## NATIONAL QUALITY FORUM

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SURGERY PHASE 3 STANDING COMMITTEE

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## WEDNESDAY AUGUST 17, 2016

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The Standing Committee met at the National Quality Forum, 9th Floor Conference Room, 1030 15th Street, N.W., Washington, D.C., at 8:00 a.m., Lee Fleisher and William Gunnar, Co-Chairs, presiding.

PRESENT:

LEE FLEISHER, MD, Co-Chair; Professor and Chair of Anesthesiology, University of Pennsylvania/American Society of Anesthesiologists

WILLIAM GUNNAR, MD, JD, Co-Chair; Director, National Surgery Program Office, Veterans Health Administration

KARL BILIMORIA, MD, MS, Director, Surgical Outcomes & QI Center; Vice Chair for Quality, Northwestern University and Northwestern Medicine

RICHARD DUTTON, MD, MBA, Chief Quality Officer, United States Anesthesia Partners

ELISABETH EREKSON, MD, MPH, Dartmouth Hitchcock Medical Center

FREDERICK GROVER, MD, Professor of Cardiothoracic Surgery, University of Colorado School of Medicine

JOHN HANDY, MD, Thoracic Surgeon, American

College of Chest Physicians

CLIFFORD KO, MD, MS, MSHS, FACS, Director, Division of Research and Optimal Patient Care, American College of Surgeons/Professor of Surgery, Department of Surgery, UCLA School of Medicine, American College of Surgeons/UCLA School of Medicine BARBARA LEVY, MD, FACOG, FACS, Vice President, Health Policy, American College of Obstetricians and Gynecologists

BARRY MARKMAN, MD, Senior Medical Director Medicaid, Aetna

KELSEY MCCARTY, MS, MBA, Senior Manager, Quality and Safety Program, Department of Anesthesia, Massachusetts General Hospital

LAWRENCE MOSS, MD, Surgeon-in-Chief, Nationwide Children's Hospital

AMY MOYER, Manager of Value Measurement, The Alliance

KEITH OLSEN, PharmD, FCCP, FCCM, Professor and Dean, College of Pharmacy, University of Arkansas for Medical Sciences

COLLETTE PITZEN, RN, BSN, CPHQ, Clinical Measure Development, Minnesota Community Measurement

LYNN REEDE, DNP, MBA, CRNA, Senior Director, Professional Practice, American Association of Nurse Anesthesiologists CHRISTOPHER SAIGAL, MD, MPH, Professor, UCLA

SALVATORE T. SCALI, MD, Assistant Professor of Vascular Surgery, University of Florida-Gainesville

ALLAN SIPERSTEIN, MD, Chairman Endocrine Surgery, Cleveland Clinic

LARISSA TEMPLE, MD, Colorectal Service, Department of Surgery, Memorial Sloan-Kettering Cancer Center

BARBEE WHITAKER, PhD, Director, American Association of Blood Banks\*

A.J. YATES, MD, Associate Professor and Vice Chairman for Quality Management, Department of Orthopedic Surgery, University of Pittsburgh Medical Center

NQF STAFF:

HELEN BURSTIN, MD, MPH, Chief Scientific Officer ELISA MUNTHALI, MPH, Vice President, Quality Measurement MARCIA WILSON, PhD, MBA, Senior Vice President, Quality Measurement JASON GOLDWATER, MA, MPA, Senior Director KAREN JOHNSON, MS, Senior Director MELINDA MURPHY, RN, MS, Senior Director DESMIRRA QUINNONEZ, Project Analyst CHRISTY SKIPPER, MS, Project Manager KATHRYN STREETER, Senior Project Manager ALSO PRESENT: JAIMO AHN, MD, PhD, Orthopedic Trauma Association VINAY BADHWAR, MD, FACS, FACC, Society for Thoracic Surgery JULIA BERIAN, MD, American College of Surgeons MICHELLE DARDIS, MSN, MBA, RN-BC, The Joint Commission KATHY DOMZALSKI, MHA, BS, RN, The Joint Commission BRUCE HALL, MD, PhD, MBA, FACS, American College of Surgeons GAETANO PAONE, MD, MHSA, Society for Thoracic Surgery DAVID SHAHIAN, MD, Society for Thoracic Surgery ARYEH SHANDER, MD, FCCM, FCCP, Englewood Hospital and Medical Center\* JONATHAN H. WATERS, MD, Magee Women's Hospital, University of Pittsburgh ANN WATT, MBA, RHIA, The Joint Commission

