#### THE NATIONAL QUALITY FORUM

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PEDIATRIC CARDIAC SURGERY STEERING COMMITTEE

NATIONAL VOLUNTARY CONSENSUS STANDARDS FOR

PEDIATRIC CARDIAC SURGERY

OPEN SESSION

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WEDNESDAY OCTOBER 21, 2009

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The Pediatric Cardiac Surgery Steering Committee met in Congressional A in the Hyatt Regency Washington Hotel, 400 New Jersey Avenue, N.W., Washington, D.C., at 9:30 a.m., Howard Jeffries and Lisa Kohr, Co-Chairs, presiding.

STEERING COMMITTEE MEMBERS PRESENT:

HOWARD JEFFRIES, MD, MPH, MBA, Co-Chair LISA M. KOHR, MS, MPH, RN, CPNP, Co-Chair SCHONAY BARNETT-JONES, MBA PATRICIA A. GALVIN, RN, BSN, CNOR NANCY GHANAYEM, MD

DARRYL GRAY, MD, ScD ALLEN J. HINKLE, MD MARK HOYER, MD SYLVIA LOPEZ, MD CONSTANTINE MAVROUDIS, MD JOHN E. MAYER, MD LISA NUGENT, MFA

NQF STAFF PRESENT:

HELEN BURSTIN

SARAH FANTA

TINA GRANNIS

LISA HINES

CHRISTINA TSIATIS

ASHLIE WILBON

ALSO PRESENT:

DR. KATHY JENKINS

DR. KIMBERLEE GAUVREAU

DR. MARSHALL JACOBS

DR. JEFFREY JACOBS

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1	P-R-O-C-E-E-D-I-N-G-S
2	10:04 a.m.
3	CO-CHAIR KOHR: At this time since
4	we're all face to face, we'll go around the
5	room and introduce ourselves and also disclose
б	any conflicts of interest that you have. And
7	then we'll have the measure developers
8	introduce themselves.
9	I'm Lisa Kohr, and I'm a nurse
10	practitioner currently working at Children's
11	Hospital of Philadelphia. And I don't have
12	anything to disclose.
13	CO-CHAIR JEFFRIES: My name is
14	Howard Jeffries. I'm a pediatric cardiac
15	intensivist at Seattle Children's Hospital.
16	And I don't have anything to disclose.
17	DR. MAYER: I'm John Mayer. I'm a
18	pediatric cardiac surgeon at the Children's
19	Hospital in Boston. I suppose I have a few
20	things to disclose.
21	One of which is that I'm a past
22	president of the Society of Thoracic Surgeons.

I was actually part of the original group that 1 came down to Washington to meet with Ken 2 Kaiser in those days. And we were one of the 3 first professional organizations to put a set 4 5 of measures through the NQF process for adult 6 cardiac surgery. 7 I also was part of the group that you'll hear about later that was involved in 8 9 developing the first risk adjustment for 10 congenital heart surgeries called RACHS 11 Scores. I was on the expert panel for that undertaking, now, at least ten or more years 12 13 ago. I think that's all I should need 14 to disclose. 15 DR. BURSTIN: John, it would also 16 just be helpful if you could emphasize that 17 you were not involved, though, in the 18 development of these measures beyond -19 20 DR. MAYER: Right. That's correct. I was not involved in the development of this 21

22 set -

1 DR. BURSTIN: Thank you. That's 2 why you're here. DR. MAYER: - of measures that's 3 being put forward. Thank you for reminding me 4 5 of that. 6 DR. GRAY: Darryl Gray. I'm a 7 medical officer with the Center for Quality Improvement and Patient Safety at the Agency 8 9 for Healthcare Research and Quality. 10 My background actually involves a doctorate in epidemiology with a project on 11 patent ductus closure which John actually 12 13 helped me with, now, almost 20 years ago. And I've maintained an interest in 14 this area of - I'm also involved at AHRO with 15 the Performance Management Advisory Group of 16 the American Medical Association. 17 Which I think it's important to 18 disclose that because PMA actually reviews 19 20 measures after they've been approved by NQF or other bodies and helps, actually, formally get 21 22 them into a form where they can actually be

1 implemented.

And that's, I think, not a
conflict, but something that's important to
disclose.

5 Also, I was not involved in the 6 development of any of AHRQ's pediatric quality 7 improvement measures. However, I was asked to 8 review them.

9 The other thing which I should also disclose is that I started working with 10 Jeff Jacobs and Marshall Jacobs and others 11 developing a crosswalk between ICD-9 procedure 12 13 codes and diagnosis codes and STS diagnosis and procedure codes with the goal of doing a 14 project to actually assess the concordance 15 between STS data and administrative data that 16 are actually based on the ICD-9 codes. 17 18 DR. LOPEZ: I'm Sylvia Lopez. I'm a pediatrician. I work with the Oklahoma 19

Healthcare Authority, which is a State
Medicaid agency. I have nothing to disclose.
DR. HINKLE: My name is Dr. Allen

## Hinkle. I'm a pediatrician and 1 anesthesiologist and chief medical officer at 2 Tufts Health Plan in Massachusetts. 3 4 MS. GALVIN: My name is Patty 5 Galvin. I'm a nurse, a clinical coordinator in the cardiac operating room at Children's 6 7 Hospital of Boston. The only disclosure I have is that 8 9 there - well, it's not a disclosure, but even 10 though I work at Children's, the measure that was submitted by Children's I had no part of 11 and have nothing else to disclose. 12 13 DR. HOYER: I am Mark Hoyer. I'm a pediatric cardiologist. I direct the cath lab 14 at Riley Hospital for Children in 15 Indianapolis. 16 I don't think I have any specific 17 disclosures. I was nominated for this 18 committee by the president of the Society for 19 Cardiac Angiography and Intervention. 20 And obviously I work very closely 21 22 with the surgeons and have an interest in the

way things kind of unfold because we're so 1 2 closely allied with the patients that we take care of, but I don't think I have any other 3 specific disclosures. 4 5 MS. BARNETT-JONES: I guess I better scoot closer here. 6 7 Good morning. My name is Schonay Barnett-Jones. I chair the Patient and Family 8 9 Advisory Council here at Children's National 10 Medical Center in Washington, D.C. I have a five-year-old who had a 11 heart transplant when she was 17 months. She 12 13 is a thriving kindergartner today, and I'm very happy to be here. 14 I am a managing director for Visa, 15 managing US and Canadian client testing for 16 all end points here. Thank you. 17 DR. MAVROUDIS: Good morning. 18 I'm I'm a congenital heart surgeon 19 Gus Mavroudis. at the Cleveland Clinic. 20 I was involved in the inauguration 21 22 of the Society of Thoracic Surgeon's

congenital database 21 years ago. I chaired 1 2 that committee for a long time, after which it was transferred to Jeff. 3 I'm still on that committee, been 4 5 involved in some of the risk stratification projects. However, I was not involved in any 6 7 of these scores or these indicators that are being presented today. Thank you. 8 9 DR. GHANAYEM: Good morning. I am 10 Nancy Ghanayem. I am a cardiac intensivist at the Children's Hospital of Wisconsin, Medical 11 College of Wisconsin in Milwaukee. 12 13 I was nominated to this committee 14 by NACHRI. I have participated in the multisocietal organization that has been overseen 15 by Jeff. And I have not participated - I have 16 not been involved with the development of 17 these measures, however I do work with a 18 surgeon who is on the task force. 19 20 MS. NUGENT: My name is Lisa Nugent

22 creative director in the Global Strategic

and I work for Johnson & Johnson.

21

I'm a

1 Design Office and I work with the medical 2 devices and diagnostic operating companies and franchises in that sector. 3 4 My focus has been on designing 5 experiences and tools to empower patients to better manage their own care, and I have 6 7 nothing to disclose. Thank you. MS. TSIATIS My name is Christina 8 9 Tsiatis. I'm NQF staff and I have nothing to 10 disclose. MS. FANTA: Hi, I'm Sarah Fanta, 11 12 research analyst at the National Quality 13 Forum, and I have nothing to disclose. MS. GRANNIS: I'm Tina Grannis, and 14 I'm project manager at National Quality Forum 15 with nothing to disclose. 16 MS. WILBON: Hi. Good morning. 17 Ashlie Wilbon, also a project manager at the 18 National Quality Forum, and no disclosures. 19 20 DR. BURSTIN: Good morning. Hi. 21 Helen Burstin, senior vice president, NQF for 22 performance measures and nothing to disclose.

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# MS. GRANNIS: Can we just have the audience members stand up by the microphone and just introduce yourselves, please? DR. GAUVREAU: I am Kim Gauvreau. I am a biostatistician at Children's Hospital in Boston, and also at the Harvard School of Public Health. DR. M. JACOBS: Good morning. I'm Marshall Jacobs. I'm a congenital heart surgeon and the director of clinical research for congenital heart surgery at the Cleveland Clinic. I'm a member of the Society of Thoracic Surgeon's Task Force for the national database. I have been involved with evaluation of the Aristotle Complexity Score as a measure, and I have been a member of the expert panel not that created the first iteration of RACHS-1, but has worked on further development.

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DR. J. JACOBS: Good morning. I'm

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Jeff Jacobs. I chair the STS Congenital Heart 1 Surgery Database Task Force, and I have all 2 the same disclosures that Marshall just had, 3 including the same last name. 4 5 (Laughter.) MS. GRANNIS: Great. 6 Thank you, 7 everyone, and I'm going to be turning this meeting over to Ashlie Wilbon. 8 9 MS. WILBON: Good morning. We're 10 just going to go over - I'm going to switch seats here to get to the computer. 11 12 We're just going to go over a few 13 slides just to get everyone back in the mindset and review the projects, our goals today, 14 and talk a little bit about the breakout 15 groups a little bit more and get everyone 16 ready to start the discussion. 17 18 So, bear with me briefly while I relocate. 19 20 So, some of these slides you guys 21 have already seen. We reviewed many of them during orientation. 22

## 1 We just wanted to go back over the project scope and the list of measures. 2 And we're going to have Helen go over the 3 evaluation criteria again just in case you 4 5 guys have any additional questions. Most of you have probably since 6 7 reviewed the measures since orientation, so there may be some questions about the 8 9 evaluation criteria that came up as you were 10 reviewing the measures. So, we will have an opportunity to talk a little bit about that if 11 12 you have any questions and before we go into 13 the breakout groups. So, again, project staff, I think 14 we've all introduced ourselves at this point, 15 and Helen has given a pretty good overview 16 already during the executive session. But in 17 the interest of our audience members that are 18 in attendance, I'll go ahead and kind of skim 19 through these slides just about NQF in 20 21 general. 22 We're a 400-plus-member

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organization organized into eight stakeholder
 councils including supplier industry,
 purchasers, consumers, health plan providers,
 quality measurement and research. And I'm
 sure I'm missing at least one, but we've been
 through that already.

7 The NOF structure includes a board of directors, the CSAC. Which once you 8 9 recommend your measures, your recommendations 10 then get forwarded to the CSAC and they review 11 the measures that you've recommended and make their recommendations based on your 12 13 recommendations for endorsement. And then they go on to the board of directors for a 14 final endorsement. 15 Strategic goals, again, that 16 standards endorsed here become the primary 17 standards used for measuring the quality of 18 healthcare in the United States, that we are 19

20 the principal body that endorses national

21 healthcare performance measures and quality

22 indicators, that NQF will increase the demand

for high-quality healthcare and be recognized
 as a major driving force for facilitator of
 continuous quality improvement in American
 healthcare quality.

5 So, we went through a little bit with the diagram, I believe, that was in your 6 7 packet about the consensus development process which is a process that we go through to 8 9 ensure that it's transparent and open to the 10 public, but allows experts to weigh in on standards that are submitted to the NOF for 11 12 review.

