able to look 18 at -- build an all-payer measure and test it. 19 Not all 50 states obviously collect 20 mortality data or link it with claims in a way 21 that we would be able to use it and we have not 22 explored the implementation of something that

could work across 50 states. And recognize the 1 2 concerns about the current environment with 3 respect to HIPAA and moving away from unique patient identifiers and restricting the kinds of 4 5 entities that can collect identifiers and linkable data. 6 7 So, it's a, you know, it's a valid concern about implementation, but currently the 8 9 measure is only reported in Medicare fee-for-10 service over 65 for exactly that reason. CO-CHAIR LANG: Additional discussion? 11 12 If not, Janine. 13 MS. AMIRAULT: Validity for 0468. 14 One, high; two, moderate; three, low and four, 15 insufficient. 16 (Voting.) 17 MS. BAL: Ella, please send in your 18 vote. 19 (Voting.) 20 MS. AMIRAULT: Two high, 14 moderate, four low and one insufficient. Based on the 21 22 percentage, we can move along.

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1	CO-CHAIR LANG: Feasibility.
2	DR. MURRAY: So, all data elements are
3	in fine fields in electronic claims and generated
4	or collected by and used by healthcare personnel
5	during the provision of care.
6	The data are coded by someone other
7	than the person obtaining the original
8	information. So, the feasibility should be
9	pretty good.
10	Any questions or discussion on that?
11	MS. WEST: I think that the only thing
12	that we had discussion about, and it's similar to
13	what when I just mentioned the concern about
14	capturing death
15	DR. MURRAY: Right.
16	CO-CHAIR LANG: Any further
17	discussion? Do you want to say something?
18	DR. BERNHEIM: Just to respond to
19	that, I think, you know, the issue would be if an
20	entity wanted to use this measure in a broader
21	population. In its current use, again, it's used
22	just for the over 65 in Medicare. So, the death

capture is not an issue.

We purposely specified it to have
potentially use in other settings. So, any given
state that does have the ability or a health plan
that's got the right linked data obviously could
use it in a broader population we've shown that
the model works, but it shouldn't be used if
there's not a reliable source of death
information. And so, I think that's just a
limitation to the use of the all-payer measure.
CO-CHAIR LANG: Janine.
MS. AMIRAULT: Feasibility for 0468.
One, high; two, moderate; three, low or four,
insufficient.
(Voting.)
DR. NISHIMI: Crystal, can you submit
your vote?
(Voting.)
MS. AMIRAULT: Eight high, 13
moderate, zero low and zero insufficient. Based
on the percentage, we will move on.
CO-CHAIR LANG: Usability and use.

1	MS. WEST: Okay. As was already
2	mentioned, it's being used, the measure right
3	now, in the IQR program, the CMS IQR program, as
4	well as value-based purchasing.
5	CO-CHAIR LANG: Discussion.
6	(No response.)
7	CO-CHAIR LANG: All right. Seeing no
8	hands, we'll proceed to you, Janine.
9	MS. AMIRAULT: Usability and use for
10	0468. One, high; two, moderate; three, low and
11	four, insufficient.
12	(Voting.)
13	MS. AMIRAULT: Nine high, nine
14	moderate, three low and zero insufficient. Based
15	on the percentage, we will move on.
16	CO-CHAIR LANG: Now, we will consider
17	the overall suitability of the measure.
18	Discussion, additional questions for the
19	developers who are both here and I think they're
20	on the phone doesn't matter. They're here.
21	Any additional questions or comments?
22	(No response.)