\* present by teleconference

## AGENDA

Welcome, Recap of Day 1		
Consideration of Candidate Measures (Continued) 0134: Use of Internal Mammary Artery (AMI) in Coronary Artery Bypass Graft		
(CABG)		
0117: Beta Blockade at Discharge48		
0127: Preoperative Beta Blockade		
3030: Individual Surgeon Composite Measure for Adult Cardiac Surgery70		
3031: STS Mitral Valve Repair/Replacement Composite Score 109		
3032: STS MVRR + Coronary Artery Bypass Graft Composite Score		
0697: Risk Adjusted Case Mix Adjusted Elderly Surgery Outcomes Measure - American College of Surgeons 129		
0706: Risk Adjusted Colon Surgery Outcome Measure - American College of Surgeons		
2998: Infection rate in bicondylar tibia plateau fracture - Orthopedic Trauma Association		
Overview of eMeasures		
Consideration of Candidate Measures (Cont'd)		
3016: PBM 01 Preoperative Anemia Screening - The Joint Commission 245		
NQF Member and Public Comment		

Consideration of Candidate Measures (Cont'd)

3020: PBM 04 Initial Transfusion Threshold - The Joint Commission. . . . . 299

Adjourn

1P-R-O-C-E-E-D-I-N-G-S28:00 a.m.3CO-CHAIR FLEISHER: Okay. Good4morning. It is 8:00 according to my iPhone5clock, so we are going to get started. I want to6thank everyone for coming on time. We have one7new member who has joined us this morning.8And can you identify yourself and any9disclosures?10You did the disclosure yesterday. I'm11sorry.12MEMBER WHITAKER: I did my disclosures13yesterday. I'm Barbee Whitaker from the American14Association of Blood Banks.15CO-CHAIR FLEISHER: Great. Well,
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14 Association of Blood Banks.
15 CO-CHAIR FLEISHER: Great. Well,
16 welcome.
17 And we do not have Dr. Cima on the
18 phone today. Is there anyone else? Are the
19 phone lines open? Yes?
20 OPERATOR: The line is open.
21 CO-CHAIR FLEISHER: Great. Do we have
anybody from the standing committee on the phone?

1 OPERATOR: No, we do not. 2 CO-CHAIR FLEISHER: Great. Thank you. Incredibly productive yesterday. 3 What 4 was most important is we actually touched on a 5 lot of cross-cutting and difficult issues. And Barbara and I were talking about the need --6 7 (Recorded music playing.) CO-CHAIR FLEISHER: 8 Yes. As long as 9 it's classical. 10 Some of the issues that were touched 11 on, we think the Committee did a fabulous job 12 outlining the issues and some of them have 13 actually brought up issues that we'll take to the 14 CSAC for more strategic questions. For example, 15 the last measure we went over yesterday. 16 We have two hours to get through our 17 colleagues from STS' measures. I would ask -- we did a great job yesterday, but even today to be 18 19 more effective in limiting any additional 20 comments to not that I agree, which -- but that I 21 have a new area to actually question with regard 22 to the measure developers or for the discussion.

So if we can do that, I think we can get through 1 2 the entire day. And we must finish by 3:00 since I know lots of people have planes, trains and 3 4 automobiles even before that. So nothing further? Who's coming to 5 the table? 6 7 CO-CHAIR GUNNAR: Christy, did you 8 want to say anything? 9 MS. SKIPPER: No, just good morning 10 and welcome again to our second day of the 11 meeting and looking forward to an efficient and 12 productive meeting. 13 CO-CHAIR FLEISHER: And as always, we 14 want to thank NQF staff both for the preparation 15 before, which was outstanding, and all the work 16 done here. 17 So if you can introduce yourself and 18 we'll go through the measures. And someone has a 19 conference call. And, Larry, so we'd like to put 20 that first. So if you can identify yourselves. 21 And then if we can start with 134, that would be 22 fantastic.