13 We want to make sure that we have attention to overall strategy for measuring 14 and reporting healthcare quality, including 15 the establishment of national goals, that we 16 represent on the committee that we have 17 represented multi-stakeholder membership 18 including, again, here at the eight councils, 19 20 and that public and private sector 21 representation are on the governing board. 22 So, here is a condensed version of

the CDP schema. You have a much more detailed one in your packet, I believe. And again, we are at the yellow area where the Steering Committee is reviewing. And again, once you review, they'll go to the CSAC, we'll draft your recommendations and they'll go for public comments and then on to the board.

So again project information, you 8 9 guys are all again familiar with this. This 10 is project focused. Our first project focus on pediatric cardiac surgery, there are the 11 two AHRQ measures already endorsed for 12 13 pediatric cardiac heart surgery, which are 14 PDI-17 and PDI - I'm sorry - PDI-7 and PDI-6 that were endorsed in May of last year. And 15 there are also some similar adult cardiac 16 surgery measures that are endorsed. 17

And I believe also in your materials that we had distributed to you, there's a table that lists similar measures together so you can kind of get an idea of how they're grouped. And as you're reviewing

		P
1	those measures, you can compare in contrast	
2	based on what was submitted and what is	
3	already endorsed.	
4	This project, again, was funded by	
5	the Pediatric Cardiac Surgery Coalition which	
6	is comprised of several hospitals and	
7	organizations. And we had 21 measures	
8	submitted from both STS and the Children's	
9	Hospital of Boston.	
10	And again, because of the lack of	
11	field testing for these measures, you'll only	
12	be eligible to recommend them for time-limited	
13	endorsement.	
14	Project goals, to review the	
15	submitted measures, recommend qualified	
16	measures for endorsement to the CSAC, and to	
17	hopefully eventually provide pediatric cardiac	
18	surgery community patients/consumers with	
19	measures for reporting.	
20	Your role today is to discuss the	
21	measures and have a healthy discussion on the	
22	evaluation criteria to ultimately make	

recommendations to NQF on how the measures
 should move forward.

Once the measures are recommended 3 4 here, we put them out for public comment. And 5 then we'll have - there will be an opportunity for the committee to respond to any comments 6 7 that the public may have maybe based on the way you voted, what was not recommended, what 8 9 was recommended, and based on your discussion 10 here. So, that will be in a subsequent conference call following this meeting. 11 12 Also, once your recommendations 13 are submitted to CSAC, which either Lisa and/or Lisa and Dr. Jeffries will attend to 14 represent the discussions on behalf of the 15 Steering Committee here, CSAC may have 16 questions for you that they want you to 17 respond to and so forth, which they would do 18 on your behalf. 19 Here is the general timeline for 20 the remainder of the project. The comment 21 22 period is expected to begin November 6th.

1 Comments should end around November 30th for 2 the public, and December 7th for the members. The voting begins for members 3 around December 18th, and it would end around 4 5 January 16th. We're hoping that we'll have the measures along with the public comments 6 7 and recommendations to go for the CSAC meeting that will happen in February of next year, and 8 9 then on to the board of directors for their 10 final endorsement by February/March of next 11 year as well. This is just a screen shot of the 12 13 NQF website. For those of you that have not had an opportunity to look at the website, we 14 just did a whole revamp of the website and 15 have added some features that allow you to 16 follow a project along the course of the 17 consensus development process. 18 On the Project page, you'll notice 19 we're on the Details tab of the Pediatric 20 Cardiac Surgery Project, and each step of the 21 22 process has a plus sign next to it. And you

can click on the plus sign and it will list 1 any materials or documents that you can 2 download for that step of the process and kind 3 of give you a little bit of text around what 4 5 was going on during that step of the process. 6 So, we encourage you just even 7 beyond this meeting if you want to know the status of what's going on, we keep this site 8 9 very up to date. 10 And if you feel like you've missed something from us, because everything is 11 public, it will pretty much be on the website 12 13 as well. So, we encourage you to use that as 14 a resource. So at this point, I'm going to 15 hand it over to Helen. I'm not sure if you 16 want to just go from there or - okay. 17 18 DR. BURSTIN: I believe you guys have all had the orientation session. 19 It's 20 just a very brief, high-level overview very quickly of our criteria. So, this is really 21 22 what your evaluation is grounded and your

evaluation forms are grounded on the criteria
 and the sub-criteria.

So, just briefly to highlight some 3 of the key features here, we updated 4 5 evaluation criteria just about a year ago and specifically did that for several reasons. 6 7 One of which, we wanted to clarify what some of those terms actually meant and 8 9 get more specificity. 10 And secondly, we really felt there was an opportunity to kind of raise the bar a 11 12 bit, make sure we're bringing in measures that 13 are actually achieving the goals or hoping to achieve in terms of better healthcare quality. 14 So, we specifically put a link in 15 to the national priorities that NQF has been 16 working with, a coalition called the National 17 Priorities Partnership, to put forward, as 18 well as specifically saying we wanted to get 19 20 at measures in high-impact areas. 21 There was also a strong emphasis 22 on measure harmonization. If you just look at

1 the cardiac measures alone within NQF, it is 2 frightening how many beta blockade measures 3 there are around cardiac surgery and 4 cardiology. 5 There's really a need, I think, to

begin thinking about how we bring those 6 7 measures together especially as we start thinking about care across the full continuum 8 9 from outpatient to inpatient and beyond. 10 I didn't know if we have a pre-op 11 beta blocker or a post-op beta blocker or a beta blocker persistence measure, so really 12 that's the idea of what we're trying to push 13 out around harmonization. 14

A greater emphasis on outcome measures as much as possible. And process measures are great, they're very appropriate, as long as they're fairly proximate to the outcome. We don't want measures that are very distal.

So, for example, we had measuressubmitted to us that said did you consider

whether the patient needed a flu shot? Did the patient get a flu shot, is really ultimately what you want to know. Did you consider whether the patient needed one probably isn't proximate enough to the outcome that it's adding much to what we really want to get at.

So, we have specific conditions 8 9 for consideration in these measures. The 10 measure either has to be in the public domain or an intellectual property agreement or 11 measure steward agreement if signed. This is 12 13 still in process with at least on the STS side, but we have no issues, I think, 14 15 proceeding.

We need to make sure there's a responsible entity, a measure steward, and this is really important. Because as I mentioned earlier, all of our measures require measure maintenance at least every three years. We have to have a steward who

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agrees to do the maintenance on it, keep up
 the evidence base, update the measure as
 needed.

4 We also not very often, but 5 occasionally will do what's called ad hoc reviews. If we hear from the field that 6 7 there's untoward consequences related to the use of a measure, we will feed that back to 8 9 the measure developer and ask for their 10 response in real time as well. As I mentioned earlier, the intent 11 12 is really ultimately that all these measures 13 should really be used for both public reporting and quality improvement. 14 And lastly, just the fact that the 15 measure's submission is complete. And that if 16 it hasn't, if the measure developer can't 17 provide evidence that the measure's been 18 testing, it could only be put forward for what 19 we call time-limited endorsement. 20 The measure is still endorsed 21 22 fully, but there is an expectation that within 1 12 to 24 months the developer will return with
 2 our testing results.

Those testing results go to our 3 CSAC for review that the measure has in fact 4 5 fulfilled the testing requirements. 6 So, importance to measure and 7 report is sort of foundational. We really consider all outcome measures essentially 8 9 meeting this, so that's not a problem. 10 We want to make sure, essentially, 11 are the resources expended to collect these data to do the measure worth it, we're getting 12 13 something out of it in terms of impact. And specifically here we're 14 thinking about is it related to one of those 15 National Priorities Partnership goals? 16 And certainly many of these are; patient safety, 17 care coordination. I don't think there's much 18 of an issue for these measures today. 19 And specifically thinking about, 20 as well, the evidence to support the measure 21 focuses under importance. 22

1	This is a must-pass criteria.
2	This is a change from when we updated the
3	criteria last year.
4	If a measure is not judged to be
5	important, it doesn't matter if it's
6	scientifically acceptable, usable and
7	feasible. It's out. So, that has actually
8	been a change in our process.
9	Scientifically acceptability of
10	the measurement properties is obviously
11	critical. We want to ensure that the
12	specifications are precise, that they are
13	reliable and valid and can discriminate
14	between providers.
15	I mean if the ultimate goal here
16	is public reporting and quality improvement,
17	you want to be sure that as you aggregate
18	these data for providers or clinicians that
19	you're getting a reasonable estimate of their
20	performance and can be compared to others.
21	And you want to make sure at least
22	in the part of the work we've done, and this

has been an issue we've had discussing with 1 STS over the years, our preference is not to 2 control for issues that could be related to 3 4 disparities like race, ethnicity, language, 5 insurance status, and then set to stratify by those variables so we can actually see 6 7 disparities as opposed to having them control for in a risk model. 8 9 And exclusions is the other big 10 issues, next slide there. We are increasingly having trouble with measures just loaded down 11 with exclusions. 12 13 This is especially important as we envision moving many of the measures to an 14 electronic platform. The more exclusions, the 15 more difficult it is to collect the data. 16 So, we are requiring that it's 17 fine to have exclusions. Things that are 18 medical contraindications or relative 19 contraindications should absolutely be 20 exclusions. 21 22 What we don't want is things that

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are really excluded and the reality is they 1 2 contribute very, very little to the overall distortion of the measure if you actually 3 didn't have them in there. So, this is 4 5 definitely a work in progress. Usabilities, as I mentioned 6 7 earlier, really important. We really are all about trying to make sure that people can use 8 9 these data at the end of the day to make better decisions. 10 So from where a patient sits, for 11 example, can they begin at some point to be 12 13 able to go to some website and figure out who's performing well and make decisions about 14 their care, or purchasers, for that matter, as 15 well. 16 And obviously the use for internal 17 quality improvement has been well demonstrated 18 with the STS cardiac surgery data measures to 19 20 date, so that's certainly not an issue. Feasibility, again increasingly 21 22 trying to move to measures that we can collect

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without undue burden. Being able to go into
 charts to pick up these kind of measures is,
 I think, fallen away.

4 Increasingly we're seeing lots of 5 measures come in, which we are delighted with, 6 off clinically registries. I think it's the 7 right way to go for many of our clinical 8 specialties.

9 It just doesn't make sense that 10 you're going to kind of do this on paper or 11 that you're going to be able to get the 12 clinical richness you need off administrative 13 data. So, we fully expect a lot of these 14 measures will come forward off of clinical 15 registries.

As much as possible as time goes forward, we would also like to ensure that in our work we're doing in the health IT sphere, we work to make sure that whatever these registries are ultimately interoperable with the electronic health records where perhaps not the ones we have now, but the ones we

1 should have in the next few years where you've pulling in the key pieces of clinical data 2 from the EHR and supplementing it with the 3 required pieces of data through a clinical 4 5 registry that you wouldn't otherwise have in your EHR, so very much we're hoping to go. 6 7 And we're also requiring all measure developers at this point on that path 8 9 forward, to indicate which of the data elements within those measures could be 10 captured electronically and which ones can't 11 and what's the path going forward here. 12 13 A particularly exciting time. Ι mean there's actually a meeting next week that 14 I'm presenting at for the Health IT Policy 15 Committee completely focused on specialty 16 measures and the use to clinical registries as 17 we envision this health IT-enabled world. 18 So, quite optimistic. 19 This is an exciting opportunity for us, but we still need 20 to have the measures based on the registries 21

22

as that starting point.