Seeing none, we will 1 CO-CHAIR LANG: 2 proceed to vote on the overall suitability for 3 endorsement of the measure. 4 MS. AMIRAULT: Overall suitability for 5 0468. One, yes; two, no. (Voting.) 6 7 MS. BAL: Ella, please send in your vote -- oh, never mind. We received it. 8 9 (Voting.) 10 MS. AMIRAULT: 17 yes, four no. So, 11 based on the percentage, this will be 12 recommended. 13 DR. MURRAY: David, where's the 14 related pneumonia mortality rate that comes up? 15 When do you want to talk about that? Should we 16 talk about it now? 17 DR. NISHIMI: No, we're going to 18 discuss --19 Do that later? DR. MURRAY: 20 DR. NISHIMI: -- the last measure. 21 I'd like everyone to move crisply, and then we'll 22 be able to finish on time and we can have related

offline --

2	CO-CHAIR LANG: So, we're moving
3	forward to coup de grace for our two-day
4	experience, which is 1893, hospital 30-day, all-
5	cause, risk-standardized mortality rate following
6	chronic obstructive pulmonary disease
7	hospitalization.
8	MS. GORHAM: Before we move on, can I
9	ask how many of you have to leave before 2:30?
10	(Off microphone comment.)
11	MS. GORHAM: Okay. So, we'll still
12	have quorum. So, we can do this last one. Thank
13	you, gentlemen.
14	CO-CHAIR LANG: Thank you. You will
15	be conspicuous in your absence. Thank you.
16	Would the developers wish to make some
17	brief comments regarding the measure?
18	DR. DORSEY: I'll be very brief. This
19	measure assesses mortality within 30 days of
20	admission to the hospital for chronic obstructive
21	pulmonary disease for Medicare fee-for-service
22	for those 65 and older.

1	It has not changed since it was
2	previously endorsed. Although, we do present
3	some updated data.
4	CO-CHAIR LANG: Bruno, evidence.
5	DR. DIGIOVINE: We didn't think there
6	was any need to vote on the evidence.
7	CO-CHAIR LANG: Any further
8	discussion, comments? If not, we will pass and
9	then proceed to performance gap.
10	Bruno.
11	DR. DIGIOVINE: Yes. So, I think
12	performance gap is going to be the same. So,
13	I'll just highlight what I'm seeing.
14	So, at this time I don' think this
15	data is summarized. So, if it does look like
16	it's going 7.7, 8.1, 7.4, 7.8 over four
17	consecutive years and there doesn't seem to be a
18	difference across the different performance
19	groups, so I think there is still a concern that
20	we had about showing that there's a gap in care.
21	DR. DORSEY: That last column is a
22	three-year average. Sorry.

MS. BAL: Yeah, sorry about that. 1 2 That was a typo on staff's part. DR. DIGIOVINE: But the -- okay. 3 So, 4 again, I guess 7.6 -- 7.7 to 6.7 you're 5 interpreting as an improvement in care. DR. DORSEY: It's small. 6 7 (Laughter.) DR. DORSEY: But I'll also just, you 8 9 know, direct your attention to the range that we 10 still see, you know. It's a little narrow, even narrower than the last measure we talked about, 11 but there still is a range of performance. 12 13 DR. BERNHEIM: Mark, our clinical 14 expert, is on the phone. Mark, do you want to 15 add any points to that sort of evidence of a 16 performance gap for mortality for patients with 17 COPD? 18 DR. METERSKY: Yeah. There have been 19 studies, although some of them are a little 20 dated, showing that some of the established 21 processes of care, that there are gaps in the 22 performance of those.

We certainly see problems with 1 2 transitions of care. Now, I'm speaking anecdotally, but we see that all the time and a 3 4 lot of these patients will die after their 5 discharge, but granted it has been tough to show improvement. 6 Probably many of you are aware of the 7 study seeking to improve post-discharge outcomes 8 9 looking at intensive contact with patients and it 10 actually increased mortality. So, it is a 11 difficult problem, but clinicians who work with 12 COPD do see gaps and certainly the evidence in 13 some process gaps is clear. 14 CO-CHAIR LANG: Is there additional 15 discussion? 16 (No response.) 17 CO-CHAIR LANG: Janine. 18 MS. AMIRAULT: Performance gap for 19 1893. One being high; two, moderate; three, low 20 or four, insufficient. 21 (Voting.) 22 MS. AMIRAULT: Two high, 14 moderate,