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DR. BADHWAR: Sure. Thank you for your accommodation. My name is Vinay Badhwar. I'm a professor of surgery at WVU, West Virginia University, and I'm humbled by being the Chair of Public Reporting for the STS.

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And we thought, just because there's 6 7 a few new members, that a 90-second just preamble on the STS Database, that it was established in 8 9 1989. We now have 6 million patients and over 95 10 percent of cardiac surgery performed in the 11 United States is registered by the database. The 12 database is a qualified clinical data registry by 13 CMS and for PQRS, and we've got a portfolio of 14 measures that are risk-adjusted outcome model-15 based and long-standing NQF relationships, as you 16 know.

We have 36 measures, all of which are used for ongoing feedback to our participants for the purposes of quality measurement and quality improvement, and many of these are included in the PQRS system. The three areas to just briefly touch on in 30 seconds are penetration,

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completeness and accuracy and the suitability for public reporting.

So the penetration, the database 3 4 compared to CMS has now 95 percent penetrance and 5 it's been implemented through a robust audit process over the last decade. And now we have an 6 audit of 10 percent. And in the history of our 7 audits there have been no egregious absence and 8 9 essentially 100 percent, particularly on the most 10 important indicators such as mortality. 11 And then finally, all the six measures we're going to discuss today are designated for 12 13 public reporting. And it's such an important element in the STS Database that it's evidenced 14 15 by -- currently we have in the adult cardiac 16 surgical section 49 percent of sites are 17 participating in public reporting and 57.9 18 percent of all congenital sites are public 19 reporting voluntarily, which we believe is among 20 the highest in specialties in the United States. 21 And so today we'll touch upon six 22 measures: three process measures for CABG and

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three composite measures, and Dr. Paone, Chief of Cardiac Surgery at Henry Ford and our leader and Chair of the Adult Cardiac Surgery Task Force is going to kick us off.

5 Thank you. Good morning. DR. PAONE: As Dr. Badhwar said, I have the honor of serving 6 7 as the Chair of the Task Force on Quality Initiatives for the STS, and I guess we'll start 8 9 with Measure 134. It's a little out of order, 10 but I will start by saying that there have been 11 and continue to be significant advances in both 12 medical therapy and use of advanced percutaneous 13 catheter-based approaches for treating patients 14 with ischemic heart disease.

15 And as a result, the number of 16 coronary bypass procedures has decreased 17 significantly over the past two decades, but yet 18 continues to be the most common procedure that we 19 perform with over 150,000 procedures a year. Ι 20 might also add that in the opinion of many of us 21 it's by far the most highly scrutinized surgical 22 procedure in history.

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The first measure that we'll discuss 1 2 is the use of the internal mammary artery in 3 coronary bypass surgery. This measure captures a percentage of patients aged 18 and older 4 5 undergoing CABG who received an internal mammary 6 artery graft. There are reasons to exclude patients from consideration, and these include 7 the subclavian artery stenosis, previous cardiac 8 9 or thoracic surgery, previous mediastinal 10 radiation; both of those may make harvest of the 11 artery difficult or impossible, patients who 12 undergo emergent or salvage procedures, and 13 finally if there is no significant or bypassable 14 disease of the LAD artery itself. 15 The IMA use has previously 16 been endorsed by NQF and is a very significant 17 component of our STS CABG composite score. Use 18 of the IMA to bypass the left anterior descending 19 artery, coronary artery during coronary bypass 20 surgery is a Class 1B recommendation of the 2011 21 ACCF/AHA Guidelines for Coronary Artery Bypass 22 Graft Surgery. And in those cases where for some

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1reason the left mammary is either unavailable or2unsuitable for use, it is then a Class 2C3recommendation that the right internal mammary4artery is probably indicated to bypass the LAD.5The superiority of internal mammary6arteries over saphenous vein grafts as coronary7artery bypass conduits and the evidence8supporting the short and long-term survival9benefits of using the left IMA specifically to10bypass the left anterior descending artery are11exhaustive and well-documented over what is now12approaching 30 years.13Long term patency rates of 10-plus14years for the LIMA graft when placed in the LAD15are routinely in excess of 90-plus percent16compared to saphenous vein patency, which17approximates 50 percent.18Most importantly, perhaps more than19any other20CO-CHAIR FLEISHER: I think we're very21comfortable with the evidence of the superiority.22DR. PAONE: Okay.		
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22 DR. PAONE: Okay.	21	comfortable with the evidence of the superiority.
	22	DR. PAONE: Okay.