1 And I'll stop there and see if 2 there are any questions. 3 MS. GRANNIS: We're going to ask the measure developers at this time, just if 4 5 you have any general comments, if you would just step up to the microphone and you can 6 7 present your comments to the Steering Committee. 8 9 And this would probably be an 10 excellent opportunity maybe to explain the book, Dr. Jacobs, that you have brought along. 11 12 DR. BURSTIN: And also just to put 13 this in context, it's also very helpful since we, as you heard from our introductions, we 14 can't allow those who have been involved in 15 the development of the measures to sit at the 16 Steering Committee table. 17 18 But we've tried to build into our process the opportunity to both hear from the 19 20 measure developers up front, and also as 21 you'll see in the two workgroups, they'll be I assume we'll have a Dr. Jacobs in 22 with us.

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each room for the two workgroups. This is 1 2 quite simple. 3 And so feel free to interact with the measure developers, get their input. 4 We 5 don't want to exclude them from the process, but at the same time need to be able to ensure 6 7 we don't have conflicts at the table. I'm sorry. Go ahead. 8 9 DR. JENKINS: All right. Well, 10 it's nice to be here, and it's been exciting to see this field actually move forward so far 11 in the last ten years. 12 13 I would just like to give a little 14 bit of background to the measure that we're proposing form the Children's Hospital in 15 Boston. 16 It's called or we refer to it as 17 the RACHS-1 Methodology. And the measure that 18 we're proposing is a standardized mortality 19 20 ratio using the RACHS-1 Methodology in its full form. 21 22 As John mentioned, this work

actually started around ten years ago. And
 cardiac surgeons and cardiologists together
 provided the judgment to the derivative
 methodology.

5 It was also empirically tested 6 originally in two large data sets and has been 7 used - it was published in January of 2002 and 8 has been used really widely both nationally 9 and internationally since that time. We found 10 over 39 publications that have relied in some 11 manner on RACHS-1.

12 One of the points that I would 13 like to emphasize to the Steering Committee, 14 is that the measure we're proposing is for the 15 full standardized mortality ratio using RACHS-16 1.

And I emphasize that because there have been applications that have used only the categories that are a fundamental part of the procedural adjustment for RACHS-1. But the additional clinical variables for the full model which is relatively parsimonious, just

1 includes age, prematurity and other major cardiac anomalies, also are important 2 components to an overall assessment. 3 4 The primary reason that we 5 developed the measure was to provide an overall assessment of risk for short-term 6 7 mortality for the core pediatric component of a cardiac surgeon's caseload. 8 9 It doesn't include the adult 10 congenital heart population. It's limited to patient's less than 18 years of age. 11 12 It actually can be used in a 13 variety of data sources, both administrative data and prospectively collected data. 14 And I do provide information in 15 the packet that I submitted, of really 16 widespread variation in the United States 17 using this measure. It's definitely one that 18 does show center-specific differences. 19 20 The data that I showed, showed variation in standardized mortality ratios 21 from .54 to 3.01 in a set of children's 22

1	hospitals that submit data to the Pediatric
2	Health Information System's database.
3	And the table that I provided is
4	actually the one that we use at the Children's
5	Hospital in Boston to benchmark our own
6	performance using a one-year outcome and a
7	three-year rolling average.
8	So, I really just wanted to give
9	you that introduction to our methodology.
10	And as Marshall mentioned, I know
11	that you now have a three-year rule for
12	revising these measures. RACHS-2 is in
13	process.
14	It's been a little bit more
15	complicated this time because there's a lot
16	more data to use to revise the methodology,
17	but both Jeff and Marshall and a number of
18	other surgeons have participated in that
19	process.
20	But your time frame came in before
21	that process was done, so the measure we're
22	proposing is based on the RACHS-1 original

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1 methodology.

2	DR. J. JACOBS: Good morning, and
3	thank you for giving me the opportunity to
4	come and talk with you all this morning about
5	the STS measures.
6	The Society of Thoracic Surgeons
7	is the largest congenital hearty surgery
8	database in the world. And a group of
9	surgeons from the STS spent about the last
10	year-and-a-half developing these 20 measures
11	that we've proposed.
12	To understand those measures, I
13	think the first step is to give a little
14	background about the STS database.
15	So, the STS congenital heart
16	surgery database, like I said, is the largest
17	database in the world. Right now 85 of 122
18	hospitals that do pediatric heart surgery in
19	the United States participate in the STS
20	database.
21	More importantly, 19 of the 20
22	largest hospitals participate, and we think

1 that 28 of the 30 largest hospitals participate. The non-participants are some of 2 the smaller hospitals. 3 The STS database has worked over 4 5 the last 15 years to create a platform for data entry that can work across the country 6 7 and is harmonious with international centers in Europe and Asia and Australia as well. 8 9 So, there's really six principles within the STS database that establish the 10 platform for the creation of these quality 11 improvement/quality assessment metrics. 12 13 And just to quickly go through these six principles, first of all, we've 14 since the 1980s worked to standardize the 15 nomenclature and terminology used in our 16 database so that the same words/names for 17 diseases, names for operations that are used 18 in the STS database are used in the American 19 20 College of Cardiology Impact database, are used in the Pediatric Cardiac Intensive Care 21 22 Society database, are used in the Congenital

1 Cardiac Anesthesia Society database, and are used in the equivalent databases of 2 cardiology, cardiac surgery, anesthesia and 3 critical care in Europe as well, and in some 4 5 developing databases in Asia. And this terminology is being 6 7 harmonized now with SNOMED and ICD-11, and the committee that developed the STS nomenclature 8 9 has representatives sitting on SNOMED and ICD-10 11 committees. So, I think that's very important when you think about electronic 11 medical record, which you were talking about 12 13 before. These metrics will work in the 14 electronic medical record because it's going 15 to be based on the same terminology. 16 Beyond nomenclature, the second 17 part is harmonizing database standards. 18 So. over the last decade we published a series or 19 rules to define "mortality" and "morbidity" 20 within our database, rules that have been 21

22 adopted in the surgical databases in six

1	continents, and that have also been
2	implemented in cardiology, cardiac surgery,
3	anesthesia and critical care databases across
4	the United States.
5	The third piece that we used to
6	develop these metrics is tools for
7	stratification of complexity. And what I mean
8	by that is that we have to have a way within
9	the database to be able to separate out
10	operations that have a very high risk of dying
11	versus a low risk of dying, and operations
12	that have a high risk of complications versus
13	a low risk of complications.
14	And within the STS database, we
15	use the RACHS Methodology as described by
16	Kathy. We also use another methodology, the
17	Aristotle Methodology. And we've just
18	recently published a new score that's based on
19	actual data within the STS database based on
20	200,000 operations rather than being based on
21	subjective probability and expert opinion.
22	And that's kind of where we get to some of

1 these books.

2	So, the big book is a book that
3	was published last December. And the first
4	half of that big book is divided into the six
5	points that I'm talking about now; the
б	nomenclature, database standards,
7	stratification of complexity, data
8	verification, sub-specialty collaboration and
9	longitudinal follow-up, and there's between
10	one and several articles on each of those
11	areas.
12	In the smaller book, there's four
13	more recent publications. One on defining
14	mortality, one on defining morbidity, one on
15	the application of the basic forms of RACHS
16	and Aristotle within the STS database, and
17	then the last one is on the newer
18	
	stratification methodology that we've
19	stratification methodology that we've developed on objective data.
19 20	
	developed on objective data.
20	developed on objective data. And this can provide a source as

1 within our quality improvement metrics. The fourth area of the STS 2 database I wanted to mention briefly is data 3 verification. We have an active system in 4 5 place to verify the completeness and accuracy of the data so that there is really three 6 7 levels of data verification. There's an intrinsic data 8 9 cleansing method that eliminates inconsistencies and illogical applications of 10 the data. 11 12 Beyond that there's a site visit 13 program where sites participating in the STS database are audited over a three-day period 14 in collaboration with the Iowa Foundation for 15 Medical Care and a senior level congenital 16 17 heart surgeon. 18 And then finally, we're in the process now of linking the STS database to the 19 20 Social Security Death Master File which provides a third method for verifying the 21 22 accuracy of the mortality data.

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1	The fifth topic is sub-specialty
2	collaboration. And although we're talking
3	about congenital heart surgery outcomes, the
4	care of a patient with pediatric congenital
5	heart disease is a team sport. It's not just
б	the surgeons. It's surgeons, cardiologists,
7	anesthesiologists and intensivists.
8	And when we look at the blue book
9	that I've handed out, this blue book has been
10	written by surgeons, cardiologists,
11	anesthesiologists, intensivists,
12	profusionists, nurses, respiratory therapists,
13	the full spectrum of the team that cares for
14	these patients.
15	And the standards for
16	nomenclature, database, complexity
17	stratification and data verification have been
18	harmonized across all these sub-specialties so
19	that what the STS database is doing is what
20	the American College of Cardiology database is
21	doing and what the Congenital Cardiac
22	Anesthesia Society database is doing.

1	Briefly, the last component of
2	these six components is longitudinal follow-
3	up.
4	And the STS database is making
5	major efforts to become a tool for
6	longitudinal follow-up because what parents
7	really want to know is not is my baby going to
8	go home alive from the hospital, but how is
9	the baby going to be doing in six months or a
10	year or two years or ten years and can they go
11	to college and have children?
12	So, we're implementing methods
13	within the STS database, to make the database
14	function as a tool for longitudinal follow-up.
15	So, that's the background on the STS database.
16	When John Mayer was president of
17	the STS, a committee was established within
18	the STS to develop pediatric and congenital
19	heart surgery quality indicators. And this
20	committee was made up of a group of surgeons
21	really representing small hospitals, large
22	hospitals, academic hospitals and private

1 practice hospitals.

And over the course of a year through bi-weekly phone conferences, the 20 metrics were developed. And as you go through them, you'll see some are structure metrics, some are process metrics, some are outcome metrics.

A hundred percent of them can be 8 9 tracked within the STS database, a hundred 10 percent of them can eventually be in an electronic medical record that could 11 communicate with the STS database, and I think 12 13 also as you go through them you'll see that they build on one another. 14 So, several of the structure 15 metrics provide the foundation for the 16 subsequent outcome metrics. 17 And as one goes through these 18 metrics, the definitions used to define some 19 of the structure metrics about volume are then 20 21 applied in the outcome metrics. 22 The two books will provide a lot

### of source material, charts, graphs and data 1 that support how we came up with these metrics 2 and also document some of the testing these 3 metrics have had so far. 4 5 RACHS has been in the STS database since 2006. The Aristotle score since 2002. 6 There is over a hundred thousand operations 7 between the STS and the EACTS that have been 8 9 scored with these complexity stratification tools. 10 They're using the STS database 11 right now, as Kathy said, not in the full 12 13 form, but in a form that is a group of categories to categorize operations. 14 But within the last year, the STS 15 has started to develop ways to use complexity 16 stratification tools in a more complete form 17 that also takes into account patient variables 18 like prematurity and associated anomalies. 19 And that's being implemented now within the 20 STS database. 21 22 So, I think I'll stop talking now.

1	That provides a little information about why
2	everybody has this big book to carry home on
3	the airplane and a little bit of background
4	about how we got to where we are now.
5	And Jacobs and Jacobs will be here
6	all day and we're happy to help in any way we
7	can. Thank you.
	-
8	(Off the record comments.)
9	DR. J. JACOBS: That's a good
10	point, Marshall.
11	So the big blue book, the first
12	half talks about those six areas I talked
13	about; nomenclature, database, complexity
14	stratification, data verification, sub-
15	specialty collaboration and longitudinal
16	follow-up.
17	The second half of this book is a
18	group of definitions that are consensus-based
19	definitions that were developed by a group
20	called the Multi-Societal Database Committee
21	for Pediatric and Congenital Heart Disease.
22	This multi-societal group had, on

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the average, three three-day meetings a year 1 over a four-year period. And a large portion 2 of that was centered on developing these 3 definitions. 4 5 And these are the definitions that 6 are used in all of the sub-specialty 7 databases; cardiology, cardiac surgery, anesthesia, critical care, both in Europe and 8 9 North America. 10 And the consensus basis of these definitions, I think, is very, very important 11 as we start discussing some of these metrics, 12 13 because some of the metrics talk about things like stroke or renal failure. And there's a 14 very clear, concise, consensus-driven 15 definition that's been harmonized across 16 multiple medical sub-specialties of these 17 complications. 18 And the source of those is the 19 20 multi-societal group that are published in this blue book. That's the other reason we 21 22 brought the blue book.