four low and zero insufficient. And based on the 1 2 percentage, we can move along. CO-CHAIR LANG: Validity --3 reliability, yes. 4 5 DR. DIGIOVINE: That's okay. So, in terms of reliability the test was sort of an 6 interclass correlation coefficient with the main 7 8 testing we saw. 9 The split sample analysis was 0.51 10 which is lower than the sort of minimal 11 acceptable 0.7. There was a high, however, that 12 I didn't understand. So, I guess the developer 13 can help with the "however" piece of that, but 14 that was, I think, our concern in terms of 15 reliability. The "however" is mostly 16 DR. BERNHEIM: 17 that we use a very conservative approach. So, in 18 our measures that have lower volumes, we tend to 19 see slightly lower numbers, you know. 20 We're not allowing for any overlap 21 between the patients that are tested in the test 22 and retest. So, we're sort of doing the most

conservative testing.

2 And in both COPD and AMI where we have lower volumes, we don't get quite to the same 3 level as we do in the higher volume measures. 4 We do have a lot of things built into 5 our measure to prevent us from misclassifying 6 7 small volume hospitals. I mean, that's one other thing I'll say is that we exclude hospitals with 8 9 fewer than 25 patients from reporting. 10 And we, you know, use an interval estimate for classifying hospitals that also 11 ensures that we're really confident about how we 12 13 classify them in the IQR program. So, that helps 14 with the reliability. 15 CO-CHAIR LANG: Are there any 16 questions/further comments regarding reliability? 17 I'm told that we can proceed to validity without 18 voting on reliability. 19 Is there an objection to proceeding to 20 validity? 21 (No response.) 22 CO-CHAIR LANG: With all due respect,

Janine, we're going to proceed to validity. Take it away, Bruno.

3 DR. DIGIOVINE: Okay. So, validity was done based on face validity. And, again, I 4 5 think I was somewhat -- the -- what is the summary there says that 90 percent of the expert 6 panel agreed that it had face validity, but 7 conversely 60 percent were able to agree at a 8 9 level of -- that was either moderate or strong, 10 which meant that 40 percent did not agree that it 11 was either moderately or strongly had face 12 validity in terms of that this measure was an 13 accurate reflection of quality. 14 And so, that was certainly my concern 15 and the concern of our group. 16 DR. BERNHEIM: Yes. So, when we 17 developed this measure, we had developed a number 18 of claims-based measures where we had the 19 advantage of having the chart data to show the 20 validity of the risk model with the chart data. 21 For COPD we didn't have the same We didn't have a national dataset of 22 advantage.

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chart-abstracted data. So, we have had to rely a 1 2 little on the fact that we've done a number of measures where we've successfully done a chart 3 4 validation. So, we've done that for stroke, AMI, 5 pneumonia, heart failure, many measures where 6 7 we've had chart data and showing the claims-based models work. 8 9 I think when we don't have that data, 10 it's a little harder to get that strong validity. 11 So, we've depended on clinical experts. 12 This measure has now been out and 13 reporting for a number of years pretty 14 successfully. So, it's gaining face validity 15 since the time that it was developed, but the 16 numbers are what you see. 17 DR. O'BRIEN: There was -- I can't 18 remember if it was this measure of the prior one. 19 There was discussion -- previous discussion about 20 the hospice exclusion of the first day versus 21 subsequent days and looking at those. 22 For pneumonia, obviously as an acute

illness construct I get the notion that you can 1 2 enroll people and hospice changes their goals of care as a result of patients getting worse 3 4 because of poor care. 5 With a chronic illness like COPD, that actually may be a patient-centered outcome as 6 7 enrolling them in hospice yet they may die within the next 30 days. 8 9 Have you had the chance to look at, 10 again, the enrollment in hospice not just on day 11 one, but subsequently during the hospitalization 12 to see how much of an impact that change in 13 exclusion might be? 14 DR. DORSEY: We've not looked at it 15 freshly. We did address this when we first 16 brought the measure before NQF and we found that 17 there's very, very little enrollment actually 18 during the index stay. And most enrollment 19 happens on discharge. 20 So, it's a very small, small group of 21 people who we identify by looking at days during 22 the index, or even before the index. Even before