1	CO-CHAIR FLEISHER: So what we're most
2	interested in; and thank you, is the gap and any
3	new evidence, because as you we can accept the
4	evidence as it is
5	DR. PAONE: Excellent.
6	CO-CHAIR FLEISHER: unless there's
7	anything new that's come out.
8	DR. PAONE: Okay. Well, in fact then
9	there really hasn't been anything new that's come
10	out except for the fact that this remains really
11	the most important part of a coronary bypass
12	operation and we feel very strongly that it
13	should be continued to be endorsed because we
14	don't want to send a message anything other than
15	that.
16	CO-CHAIR FLEISHER: And anything on
17	gap that you can comment on? If not, I'm sure
18	the Larry, do you want to start
19	MEMBER MOSS: Actually John is the
20	primary on this one.
21	CO-CHAIR FLEISHER: Okay. John?
22	MEMBER HANDY: Well, there isn't much

of a gap and it's a little bit tough to criticize 1 2 this particular process measure. It's a 3 maintenance process measure, so we don't even 4 really have to vote on the evidence, frankly, 5 just discuss the gap. The gap is listed in --CO-CHAIR FLEISHER: Why don't we just 6 7 very quickly -- would anybody like to vote on evidence? 8 9 (No audible response.) 10 CO-CHAIR FLEISHER: No? Okav. 11 Evidence passes. 12 MEMBER HANDY: Good. So the gap is 13 listed in a couple of different places. A little 14 bit variously on page 6 it's listed as a low 15 performer as 96 percent, high performer is 99 16 percent. In other words, the amount of volume 17 left internal mammary arteries used. Page 3293, 18 100 percent. So the worst is 93 percent. So 19 it's got a high penetrance in cardiac surgery. 20 It's adhered to. And that's true across the SDS 21 groups, too. The lowest was 98 percent. So 22 there isn't much of a gap.

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1	And so, back to what I was getting
2	ready to say before we went and talked about
3	evidence is that it's so central to coronary
4	bypass it's a little difficult to discard it.
5	CO-CHAIR FLEISHER: Larry?
6	MEMBER MOSS: I agree completely. My
7	only comment or question was whether we should
8	consider reserve status, and if we did, whether
9	that would negatively impact the composite
10	measure that's so important.
11	CO-CHAIR FLEISHER: Yes?
12	MS. MURPHY: With respect to gap, one
13	of the things we talked about yesterday is for
14	some of these measures where the importance of
15	the measure in terms of precipitating or
16	contributing to an adverse event would cause you
17	to think potentially about it differently in
18	terms of retaining one in active endorsement with
19	a low gap.
20	The other thing is that if you make
21	the determination to put it into reserve status,
22	it is still an endorsed measure, still therefore

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eligible to be an integral part of any composite. 1 2 DR. PAONE: Well, we would suggest that -- we understand that putting it in reserve 3 does not take it away from the significance with 4 5 regard to the composite, however, we're not sure that everyone understands the subtle difference 6 7 between being endorsed and being on reserve. One of our colleagues has stated that 8 9 pretty much that probably the most important 10 thing we do as cardiac surgeons and coronary 11 surgeons is use the left internal mammary artery 12 to bypass the LAD, and that goes to evidence. 13 And I know we've accepted that, but we do think 14 that this is probably the most important process 15 measure in cardiac surgery and very strongly feel 16 that we'd benefit from having it re-endorsed 17 rather than just placed in reserve. 18 CO-CHAIR FLEISHER: Thank you. Amy? 19 MEMBER MOYER: So looking at the 20