1	The definitions were not just
2	developed with experts in pediatric and
3	congenital heart disease, though. Experts in
4	the organ system involved with the
5	complication were also consulted.
6	So when we worked on stroke,
7	you'll see that the chapter on neurologic
8	complications and stroke is authored by a
9	group of cardiologists and cardiac surgeons,
10	but also has a co-author that's a pediatric
11	neurologist that specializes in the neurologic
12	complications after heart surgery, from
13	Children's Hospital of Philadelphia. And that
14	applies to all of the organ system
15	complications.
16	So, we consulted infectious
17	disease experts for the infectious
18	complications, we consulted pulmonary experts
19	for the pulmonary complications.
20	That also allowed us then to
21	harmonize the stroke definitions with the
22	definition of "stroke" that's used by
1	

1 neurology societies.

2 It allowed us to harmonize our infectious definitions with the infection 3 definitions used by the Center for Disease 4 5 Control. So what we call mediastinitis in 6 7 the Congenital Heart Surgery database is what mediastinitis is called in the Adult Heart 8 9 Surgery database, and is what the CDC calls 10 mediastinitis. And that's clearly pretty important for metric development. 11 DR. BURSTIN: Can I just ask one 12 13 general question? Some of these measures look 14 incredibly interesting, while some of them 15 look very similar. We've seen these obviously 16 on the adult side. 17 18 I mean ultimately is there a thought that there could be a cardiac surgery 19 20 measure that could be stratified depending on the age group of the patient? 21 22 DR. J. JACOBS: It's really a

totally different science operating on 1 2 children versus operating on adults. And I think that if we want to do this right, we 3 have to develop metrics specifically looking 4 5 at - what we focused on was children, and then adults with congenital heart disease. 6 7 And that's a very different world from the world of coronary bypass and aortic 8 9 and mitral valve replacement. 10 DR. BURSTIN: Yes. DR. J. JACOBS: And the same 11 12 reasons that we have separate databases for 13 adult cardiac surgery and pediatric and adult congenital heart surgery is I think, at least, 14 15 the same reason why we should have a separate set of metrics. 16 The definitions of certain terms 17 should be harmonized whenever possible, and 18 we've tried to do that, but I think that it's 19 20 not realistic to say that we would just have 21 one set of metrics. 22 DR. BURSTIN: I was actually

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1 thinking more of - I should be more specific some of the structural measures, for example. 2 So, the participation in our database, for 3 example, seems to me well, we've now got one 4 5 for thoracic, one for cardiac surgery, now one pending for cardiac surgery. 6 7 It seems like one of those ones ultimately you want to know is your provider 8 9 part of a systematic risk-adjusted database 10 that provides feedback to them. 11 DR. J. JACOBS: Absolutely. 12 DR. BURSTIN: I'm just saying it's 13 just something to think about whether it needs 14 to be that. And I was especially excited to 15 see the one about the time out, you know, the 16 actual - and that, to me, seems like one, 17 again, doesn't seem unique to cardiac surgery. 18 Would love to see that one potentially 19 20 expanded to other kinds of surgery. DR. J. JACOBS: I think that's an 21 22 excellent point.

1 DR. BURSTIN: Yes. 2 DR. J. JACOBS: I think the one that we wrote about time out could be applied 3 to all forms of intervention. It's just that 4 5 it was the right time for us to do it whereas 6 maybe someone else two years ago or three 7 years ago it might not have been the right time. 8 9 (Off-the-record comment.) 10 DR. J. JACOBS: Thanks. MS. WILBON: Thank you. 11 So, we're at about 10:45, running a little bit ahead of 12 13 schedule. And Tina is just telling me that it takes them a little bit of time to set up for 14 the breakout groups, which is going to be our 15 next phase of the meeting. 16 So, I'll talk a little bit more 17 about the breakout groups, and then we'll kind 18 of break for a few minutes and let them set 19 20 up, and then we'll kind of have you guys 21 migrate to your groups. 22 So everyone is aware, I'm sure, at

this point, which group they've been assigned to. We divided you up by process and structure measures for one group, which Lisa Kohr will be facilitating, and then an outcomes group which Dr. Jeffries will be facilitating.

7 Within your group, we'll be giving 8 each group one thumb drive. And on that thumb 9 drive will be the blank document that Sarah 10 showed earlier where you can take notes within 11 that.

So, however that group decides to take notes, if you want one person to be the note taker for your group and just take notes into that document and then save it on the thumb drive. And then when your group is complete, you will hand it to us and we will be able to download it to our computer.

And then potentially that same
person may want to continue to take notes
during the full Steering Committee meeting to
add any additional notes for that measure, or

1	you may want to have the secondary reviewer
2	for that measure just use the thumb drive for
3	that measure and then pass it on when the next
4	measure is discussed, and then have that
5	secondary reviewer take notes.
6	So, however your group decides to
7	do it, we just need to make sure that
8	everything is typed and saved onto the thumb
9	drive at the end and that notes - that blank
10	document for the notes.
11	I'm trying to think is there
12	anything else? I believe the breakouts are
13	going to be in this room.
14	So, we'll kind of direct Group A
15	and Group B once we have the room set up a
16	little bit more.
17	Does anyone have any questions
18	about the groups or - I think we have some
19	notes in one of the documents we sent, about
20	things you might want to think about when
21	you're presenting your measure.
22	So, if everyone is comfortable

1	with that and the process for the breakout
2	groups, then - you look like you have a
3	question, Dr. Hinkle.
4	DR. HINKLE: Yes, just real quick.
5	MS. WILBON: Okay.
б	DR. HINKLE: I think I understand.
7	For the developers, we will have one of each,
8	I guess, in each of our rooms. That's why
9	there's four people here.
10	That's all. Just for
11	clarification purposes.
12	MS. WILBON: Yes. And they may
13	want to rotate or what have you, but it is a
14	public meeting.
15	And Lisa and I will also be
16	rotating the room. If you guys have any
17	logistical questions or questions about the
18	process, we'll be here to answer those for you
19	as well.
20	Okay. We'll go ahead and break
21	then to get set up. Thank you.
22	(This portion of the meeting

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adjourned at 10:51 a.m. for Workgroup 1 2 Discussions.) 3 (Meeting reconvened at 3:47 p.m.) OPEN SESSION RECONVENED 4 5 3:47 p.m. MS. WILBON: So, just a brief 6 7 overview of what we're going to do for the rest of the afternoon. 8 9 We were a little bit off schedule. 10 I think both groups actually ran over a little bit with their discussions, which is good 11 because everyone wanted to be very thorough in 12 their discussion of the criteria and making 13 sure that they had all their bases covered. 14 So, sounds like everyone had a really good 15 discussion. 16 17 So, the way we're going to move forward with this is both groups were given 18 the USBs labeled "Group A" and "Group B" where 19 20 you were tasked with recording the notes during the discussion for each measure in 21 there so that there would be some record of 22

1 the group's discussion for each measure for
2 each of the criteria, and the group's vote on
3 whether they would recommend it, and their
4 ratings for high, medium, low.
5 So, once we get the USBs from both

6 groups, we will put that up on the screen so
7 that everyone can kind of read a little bit
8 visually as the primary reviewer presents that
9 measure.

10 So, we'll only have the primary 11 reviewer present that measure. If you could 12 give a recap of the measure itself and a 13 little bit of the discussion that went on within your individual group so that the other 14 group has an idea of what went on and what the 15 group's recommendations were, and then we will 16 open it up to the entire group for discussion. 17 18 Sarah Fanta from NQF, will be taking notes on a separate version not 19 20 directly into the one that you guys did, but a separate version of the discussion of the 21

22 entire group.

1 And what we'll do is send that 2 back out to the group after the meeting tomorrow so that anything we missed, you guys 3 will have the opportunity to add any 4 5 additional notes if she missed something or we missed something. 6 7 So, we'll have a really comprehensive record of the discussion that 8 9 happened both in the individual group, as well as the entire group sitting down together. 10 So that being said, does anyone 11 have any questions about how that's going 12 flow? 13 14 So primary reviewer presents, discuss the measure and what happened in your 15 smaller group, and then open it up to the 16 larger group for discussion, and then the vote 17 18 and so forth. So, I'll hand it over to Lisa and 19 Howard to take over from there. 20 I believe we plan to start with 18 and 21, which was the 21 22 Children's Hospital of Boston measure, along

### with one of the, I believe, STS outcome 1 2 measure as well. So, I'll go ahead and hand it over 3 and we will go from there. 4 5 CO-CHAIR JEFFRIES: Okay. So, 6 we'll start with Measure 18. And the primary 7 reviewer was Dr. Mavroudis. MS. WILBON: Just a quick reminder 8 9 to turn your mics on. That's what records -10 thank you. DR. MAVROUDIS: The measure deals 11 with the three different metrics for measuring 12 13 risk stratification/risk complexity - or complexity analysis for mortality. 14 The group had a good discussion on 15 this issue. Basically the metric -- it was 16 noted that all three metrics are noted in the 17 STS database and are given to every program 18 that's a participating program as part of 19 their report and it can be easily gleaned from 20 21 the database process. 22 I think like I said before, the

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discussion was a good discussion and it was, 1 I believe, unanimously approved, and it 2 obviously is a very important metric. 3 4 And I don't want to go any longer 5 than I have to, but I think that, Mr. Chairman, I think, or, Ms. Chairman, I think 6 7 that does it. Part of this is that some programs 8 use RACHS-1 metric, some use Aristotle. 9 Some 10 undoubtedly will be using the new STS-EACTS metric which has just been published this 11 12 month. 13 They all measure classifications within close proximity. They are based on 14 different units of -- metric units, more or 15 less, data, some all opinion, expert opinion. 16 But the classifications that have 17 been presented in the literature are 18 relatively close, and we feel that if they all 19 20 are used, sooner or later the new upscaled versions of each of them will eventually come 21 22 to pass. And we hope, we expect that within

a few years or so these metrics will meld into 1 one and that we'll eventually have one metric. 2 CO-CHAIR JEFFRIES: That was the 3 essence of the discussion. We had talked a 4 5 bit about the need for - well, was there - is there a need to pick one? And the feeling of 6 7 the workgroup was that we did want to pick one, and that three would be looked at and 8 9 would there be some ability at least within the STS data set, if not within other data 10 sets, to look at all three measures for a 11 12 center. 13 Any comments from other members of the Steering Committee? Anybody. 14 DR. GRAY: Something came up in our 15 group when I was actually looking at the codes 16 here, was the issue that there -- this one 17 sort of come up with a lot of them, but that 18 it's listed with CPT codes. And we're not 19 20 sure exactly why that is given the fact that the hospitals are going to be reporting using 21 ICD-9 codes, and obviously the STS has its own 22

1 separate set of codes.

And while physicians report with CPT codes, that's not going - we're not sure exactly how that is that that would actually work.

And in addition when I was just 6 7 looking at some of the codes, I noticed that you might want to include diagnosis codes for 8 9 adults with congenital heart disease because 10 you can't otherwise determine on the basis of a procedure that's done in adults, whether 11 it's done for acquired or congenital heart 12 13 disease.

And so, you'd need to be able to make sure that the centers are if they're including adults, that they're including only the ones that are basically with congenital heart disease.