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the index it's less than two percent. 1 So, we 2 haven't renewed that analysis. It just, for me, raises 3 DR. O'BRIEN: 4 the question of if it was actually included as a 5 longer exclusion, might that actually prompt greater enrollment in hospice? 6 Right. And the balance 7 DR. DORSEY: -- the counterbalance to that is that we don't 8 9 want to mask signals of quality. So, we 10 purposely don't enroll after day one, because 11 decisions to move towards hospice could be 12 related to problems in care or harmed patients 13 during hospitalization. And so, that's the --14 that's the balance. 15 And, Mark, I'm going to DR. BERNHEIM: 16 ask if you want to weigh in at all on this issue 17 of sort of whether it is different in a COPD 18 chronic condition population than in the 19 pneumonia population thinking about the exclusion 20 in the later days of stay. 21 DR. METERSKY: I think it's the same 22 concept, you know. If you don't do a good job

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early and they end up on the ventilator, then 1 2 it's -- you're more likely to have that conversation about hospice in a patient who if 3 4 care had been good, wouldn't have ended up on the 5 ventilator. And I think it's a bigger issue for 6 COPD in that pneumonia is more often, as you 7 said, an acute issue and the expectation is that 8 9 most patients will get off the ventilator as 10 opposed to COPD where many patients may not once 11 they end up on the ventilator. So, it is a 12 balancing act. I agree with that. 13 CO-CHAIR LANG: Additional discussion? 14 (No response.) 15 So, I'm told that CO-CHAIR LANG: 16 similar to reliability with respect to validity, 17 although according to the algorithm this is 18 eligible for moderate or low, not high, we can 19 proceed to skip over pointing our blue gadgets at 20 Janine again and move forward to feasibility. 21 DR. DIGIOVINE: I'm going to take this 22 personally, David, you realize, but that's okay.

CO-CHAIR LANG: I understand. 1 Ι 2 understand. DR. DIGIOVINE: I'll keep moving. 3 CO-CHAIR LANG: I understand. 4 Unless 5 there's an objection, we'll proceed to feasibility without voting. 6 7 Bruno. DR. DIGIOVINE: Feasibility, 8 9 electronic data, again, other than mortality 10 which we've already, I think, gone through, don't 11 need to go through it again, there's really 12 nothing else about it that makes it difficult to 13 collect. 14 CO-CHAIR LANG: Additional 15 discussion/questions for the developers? 16 (No response.) 17 CO-CHAIR LANG: Janine. 18 MS. AMIRAULT: Feasibility for 1893. 19 One, high; two, moderate; three, low or four, 20 insufficient. 21 (Voting.) 22 MS. AMIRAULT: Would you mind just

giving it one more shot? Thanks. 1 2 DR. NISHIMI: We have the votes on the 3 phone. 4 MS. AMIRAULT: Okay. 10 high, nine 5 moderate, zero low and zero insufficient. Based on the percentage, it's grey zone. 6 (Off microphone comment.) 7 8 MS. AMIRAULT: Okay. Sorry about 9 It passed. that. 10 CO-CHAIR LANG: Couldn't wait for 11 everybody. 12 (Laughter.) 13 CO-CHAIR LANG: Usability and use. 14 DR. DIGIOVINE: Usability and use. 15 So, it's publicly reported in Hospital Compare. 16 I guess on use the question becomes one of 17 improvement whether it's actually showing that 18 there's been improvement. Other than that, I 19 don't think there's any issues. 20 CO-CHAIR LANG: Discussion? 21 (No response.) 22 CO-CHAIR LANG: Move forward to a