And then also some of the codes that are in there, like there's sternal debridement, which I don't know that you'd necessarily want to include as a cardiac

1	procedure, there are a couple of
2	interventional cardiology codes as well, and
3	I'm not sure if you necessarily wanted to
4	include those as well.
5	CO-CHAIR JEFFRIES: So, Jeff, do
6	you have a comment about that? Marshall?
7	DR. M. JACOBS: I will just share
8	with you what I shared with our sub-group.
9	When we initially prepared these
10	measures, inclusionary or exclusionary
11	criteria when applicable were derived from STS
12	database terminology and codes.
13	My understanding is that a dialog
14	took place between STS staff and NQF staff,
15	and the NQF had specifically requested that we
16	include the CPT codes.
17	And I imagine that was in
18	allowance for the possibility that in the
19	future a center could comply by participating
20	in a registry database that was not the STS
21	database and would want to define those fields
22	by other widely applicable codes.

## 1 I think we're not in any way wed 2 to leaving those CPT codes in the measure descriptions if it's confusing, which I think 3 it is. 4 5 Do you agree with that, Jeff? 6 DR. J. JACOBS: 100 percent. 7 DR. GRAY: So again, I guess you just might want to include some list of ICD-9 8 9 diagnosis codes for capturing the adult cases 10 because just even the STS procedure codes are not necessarily going to capture that, I 11 12 guess. 13 CO-CHAIR JEFFRIES: Is there rationale from NQF for the inclusion of the 14 15 CPT? MS. HINES: That probably was your 16 discussion with Helen way back at the -17 probably because we ended up, as you well 18 know, with what began as facility level adult 19 20 measures, also using them as individual levels. 21 22 So my guess, and I wasn't part of

the conversation, was just to allow for that 1 2 to happen. 3 (Off the record comments.) DR. J. JACOBS: We can submit these 4 5 measures with ICD-9 codes, we can submit them with CPT codes or we can submit them just with 6 7 the appropriate list of diagnostic or procedural terminology, however you guys want. 8 9 We submitted them with CPT codes this time because that's the instructions that 10 we received. 11 12 And as far as Darryl's question 13 regarding adding additional ICD-9 codes to cover adults -14 DR. GRAY: The diagnosis codes. 15 DR. J. JACOBS: Diagnosis codes. 16 Again, the codes that would apply 17 to adults can also be submitted as ICD-9 18 codes, as CPT codes or from the STS 19 nomenclature list, because the STS 20 nomenclature list also applies to adults. 21 22 So, codes for adults with

congenital heart disease and codes for 1 2 children can be submitted in any way that the NQF desires and we'd be happy to send it that 3 4 way. 5 We have it at the STS office in 6 all those ways anyway, so just let us know. 7 CO-CHAIR JEFFRIES: Other comments? DR. MAVROUDIS: Does the process 8 9 require that we vote again on this? CO-CHAIR JEFFRIES: Yes. 10 DR. MAVROUDIS: And does the 11 process allow me as the lead discussant to 12 13 make a motion? MS. GRANNIS: No, I'm sorry. 14 Actually, it's the co-chairs who make the 15 motion. 16 CO-CHAIR JEFFRIES: So, I'll ask 17 for a motion for a recommendation vote on 18 19 this. 20 DR. MAYER: So moved. 21 CO-CHAIR JEFFRIES: Okay. So, 22 there are three ways that we can vote on any

measure. And that is recommend for time-1 limited endorsement, recommend for time-2 limited endorsement with conditions, and the 3 final one was do not recommend for time-4 5 limited endorsement. 6 So, can I get a show of hands who 7 recommends for a time-limited endorsement? Okay. So, we have a vote of 12 8 9 for that measure. 10 So, if we can move now to Measure 11 21? MS. HINES: Just for the record, 12 13 there were no no's. We have 12 members here. CO-CHAIR JEFFRIES: There were no 14 15 no's. Measure 21, standardized mortality 16 ratio for congenital heart surgery, risk 17 adjustment for congenital heart surgery. And 18 the primary reviewer is Dr. Mavroudis. 19 20 DR. MAVROUDIS: Thank you. This is an indicator to introduce the RACHS-1 model 21 22 that has been expanded to include four other

categories which include weight, number of
 operations - number of procedures that are
 done on one patient and age, so that the
 metric can measure observed and expected
 mortality.

6 And, please, if I'm getting any of 7 this wrong, don't wait until the end. Raise 8 your hand. It's a rather complex issue and I 9 don't want to understate it or even overstate 10 it.

The reason I believe why this was 11 brought into - why it was introduced is 12 13 because there was no other metric, including no other metric extant in the STS database, 14 and that the idea being that this was 15 something new and that the data has been 16 verified by the Boston group. 17 18 The discussion during this time

19 period centered around the idea that in 18, 20 Category 18, there was more of an inclusive 21 approach to the three different metrics for 22 the measurement of death. Not observed death

and expected death, but the calculations of 1 2 risk stratification, and that it was recognized that different groups around the 3 country used different metrics. 4 5 And that both the Aristotle and the RACHS-1 not associated with SMR, but the 6 7 RACHS-1 are part of the reporting structure of the STS. 8 9 Included also in 18, was the new metric which was based on empiric data of 10 80,000 congenital cases that had a better C 11 statistic than the other two. That is to say 12 13 the STS-EACTS had a better C statistic of correlation than STS and RACHS. 14 15 In any case, since that was, that 18, Indicator 18, allowed for choice of any of 16 those three, the discussion centered around 17 perhaps there could be a choice for this SMR 18 metric. 19 To that end, Jeff stated that this 20 is being looked at now in the STS database and 21 will be available in the next couple of 22

months, whereas the SMR equivalent or the SMR
 not equivalent, but the SMR calculation is
 ready to go now.

4 So, the conclusion that was never 5 met, we never had a conclusion on this 6 discussion, mainly because we were interested 7 in a fair approach, perhaps, or an inclusive 8 approach like we chose in Category 18.

9 And there were some suggestions, 10 one by Jeff, that Number 21 be melded into 18 11 so that the SMR can be calculated not only by 12 the RACHS method, but also by the Aristotle 13 method and also by the EACTS-STS method.

The objection to that on the other side, was that this hasn't been done yet by the STS or the EACTS-STS method. And since there are no data, there are no calculations, then how could the Boston group understand what they are being put into and how that is going to compare.

21 The tenor of the discussion was, I 22 believe, free from contention. And the import

1 was also free from contention.

The idea was that we were looking 2 for a way to do this in an ecumenical way, if 3 4 vou will. We never arrived there. 5 And we didn't only because we stopped the discussion and I think that the 6 7 idea was to bring it back here. Now, I'm sure that in my 8 9 description of all this that I didn't consider all the sides equally, although I tried to and 10 it was my intention. 11 12 My personal thought was that the 13 SMR ought to be moved from 21 into 18 so that it would be part of the overall system of 14 mortality expression, for instance. 18 had 15 risk stratification and that this is a subset 16 of risk stratification. After all, we're 17 talking about observed mortality and expected 18 mortality. 19 And it could be and that the RACHS 20 21 could be one way of dealing with it, and then 22 STS would come up with another way, and the
EACTS-STS would come up with another way and 1 that would be in that - however, since this 2 was already proposed as 21, it would be maybe 3 a little difficult to do that. 4 5 And then the other alternative would be to as the presenters of 21, to accept 6 7 the fact that not only could RACHS be used to calculate the SMR, but also measurements from 8 9 the STS and also the EACTS-STS metrics. 10 The response to that was that they didn't know what this entailed. And how could 11 12 they agree to something that they didn't know 13 about, they didn't see, they didn't have their arms around, they didn't understand it? 14 The word was "agnostic to it," 15 which I think was a nice succinct way of 16

17 putting it.

18 So, right now we are at a little 19 bit of a standstill here or standoff what to 20 do about this.

We considered tabling it, weconsidered having the two parties perhaps talk

1 about it.

2	And we also considered the
3	ramifications of allowing a 21 to exist, and
4	also another one, a 22 to exist. That means
5	21 would have an SMR based on the RACHS
6	classification, and 22 would have an SMR based
7	on the STS and EACTS-STS calculation.
8	The problem with that is, is that
9	it would allow the insurers, the government,
10	whoever else is interested in this, to pick
11	out one of those and that it would be sort of
12	a - they would be doing the picking out of
13	what is the right metric and not us.
14	Furthermore in complicating that
15	is that we really all agreed that we didn't
16	know, and we still don't know, what is the
17	best metric.
18	This is a procedure in motion.
19	This is something that in one or two or four
20	years, or who knows what, the science alone
21	will determine which system is better.
22	It could be that RACHS-2 when it
1	

comes out, will be better. It could be that 1 2 the EACTS-STS combination will be better. And to allow someone to pick something a priori 3 and not have the benefit of a natural 4 5 selection, is probably wrong. We didn't want that. 6 7 We wanted a natural selection to take place. Not so much as the winner take 8 9 all, but what would be the best for this 10 metric, and what would be best for public 11 reporting. 12 So in a very long-winded way, 13 which I was trying to be careful not to add

any kind of gasoline to the fire - although we haven't had any fire yet, I just didn't want to even start it. And I don't think we need to because people who are disagreeing here are disagreeing from virtuous positions.

19 People believe in what they are 20 doing, and what else do we want except that? 21 That's great.

22

But we should continue this. We

should continue to have people believe in what 1 they're doing which eventually will probably 2 come into an understanding of what we should 3 do moving forward. 4 5 So it's wrong, I think, to make a decision on this now to sort of embrace one 6 7 over another even though that one is existing and the other one is four weeks away. 8 9 And so if I have to make a 10 decision here, I would say that we should table this and not approve it as it is right 11 12 now. 13 But if there is any other way, any other more diplomatic way of doing it, I'd 14 love to see that as well. 15 We're faced with one of three 16 I don't like any of them. 17 choices. But if I had to vote, I would say that we should table 18 this and try to see if we can move in a more 19 20 Venus way than a Mars way. 21 I'm finished. 22 (Laughter.)

1 CO-CHAIR JEFFRIES: Okay. Is there 2 anybody who was part of the workgroup want to add anything to what Dr. Mavroudis said, 3 though I think he summarized the discussion 4 5 very nicely? 6 DR. MAVROUDIS: Long winded. 7 CO-CHAIR JEFFRIES: Kathy. DR. JENKINS: I would just like to 8 9 weigh in and be sure that - Gus, I actually 10 thought you described that very, very well. And I think you did take - it was a really 11 nice summary of the discussion that we had. 12 13 The only thing, I guess, that wasn't clear to me, but hearing you explain it 14 again, why it is that you want the SMR either 15 16 part of 18 or you want all of the methodology incorporated in 21 a little bit as a strategy 17 that won't allow picking of one measure over 18 another by the insurance companies, I'm not 19 20 sure that that's true. 21 But if there's a concern that 22 that's true, it would be fine with me to have

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the three SMRs proposed under 21 as long as 1 it's the STS that's proposing the other two. 2 Because I'm just finding myself in 3 this difficult position about being the 4 5 sponsor of a measure who's responsible for its scientific content, who's approving it and 6 7 making it better in three years, for a measure that I just don't have my hands around the 8 9 science for. 10 So, my only objection is being the individual proposing the additional SMRs and 11 taking responsibility for it. 12 13 However, the language was about putting it with 18 or keeping it separate or 14 putting it together with 21, I really have no 15 objection to. 16 I want to be sure that's clear. 17 It's only having it be my responsibility as 18 the proposer. That's my only objection. 19 20 CO-CHAIR JEFFRIES: Marshall. DR. M. JACOBS: Well, I think that 21 22 that was a very appropriate, informative,

terse response after Dr. Mavroudis' soliloguy. 1 2 I didn't have the advantage of sitting in on that group and I see there being 3 three issues. 4 5 One is a measure of performance related to a calculated ratio of observed to 6 7 expected mortality, which is a very useful tool and a very informative tool. It's used 8 9 in the STS adult database. 10 And in fact since two reports ago in the fall of 2008, it's used for neonatal 11 and infant mortality reporting in the STS 12 13 congenital database. 14 So, at least to the extent that I can speak on behalf of the STS, we have no 15 negative or contentious issues with regard to 16 expression of observed to expected mortality 17 or a derived ratio or index from that and I 18 think it's an excellent idea. That's Issue 19 20 Number 1. Issue Number 2 is the issue of 21 22 whether outcome reporting by complexity

stratification for the NQF should rely on one 1 stratification tool, two or three. 2 And Howard addressed that. And I 3 4 think the sentiment of the group was expressed 5 in their vote on Measure 18. That is what it is and I think it was important. 6 7 I think it's entirely possible to work together and accomplish what Kathy 8 9 mentioned in her last discussion. I don't see 10 very much challenging about calculating a comparable ratio based on observed and 11 expected mortality using the Aristotle Score 12 13 and STS data or using the STS-EACTS Score and STS data. 14 I think the quandary or the 15 conundrum to be resolved if I understand 16 correctly, is the reference data set from 17 which the expected mortality is derived. 18 Which for your preliminary work on 19 20 the SMR, is one particular multi-institutional data set which is different from the STS data 21 22 set.

1	So, insofar as one can make
2	preliminary proposals not speaking on behalf
3	of an entire organization, I think if we can
4	sort out the question of the reference data
5	set from which the expected mortality is
б	derived, then it ought to be very possible for
7	the STS to work with Dr. Gauvreau and Dr.
8	Jenkins to create something very much SMR-like
9	using all three complexity stratification
10	measures.
11	DR. MAVROUDIS: If I may, the power
12	of discussion is overwhelming. It sounds like
13	we have a very nice resolution, I think, to
14	this problem, to this conundrum.
15	And that is that perhaps this
16	could be a hybrid 21, that in fact the Boston
17	group represents the SMR within 21. The STS
18	can take control of their own metric and that
19	it can be put together in the same kind of
19 20	it can be put together in the same kind of way, in the same spirit as 18. That's what it

though, you have to have a measure steward 1 2 responsible for each measure. So, if Kathy wants to maintain Boston's measure as it 3 stands and STS is going to make a 4 5 complementary measure with the other databases, that's still two metrics because 6 7 STS would own one, and one Kathy would own. So, we would still need to vote in 8 9 that case on the measure in front of us, and then STS could submit a second measure. 10 DR. MAVROUDIS: On the other hand, 11 the Measure 21 could be temporarily tabled to 12 13 give the particulars with the people in - who are approaching unity on this to develop a 14 metric that would include all three. That's 15 the other way of looking at it as well, I 16 think, although not knowing the process as 17 well as you do. 18

MS. HINES: Right. And I think we have a measure on the table that we're going to have to deal with, and it sounds like the development of that measure could be a new

measure that has all three versus one. 1 I'm not seeing tabling because 2 we're not combining the two and we're not 3 going to have one owner, so it - I'm still -4 5 DR. J. JACOBS: So, I think that Kathy's idea was a brilliant idea. And what -6 7 her original concern about combining these two metrics with hers, the measure steward, 8 9 was how could she be responsible to write about the other two metrics. 10 I think what we could do is Kathy 11 could continue to be the measure steward and 12 13 she could have substantial help from me, Marshall and Sean O'Brien at DCRI to write the 14 components relating to the other metrics. 15 And a revision of this metric could be submitted 16 with Kathy still as the primary steward, but 17 with the support of us to fill in the 18 remaining piece. And then it would be a 19 20 metric that would be supported by all groups. 21 So, the process might be that it has to be tabled now and resubmitted with the 22

# revised version. But we could help do our 1 piece, and then we could come back with 2 something altogether that would be harmonious. 3 4 CO-CHAIR JEFFRIES: Kathy, what's 5 your opinion on that? 6 DR. JENKINS: Whatever works. Seriously, I think that quite frankly an SMR 7 is a very, very useful measure for centers, 8 9 provided it covers a reasonable component of 10 the case mix and really does give centers a very good sense of how they're doing as long 11 as the risk adjustment is at a reasonable 12 13 level. And I think it would be a shame to 14 not have an SMR endorsed because of this issue 15 about what's the best way to categorize the 16 patients and incorporate the additional 17 variables. 18 I'm a little confused about the 19 20 NQF process about how's the best way to do it. 21 It's not possible, you know, the STS database process doesn't allow a lot of other people to 22

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see their data and evaluate their data, modify
 their data. They make changes through a very
 hierarchical surgeon-driven process.

4 So, it probably does make more 5 sense to retain flexibility, for us to do it 6 Jeff's way rather than in the other direction. 7 But seriously, whatever works best for the 8 process.

9 My goal is to have an SMR proposed 10 with the validity that we developed in 2002, 11 to be available for centers to benchmark their 12 performance.

13 CO-CHAIR JEFFRIES: Thanks. So, 14 would this fall under the endorsement with 15 conditions?

16 MS. HINES: Kathy, I mean if you we can table it if you two want to talk and 17 come up with a solution or proposed solution 18 to--I just want to - we have a measure on the 19 table to consider as is to vote. 20 We've had suggestions for modifications to add in the 21 22 other two data sources. If -

Page 86 DR. JENKINS: No, not data sources. 1 MS. HINES: Well, the different 2 3 models. DR. JENKINS: We've had the 4 5 suggestion to propose three SMRs. 6 MS. HINES: Right. DR. JENKINS: One, the SMR that we 7 proposed. One, if I understand correctly, 8 9 it's an SMR derived by four Aristotle 10 categories and the variables, I assume, that are currently part of RACHS. And then the 11 five STS categories and the variables that are 12 13 currently a part of RACHS. And I think that that's a very 14 reasonable suggestion. I don't have any 15 objections to proposing those SMRs. 16 (Off-mic comment.) 17 DR. JENKINS: For the RACHS 18 Methodology as we outlined in our proposal, 19 20 RACHS can be used within various types of data 21 So, it could certainly be generated sets. within the STS database. It can also be 22

1 generated in other ways.

2	I'm not as certain about the other
3	two just because I'm less familiar with the
4	details. But that's the measure that we
5	proposed, and that's the measure that we are
6	still willing to put forward.
7	So, the reference for RACHS
8	changes based on the user. It's not
9	exclusively a reference set from the STS
10	database.
11	But it certainly can be used
12	within the reference set of the STS database
13	once the database has the variables that are
14	part of RACHS, which I understand will be true
15	soon. And then data will accrue and that will
16	be able to happen every quarter or every six
17	months or -
18	MS. HINES: So conversely, the STS
19	measure or the STS modification would be
20	purely from the STS database, or you're going
21	to add the additional data sources.
22	DR. JENKINS: Well, the other

categories can also - it's a methodology. 1 So, 2 presumably it will be used in the EACTS database and other databases, but -3 4 DR. J. JACOBS: I would agree with 5 what Kathy said. The methodologies that we're proposing to add to this metric can be applied 6 7 to any data set that exists. So, Kathy's RACHS tool and our 8 9 Aristotle and STS-EACTS tools, all three have been used in the STS database and the full 10 RACHS can be applied to the STS database. And 11 conversely, all three tools could be applied 12 13 to any other data set, including administrative data sets. 14 I think that this process has led 15 to a very good ending conclusion of a way to 16 solve this problem in that we could team up 17 together and revise this metric in such a way 18 that it deals with all three complexity 19 20 stratification tools equivalently and that it would have the full support both of the team 21 from Boston and of the STS. 22

1 DR. MAVROUDIS: If I may offer a 2 suggestion -3 DR. J. JACOBS: And excellent flexibility -4 5 DR. MAVROUDIS: This may not fit into your categories of what we should do, but 6 7 I don't know why we couldn't: We can table this for the moment and ask Jeff and Kathy and 8 9 Marshall to look at this a little further and 10 then come up with another proposal, which would be 21. And it would be a part different 11 from 18. I think I was wrong in my having to 12 associate this with 18. 13 The way Kathy said with 21 is, I 14 think, a good idea. SMR is a different 15 metric. Let them come up with something 16 that's agreeable. I mean if they're agreeable 17 to it, we would be agreeable to it. 18 We're sitting here in some 19 solemnotic Buddhist kind of way in trying to 20 find out what the best way to deal with this 21 22 and because of your metrics, you're not

1 allowing us to.

2	And I think that we should bend
3	here a little bit and say okay, we'll table
4	this and we can discuss it at our next
5	telephone conversation. And we should invite
6	the particulars in that telephone conference
7	and do it.
8	And I guess if your bosses don't
9	like it or if you're the boss and you don't
10	like it, I would say look at it again and make
11	it so you do like it.
12	MS. HINES: What I'm making sure,
13	and thank you for your thoughts, what I'm
14	making sure is that I have both developers
15	that are saying yes, that they're willing to
16	talk and try to come to some - that's all I
17	need to hear is that Kathy is willing to put
18	her metric back on the table and try to work
19	it out and bring it back to us.
20	I guess just to make it worth
21	their while, do you want to do a straw vote to
22	just say that this, in concept, is a good

metric and the group supports that? 1 2 DR. HINKLE: Just a point. Can I ask a question, a clarification? So, a 3 4 process question. 5 It seems to me if they can work on it tonight or today, then we could reconvene 6 7 the outcomes group to look at it again and vote it for the committee so that the, you 8 9 know, because we've been batting this around for a while and -10 11 CO-CHAIR JEFFRIES: We would just review it in committee. 12 13 DR. HINKLE: In the committee? CO-CHAIR JEFFRIES: Yes. 14 15 DR. HINKLE: The whole committee? CO-CHAIR JEFFRIES: Yes. 16 DR. HINKLE: Okay. So, I just 17 wanted to ask that clarification, but -18 DR. J. JACOBS: I think we need a 19 20 little more time than one night to get -DR. HINKLE: Okay. That - yes, 21 22 that's what I didn't quite understand. I mean

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1 otherwise -2 DR. J. JACOBS: We can give you a one-sentence or two-sentence metric. But to 3 4 fill up that whole packet -5 DR. HINKLE: Yes. So, maybe the teleconference. You mentioned that someplace. 6 7 DR. MAVROUDIS: Do you need a whole packet, or can they give you additional -8 9 MS. HINES: Yes, it would be 10 changed enough that we would have to modify 11 what we've got. DR. MAVROUDIS: What kind of a 12 13 motion do we need? CO-CHAIR JEFFRIES: I think we 14 should do a straw vote and see with the 15 changes that could have been outlined here if 16 that - when that comes back to this group, 17 that the group would recommend it. 18 19 DR. MAYER: I'm sorry. I've been 20 trying to stay quiet here, but it seems to me that what we're talking about, and maybe just 21 22 hopefully to clarify this a little bit, is

we're talking about using the standardized 1 mortality ratio approach as a measure, right? 2 DR. MAVROUDIS: Yes. 3 DR. MAYER: And, I mean, that's the 4 5 only conceptual question here. And I think we are then looking for a way for the two 6 7 respective sponsors, each of whom has access to differing data sets and may have 8 9 incorporated slightly different variables in 10 one way or another to see if they could agree on either a common data set or some way to 11 rationalize this in such a way that a 12 13 standardized mortality ratio approach could come forward as a measure for the - as an 14 15 approved NQF measure. Did I reflect the discussion 16 correctly? 17 CO-CHAIR JEFFRIES: That's my 18 understanding. 19 20 DR. MAVROUDIS: It may not be a 21 unified approach after three or four days of 22 discussion, but it would set the stage for