1	vote, usability and use.
2	MS. AMIRAULT: Usability and use,
3	1893. One for high; two, moderate; three, low or
4	four, insufficient.
5	(Voting.)
6	MS. AMIRAULT: Five high, 12 moderate,
7	two low and zero insufficient. Based on the
8	percentage, we can move on.
9	CO-CHAIR LANG: Overall suitability
10	for endorsement of the measure. Discussion?
11	(No response.)
12	CO-CHAIR LANG: Seeing no desire for
13	further discussion, we will proceed to Janine for
14	a vote.
15	MS. AMIRAULT: Overall suitability for
16	1893. One for yes, and two for no.
17	(Voting.)
18	MS. AMIRAULT: 18 yes, one no. And
19	based on the 95 percent, it can be recommended.
20	CO-CHAIR LANG: Thank you, Bruno.
21	That was excellent.
22	All right. So, now we have

harmonization or, I mean, the first two measures, 1 2 one of them failed. Go ahead. I'm sorry. 3 MS. BAL: Yeah. So, just out of 4 respect to everyone's time, we're going to not 5 discuss ruling competing. We'll bring that up at the post-draft call. 6 We will not have a follow-up call, but 7 Janine will go over that in a second. 8 But so, 9 we're just going to bring it up in the post-draft 10 call and give everyone a little bit extra time 11 today. 12 Would that be okay, or did you guys 13 want to discuss those? 14 CO-CHAIR LANG: I see no objection. 15 MS. AMIRAULT: So, as Poonam just 16 mentioned due to the amount of grey zone measures 17 and other things to continue discussions, we're going to hold two post-meeting calls. 18 So, you 19 can expect a doodle poll -- excuse me -- two 20 post-draft comment calls. 21 And we will be sending a doodle call 22 out to everybody just to capture the availability

and organize.

1

2	MS. BAL: Okay. Just a little
3	clarity. There's two different types of calls.
4	So, we have a post-meeting call that was
5	originally scheduled for this coming Tuesday.
6	We will be canceling that call. We
7	were able to get through all the measures,
8	because you all are very amazing. So, thank you
9	for that. So, we do not need the post-meeting
10	call.
11	However, the post-draft call or the
12	post-comment call which happened after the open
13	commenting period, we will be scheduling an
14	additional call for that due to the number of
15	grey zone measures. And we want to make sure
16	that you have enough time to really discuss those
17	measures instead of the scheduled two-hour call.
18	Were there any questions about next
19	steps? Yes.
20	DR. O'BRIEN: Can you just comment
21	maybe about what the format of those calls are
22	going to be like for the post-draft comment

2 MS. BAL: It will be very similar in 3 concept to this. However, since most of them 4 fell in the grey -- or not fell -- they all --5 many of them have grey zone, we would just start at the end. 6 So, even if they had grey zone 7 throughout the review, we would start at the end 8 9 to see what your vote would be and you basically 10 review overall suitability for that vote. 11 Obviously you can bring up -- we would 12 ask the developer to provide more clarification 13 based off your notes and such. 14 DR. NISHIMI: If we have a quorum, we 15 will vote on the call. 16 MS. BAL: Any additional questions? 17 (No response.) 18 MS. BAL: All right. Thank you so 19 much, everyone. Especially the people on the 20 phone. We really appreciate your active 21 participation. 22 MS. MUNTHALI: And, I'm sorry. I just

		3.
1	wanted to I'm hoarse today, but wanted to	
2	thank you all again adding to Poonam's gratitude	
3	and especially to your co-chairs.	
4	This was a great meeting. I know it's	
5	very long and a lot of the issues are very	
6	difficult, but we think it was very successful.	
7	So, we'll be seeing you online. Thanks again.	
8	DR. KAZEROONI: Thank you.	
9	DR. POLLART: Thank you.	
10	(Whereupon, the above-entitled matter	
11	went off the record at 2:40 p.m.)	
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CERTIFICATE

This is to certify that the foregoing transcript

In the matter of: Pulmonary and Critical Care Standing Committee Meeting

Before: NQF

Date: 03-16-16

Place: Washington, DC

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

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