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that over a period of time that what we would 1 hope to happen is that we eventually have one 2 metric for all of these things. 3 I believe that that's what we -4 5 DR. MAYER: I'm not sure that, you 6 know, I think the likelihood might be that 7 from two different data sources you might actually get slightly different answers. 8 9 I think what we're talking about 10 is the common approach of creating the SMRs at the institutional levels and recognize that 11 the answers might actually - I mean one would 12 13 hope not, but it is conceivable and possible that we might wind up with differing -14 15 DR. MAVROUDIS: Agreed. 16 DR. MAYER: That's all. CO-CHAIR JEFFRIES: Yes, Marshall. 17 DR. M. JACOBS: May I just 18 supplement what John said? 19 20 I mean my understanding of this discussion is that one of the positive aspects 21 22 of Measure 18 was that it gave the participant

the option of reporting using one of three 1 2 complexity stratification tools. 3 Is that correct? DR. MAVROUDIS: That's correct. 4 DR. M. JACOBS: And so we're now 5 proposing that the participant report an SMR 6 7 using their choice of three complexity stratification tools with our two teams 8 9 working together to develop those metrics. 10 Is that what seems to be on the table? 11 12 CO-CHAIR JEFFRIES: Yes. 13 DR. M. JACOBS: Okay. CO-CHAIR JEFFRIES: And so with 14 those clarifications, let's take a straw vote 15 and see how people would agree based on that 16 measure when we see it again. 17 DR. HOYER: Are you asking how we 18 would vote if in fact everything was 19 reconciled? 20 21 CO-CHAIR JEFFRIES: Correct. 22 DR. HOYER: Or are we voting right

1 now with -2 CO-CHAIR JEFFRIES: No. 3 DR. HOYER: - the three choices? 4 CO-CHAIR JEFFRIES: We're voting as 5 if it was reconciled so they know that the work they're doing is not going to be in vain. 6 7 Okay. So, we have 11 straw 8 Straw. 9 votes, and the one not in the room. Okay. 10 DR. MAVROUDIS: That was easy. CO-CHAIR JEFFRIES: Yes. 11 The workgroup clearly dealt with all the issues. 12 13 So, we have time for a public comment, for the public who hasn't commented. 14 15 (Laughter.) 16 MS. WILBON: Operator, are you there on the conference line? 17 18 THE OPERATOR: Yes, I am. 19 MS. WILBON: Is there anyone on the 20 participant's line for the public? 21 THE OPERATOR: Yes, Boston is on. 22 MS. WILBON: I'm sorry?

1 THE OPERATOR: Boston is on. MS. WILBON: Oh, Boston is on. 2 We're opening it up for public 3 So, if you'd like to make a comment 4 comment. 5 at this time, you're on. THE OPERATOR: Please press Star 1. 6 7 PARTICIPANT: The only thing that I would like to say is that I think just from a 8 9 perspective of having a metric that's been in 10 the public domain versus one that would require participation in a database that 11 requires funding, I just think that that does 12 13 have an option. And that's just a comment that I 14 have about this as stewards of this measure. 15 16 DR. J. JACOBS: That's an excellent comment from the phone. 17 18 The metrics that have been proposed, best as I can tell, all 20 of them -19 20 all 21 of them, none of them require 21 participation in any specific database 22 whatsoever.

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1 And when we developed the 20 that we developed, and the same is true for 2 Kathy's, we were all very careful to put 3 wording in place that did not require use of 4 5 any specific database whatsoever. 6 MS. WILBON: Is there anyone else 7 on the line that would like to make a comment? Operator, is there anyone else on 8 9 the listener's line? THE OPERATOR: Not at this time. 10 11 MS. WILBON: Okay. Thank you. 12 CO-CHAIR JEFFRIES: So, we're going 13 to continue with - let's do another outcome measure. So, why don't we go back to the 14 15 start of the outcome measure group which was Number 12. 16 Patricia Galvin is the primary 17 presenter for that. 18 19 MS. GALVIN: So Number 12, the 20 measure is the use of an expanded pre-21 procedural or post-procedural time out. There is basically four elements to this 22

1	recommendation that the conventional pre-
2	procedural time out which includes the
3	identification of the patient, the op site,
4	procedure and history of any allergies is one
5	measure or one indicator.
6	A pre-procedural briefing wherein
7	the surgeon shares with all members of the
8	operating room team the essential elements of
9	the operative plan, including diagnosis, plan
10	procedure, outline of essentials in
11	anesthesia, bypass strategies, anticipated or
12	planned implants or device applications and
13	anticipated challenges.
14	That there would be a post-
15	procedural debriefing wherein the surgeon
16	succinctly reviews all members of the team the
17	essential elements of the operative plan
18	identifying successful components and
19	opportunities for improvement.
20	The debriefing ideally would take
21	place in the operating room and may be
22	followed by a more in depth dialog at a later

1 time.

2	A briefing or a handoff protocol
3	at the time of transfer or arrival to the
4	intensive care unit, a clinician-to-clinician
5	handoff, if you will, at the end of the
6	operation involving the anesthesiologist,
7	surgeon, physician staff of the intensive care
8	unit, including critical care and cardiology
9	and nursing.
10	The discussion centered around
11	I think everybody felt that this was
12	important, it's in line with national patient
13	safety goals, it's been well documented in the
14	literature, and that those parts of the
15	measure were without question.
16	There was a brief discussion about
17	the ability to - the feasibility of how the
18	data would be collected that if you are saying
19	yes, you are saying yes to all of the elements
20	that are included in each separate section.
21	But the workgroup discussed that
22	and felt that this measure was feasible,

1 usable and worthy of voting. 2 CO-CHAIR JEFFRIES: Okay. Are there any comments from either group? 3 DR. GHANAYEM: Actually, I have a 4 5 question. I'm interested in how the group 6 7 thought this would be feasible. Τn practicality, this would be great to do, but 8 9 oftentimes the surgeon is starting the next case in the next room, the cardiologist is off 10 somewhere else, there's an intensivist at the 11 12 bedside. 13 So if you don't have all of the elements, which is unlikely to happen a lot of 14 the time, how does that get measured? 15 I think this would be great if it 16 could happen. But in an era where we have 17 more and more work with fewer resources, I'm 18 not quite sure how this is possible. 19 20 CO-CHAIR JEFFRIES: And are you 21 commenting on -22 DR. GHANAYEM: The post-procedural

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1 handoff. 2 CO-CHAIR JEFFRIES: The briefing. DR. GHANAYEM: Yes. 3 CO-CHAIR JEFFRIES: And the 4 5 handoff? DR. GHANAYEM: Well, the - yes. 6 7 The handoff also specifies that all those people need to be there. 8 9 CO-CHAIR JEFFRIES: Okay. MS. GALVIN: So in our discussion, 10 we talked about in clinician-clinician to 11 handoff, a lot of places are implementing 12 13 this. That at the bedside once the patient is settled, there is a brief discussion, takes 14 five or ten minutes, where the operative 15 procedure is sort of recapped and a lot of 16 information is shared. 17 18 DR. GHANAYEM: But not to this degree of rigidity. So, you might have a 19 surgical PA, you might have a surgical 20 resident, you might not have a surgeon there 21 22 at that moment, you might have an anesthesia

1 fellow.

2	MS. GALVIN: Well, we talked about
3	whether it would be an attending or a
4	resident. And in our situation or in our
5	discussion, either would be fine as long as it
6	was a surgeon who was at the procedure, who
7	participated in the procedure.
8	DR. GHANAYEM: I'm just concerned
9	that the way this is written leaves room for
10	more times this not happening to the letter of
11	the law than it does happen to the letter of
12	the law.
13	So, it would need to be, I think,
13 14	So, it would need to be, I think, reworded to some degree.
14	reworded to some degree.
14 15	reworded to some degree. MS. GALVIN: I think what we
14 15 16	reworded to some degree. MS. GALVIN: I think what we discussed was that there would be what I think
14 15 16 17	reworded to some degree. MS. GALVIN: I think what we discussed was that there would be what I think Dr. Mayer referred to as escapes. That yes,
14 15 16 17 18	reworded to some degree. MS. GALVIN: I think what we discussed was that there would be what I think Dr. Mayer referred to as escapes. That yes, that in the document, in the auditing, that
14 15 16 17 18 19	reworded to some degree. MS. GALVIN: I think what we discussed was that there would be what I think Dr. Mayer referred to as escapes. That yes, that in the document, in the auditing, that yes, you did or no, you didn't because the
14 15 16 17 18 19 20	reworded to some degree. MS. GALVIN: I think what we discussed was that there would be what I think Dr. Mayer referred to as escapes. That yes, that in the document, in the auditing, that yes, you did or no, you didn't because the patient was unstable, that there was a reason

critical time and there's a lot going on. 1 And so we need to - as you said, we need to take 2 that into account and that would be in the 3 documentation. 4 5 CO-CHAIR JEFFRIES: Marshall. 6 DR. M. JACOBS: I think Nancy's 7 point is very important and very practical. In putting the measure together though, we 8 9 thought that the collaboration between the 10 compartments in a multi-disciplinary team is what makes the transition successful. 11 I think that there are a lot of 12 13 rules that are delegatable. Some things by law, are undelegatable like informed consent. 14 There's nothing in this measure that says 15 roles are not delegatable. That if the 16 attending surgeon is doing a case in another 17 room, the resident surgeon or PA stands in, in 18 the role of surgeon during the debriefing and 19 20 the transfer. 21 So, I think it was in that spirit 22 that this measure was put together.

Somebody's got to participate in those roles, 1 2 but several of them are delegatable as 3 necessary. CO-CHAIR JEFFRIES: And then we 4 5 also had some discussion about the numerator, about the numerator being all or none. 6 7 So if you don't do any of these elements, it would be a zero. If you do all 8 9 four, then you get a one and that the measure is a rate. 10 11 Other comments? 12 DR. HOYER: I guess I would also 13 have a few concerns that Nancy voiced about just the rigidity of this. And we had some 14 discussion in our meetings about some of the 15 ways that if these kinds of things are tracked 16 and then - it's an effort to raise the bar for 17 It's an effort to raise the bar to a 18 sure. higher standard. 19 20 And I don't know that anybody is 21 in actuality doing that all of the time, and 22 probably not very often, at least all four

1 components of that.

The number one component is things that are required now, obviously. But the additional things obviously would raise the standard.
And then if those are looked at by outside parties, again it becomes a way of

8 potentially, for lack of a better term, 9 dictating the way one practices medicine and 10 practices these things.

Now again, they're all noble and worthwhile ideas, but it does kind of put a little bit of if you don't meet the standard, you did three-and-a-half out of four, is that something that's going to ding you at some point if it does become something that is adopted as a standard of care.

I mean we should all strive to do these things at every and any point in time, but I personally haven't seen a surgeon - and this is no knock on anybody, but I haven't seen one do a post-procedural debriefing. I

have not seen that, witnessed that yet. 1 2 MS. GALVIN: From a nursing perspective, I would agree that we have a 3 formal debriefing. But at the end of a 4 5 procedure, we do ask what was the procedure that you did, because we have to document that 6 7 in the medical record. So, there are pieces of this that are already in place. 8 9 The one that I would agree with in 10 Number 3 was if there was something that went wrong, and then what we discussed in the group 11 12 was it doesn't have to happen right then, it 13 just needs to be acknowledged at that point, and then a debriefing, you know, we need to 14 talk about this at a later date because, you 15 know, again the patient - you're getting ready 16 to transfer the patient out of the room, it's 17 a critical time. 18 So, the idea of having that 19 conversation is the intent of the measure as 20 21 we saw it. DR. GHANAYEM: Actually, I think, 22

Lisa, you brought this up at our session. 1 Τf we keep the wording like this, then we run 2 into the same problem as Mark has alluded to 3 with the third-party payers that - like 4 5 central line-associated infection, ventilatorassociated pneumonia, if you have that, that 6 7 is a reason for them not to pay you. If we put the wording in here and 8 9 we don't document that each of these four 10 points have not been thoroughly accomplished regardless of the rationale, third party payer 11 12 can still say we're not going to pay you. You 13 haven't met the NQF measure. And I think we actually put 14 ourselves in jeopardy unless we reword this. 15 CO-CHAIR JEFFRIES: Marshall. 16 DR. M. JACOBS: I think this is a 17 fascinating discussion, but I'm not sure it 18 pertains specifically to this measure anymore 19 20 than it does generically to the whole process. I mean I heard a certain reticence 21 22 or fear about raising the bar, which I think
we ought to be very anxious to raise the bar. 1 And I heard an articulation of if 2 we endorse something, then it's going to 3 dictate how people practice, which it can be 4 5 looked at from two perspectives. I'm asking very honestly and 6 7 innocently, doesn't every measure that the NQF endorses dictate how people are going to 8 9 practice in the sense that payers are going to 10 look for compliance, parents are going to look for compliance, referring physicians are going 11 to look for compliance, administrators are 12 13 going to look for compliance? And unfortunately if you want to 14 make quality systematic rather than just 15 altruistic, you really are dictating how 16 people are going to practice, but you're 17 trying to raise the bar in a rational way. 18 I'm an outsider to this process 19 20 and I'm confused by the dialog. DR. GHANAYEM: This one can't be 21 22 met though. With the resources we have

available to us right now, we cannot meet this 1 2 one as it's laid out. Yes, there should be debriefings, 3 but to have all these people at the bedside is 4 5 a problem. DR. M. JACOBS: Well, this sort of 6 7 stuff comes from models like how Air Force pilots interact with the crews on aircraft 8 9 carriers and how airline pilots interact with 10 control towers and ground crews, and it has been proved in those circumstances to save 11 12 lives. 13 And in the pilot studies done in adult cardiac surgery at the Mayo Clinic, it's 14 been proved to reduce errors. 15 I think there's only so much that 16 you can relax the proposal if you intend to 17 achieve the desired end. 18 19 CO-CHAIR JEFFRIES: Dr. Mayer. DR. MAYER: Well, I think the other 20 21 thing is maybe we don't need to think about this as a black/white sort of issue. I think 22

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that many of - I'm pretty sure this is right: There are some of the metrics that are in the adult STS cardiac database and the measure set that do require accomplishing several things in order to get credit, if you will, and I think the data are that nobody is at a hundred percent.

And so the notion that somehow or 8 9 another your local insurance payer or whatever 10 would deny payment for the whole case because you didn't meet all four of the - or didn't 11 use some percentage, I mean that's a little 12 13 bit outside this process because that's a subject of negotiation between you and your 14 15 payer.

And I can tell you that from our own personal experience in a different realm with one of our local payers, we had a quite involved negotiation about what we were going to do with blood stream infections and recognizing things like the asymptote problem, you know, you can't get the infection rate below zero, as an example. Here, you couldn't
get above a hundred percent compliance.

And I think there's a recognition 3 4 that we're never going to get this a hundred 5 percent of the time. We've tried pretty hard, and I would say most of the time we would get 6 7 three out of four. We do the ICU brief/handoff thing. We do the timeouts 8 9 beforehand and stuff. 10 The debrief in the operating room I think the way it's phrased, is to be pretty 11 succinct and brief. And that if there were 12 13 issues during the case, that all you do is you said this was an issue, not that you resolve 14 it, that you figure out well, it's because 15 somebody forgot to call for this or something 16 like that. 17

18 So, I guess I'm not so 19 uncomfortable with this with those caveats 20 that if as we're collecting the data we say 21 sorry, we didn't have time or weren't capable 22 or doing the debrief because the patient was

pretty unstable and we thought the best thing 1 2 was to get the child to the unit and get settled and then let the dust settle, that 3 that would be a legitimate escape that you 4 5 wouldn't necessarily be penalized for that. And so I think rather than 6 7 thinking about this in black and white terms, I think if it's viewed as something that we're 8 9 trying to get to that there is a recognition 10 that we're not going to get it a hundred percent of the time, maybe that would give you 11 a little bit more comfort with this measure. 12 13 MS. GALVIN: I think the other thing that I would add to that is that when we 14 actually did implement that in our ICU, if you 15 look at Number 4 and the people that are 16 there, all of those people are at the bedside. 17 18 So, all we were saying was that everybody had to come together at one point 19 and hear the same information. 20

And actually it streamlined theprocess because the nurse at the bedside in

the past, couldn't hear what the 1 2 anesthesiologist had to say or didn't hear what the plan for the night would be. 3 This way it really streamlines 4 5 communication so you don't have all of those 6 questions later. 7 DR. GHANAYEM: And I absolutely agree and we do the exact same thing. 8 9 However, there are some variations of what's 10 written -11 MS. GALVIN: Right. 12 DR. GHANAYEM: - based on the 13 availability of the resources. So, oftentimes it is a PA, it's not a surgeon. 14 15 MS. GALVIN: Right. DR. GHANAYEM: It is the 16 anesthesia fellow. It's the ICU fellow. 17 But yes, you're right. It reads a little bit too 18 black and white. 19 Realizing that, I would hate to 20 21 see a third party payer come to us and say 22 well, you didn't have all these people here,

check off that they were all here, and for
that reason you can't get paid for your
services.

DR. LOPEZ: If I could just make a 4 5 comment, I mean I don't work for private insurance, but I do work for a state Medicaid 6 7 agency and we don't really look at whether a provider has checked every single box. 8 We 9 never withhold payment for anything like that. 10 What we might look at is quality and the kind of quality of care that's being 11 provided to the patient. 12 13 And if we see that there's an issue with a single provider, perhaps an 14 institution, we'll start talking to that group 15 or that institution. 16 Occasionally we'll have some calls 17 from other providers complaining about someone 18 down the street and perhaps what they're 19 20 doing, we get calls from patients concerned about the quality of care that they've 21 22 received, so we'll start investigating those

1 providers.

2 But we really don't withhold treatment just because something wasn't 3 checked off - or withhold payment, I should 4 5 say. DR. HINKLE: I'd like to make a 6 7 quick comment. I am from one of those payers, the private payers, but I've also been a 8 9 pediatric anesthesiologist. 10 Let me just make a couple of comments. One is that measurement is here in 11 medicine and it's moving forward. And my 12 13 participation in this process, I think, has been very - I'm very enlightened by the group 14 moving forward. 15 Pediatric cardiac surgery I would 16 have thought would be the last sub, sub-17 specialty I would have thought moving in this 18 direction. 19 20 So, I applaud the fact that you're 21 moving forward and you own - you're going to 22 try to own these metrics going forward.

1	And I'd hope that in most of your
2	markets if a payer does come forward, you
3	would meet with them.
4	I've only had, I can tell you in
5	my experience, it's mainly primary care, but
б	I did have an anesthesia group come forward
7	and say we would like to be measured, we would
8	like to have a pay for performance program to
9	make a little more money.
10	And I met with them and they came
11	up with the metrics. We went through them
12	back and forth and we came to a decision on
13	the metrics that they were under their control
14	and they were very reasonable and now that's
15	in place, and so we're moving forward around
16	their metric.
17	So, I would hope that you wouldn't
18	get - I mean I can't imagine any medical
19	director, chief medical officer at any health
20	plan in this country meeting with pediatric
21	cardiac specialists and dictating measures.
22	They may look at these NQF

measures and say to you what do you think? 1 Τf you want to even participate in upside, you 2 know, increasing upside payments, then they 3 would take - these would at least be a 4 5 discussion point. 6 They could put them on the table 7 and say, Nancy, what do you think of these? And then it would be a collaborative process. 8 9 None of these have been, you know, 10 they've all been collaborative in primary care as much as it doesn't sound that way from the 11 outside, you know. 12 13 So, I would just say congratulations that you're doing this. 14 This is pretty impressive. You're going to see 15 this will start a movement. 16 You do have to be aware that they 17 sometimes do find their ways into payment. 18 There's no question about that. 19 But as somebody said, you know, let's move, this is 20 what we're trying to do in healthcare, and we 21 22 as physicians need to take control, more

1 control of this moving it forward. 2 Otherwise, it's going to somebody is going to take control of it 3 outside, so this is a great process. 4 5 And I understand your discomfort, but I just, you know, I think the likelihood 6 7 of that - especially, I would say to you, go to the steps of that insurance company, walk 8 9 right in, find the CMO, sit him down, because 10 there's not going to be a pediatric cardiac specialist at that desk and you're going to be 11 the one in control of defining what you want 12 13 to be measured on. 14 CO-CHAIR JEFFRIES: Okay. Are there any other comments on this measure? 15 I mean I would just say one thing 16 from the discussion we had, and that was 17 around usability. And from - I guess I would 18 also like to hear your perspective as a family 19 20 that it would seem that these points that, again, as I mentioned in the meeting, that 21 22 there's sort of an expectation that these are

done and not that this is above and beyond
what is part of practice.

MS. BARNETT-JONES: Absolutely, and 3 that was part of my comment in our sub-group 4 5 is that we set - the goal is to set the 6 expectation. And I know from my own 7 experience especially when we look at Point Number 4, for me that is routine when we go to 8 9 CHOP, when we come out of the cath lab. It is routine that all of the 10 persons listed here are there and that there 11 is a debriefing. 12 13 At times, the family is included in that debrief. And so that is for me, a 14 very high expectation so that there is the 15 transfer of knowledge, there is the 16 communication. 17 And it helps, as I said at the 18 table, that we are all still on the same sheet 19 20 of music. That everyone is on the same page. And from an outcome perspective, I 21 think that for a child that enhances the 22

safety, that there is less likely for 1 something to go awry because the communication 2 was there and the opportunity was available to 3 ask questions and make sure that all the 4 5 answers were laid out at the same time and everyone heard the same message. 6 7 CO-CHAIR JEFFRIES: Thank you. So, Jeff, I just wanted to get some clarity before 8 9 we go to a vote, around the numerator. 10 And the way the numerator is 11 stated now, it's whether or not the facility 12 implements. 13 Is that how you want it? Is it 14 dichotomous or do you want it on a per patient 15 \_ \_ 16 DR. J. JACOBS: So, the way we anticipate implementing this is one would have 17 a database that's tracking all these different 18 metrics. 19 20 And for this metric on a case-by-21 case basis, there's going to be four check 22 boxes to check where you would document that

you complied with Step 1, Step 2, Step 3 and 1 2 Step 4. 3 Additionally for Step 2 and 3 specifically if you said no, you would have 4 5 the option of going to a drop down menu and having the reason why you said no. 6 7 And I think Step 1 obviously always has to happen every time or you're 8 9 going to go to jail, but Step 2 and 3 there's 10 probably some reasonably good, possible explanations for why it's not done like the 11 patient is unstable, giving CPR, things like 12 13 that. So, basically it's a yes-no 14 question on a per patient basis with four 15 check boxes. And for the Number 2 and Number 16 3, some explanation as to why one might put 17 And then you comply it in an all or none 18 no. fashion like we talked about before. 19 20 CO-CHAIR JEFFRIES: So, can I have a motion that we vote on this with the 21 22 modifications to the numerator as were just

1 delineated? 2 DR. MAYER: So moved. CO-CHAIR JEFFRIES: Okay. So, if 3 we can vote for recommendations with those 4 5 modifications? 6 MS. GRANNIS: Okay. So, it's 12 7 four recommend for time-limited endorsement. And no one did not, not recommend. 8 9 CO-CHAIR JEFFRIES: Okay. So, it's 10 five o'clock. So, I think we should probably 11 stop. MS. WILBON: Just a quick note 12 13 before we break for tomorrow. Breakfast starts at 7:30. I know today we started at 14 9:00. So, just a quick note so you guys don't 15 come two hours late. 16 We'll start the discussions at 17 8:00 a.m. So thank you, everyone, for your 18 participation today, and great discussions, 19 20 and we'll see you tomorrow. Thank you. 21 (Whereupon, the meeting adjourned 22 at 5:00 p.m.)

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