21 have online, I know that you take great pains to 22 make sure that you're showing statistically

public reporting, which I really appreciate you

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different -- statistically significant 1 2 differences. And I'm seeing a range of 3 performance among groups that are publicly 4 reporting on this measure alone, which to me 5 suggests there is gap that can be used to distinguish performance. So I would support that 6 7 there be -- there's a meaningful gap there. CO-CHAIR FLEISHER: Thank you for that 8 9 additional piece of information. 10 DR. PAONE: I think the average use is 11 very high, but there are still a not 12 insignificant number of outliers. So I think that would be true. 13 14 CO-CHAIR FLEISHER: Helpful. Other 15 comments? Christy? 16 (No audible response.) 17 CO-CHAIR FLEISHER: No, call for a 18 vote. 19 MS. WILSON: Desmirra is going to be 20 helping with the vote. 21 CO-CHAIR FLEISHER: Oh, okay. 22 MS. QUINNONEZ: Okay. We are now

voting on Measure 0134, use of internal mammary 1 2 artery in coronary artery bypass graft. Voting is now open for the evidence of 0134. 3 4 Gaps. Yes, sorry. Voting is Sorry. 5 now open for the gaps of Measure 0134. Option No. 1 is high; option No. 2 is moderate; option 6 No. 3 is low; and option No. 4, insufficient. 7 8 (Voting.) 9 MEMBER GROVER: Just for the record I 10 want to state that I'm abstaining on all the STS 11 votes. 12 CO-CHAIR FLEISHER: Thank you. I just 13 wanted to ask staff if we think the gap is low 14 but we still want to -- but we don't want to go 15 to reserve status, do we -- how do we vote? In 16 other words, if we think that it's important to 17 not put it on reserve status. Elisa, if you can 18 help us. 19 MS. MUNTHALI: So you would vote on 20 performance gap regardless of your desire to have 21 the measure go into reserve status because for a 22 measure that's topped out, there's no opportunity

for improvement. It still needs to be -- all the 1 2 other criterion still need to be passed. So what would happen is -- let's say you voted low or 3 4 insufficient. You may say should we consider 5 this measure for reserve status and vote on the rest of the criterion and then come back to 6 7 answer the question on reserve status. Does that make sense? 8 9 MEMBER KO: I just have a quick 10 question. Are there objective definitions, 11 criteria for reserve status? I know we did some 12 last time or a couple times ago, because like, 13 oh, that's topped out, that's -- but what -- is

14 there a definition for topped out?

MS. MUNTHALI: We do, and I don't -Katie, could you pull that up? I think it would
be easier for everyone to see it.

18 MS. MURPHY: And while she's pulling 19 that up, there is one thing I wanted to say 20 because of something I heard. If a measure goes 21 into reserve status, number one, it is endorsed. 22 It is an endorsed measure in reserve status, so

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it does not lose endorsement. In fact, as Elisa
 just said, it goes through the entire process and
 it is an endorsed measure placed in reserve
 status because of a low gap.

5 MEMBER HANDY: So then what is the 6 natural history of a reserved measure? We've 7 talked about this a little bit in the past, too. 8 I mean, does it get periodically reviewed? I 9 know it doesn't have to be continuously supported 10 by data.

11 MS. MUNTHALI: So it doesn't go 12 through the three-year maintenance cycle, but 13 because you have ownership, the Surgery Committee 14 has ownership over the portfolio. You may want 15 to revisit it if in the particular topic area you 16 see that there might need to be a performance 17 measure to address certain elements to improve 18 So it's something that we will bring in care. 19 front of you again to look at the reserve status 20 list to see if any of those you would like to 21 revisit given new data, new evidence, anything 22 that you may have that would help to push that

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forward.

2	MEMBER HANDY: And is there a sunset?
3	MS. MUNTHALI: So reserve status is
4	almost like a sunset. We're seeing the first
5	class of them. These are most of them are
6	process measures that have come through our
7	process early on. And so, but there may be an
8	opportunity for them to come back if we see that
9	improvements are going down. Maybe behavior has
10	changed. And so, yes. So we but we haven't
11	gotten there yet. This is like the first major
12	class of reserve status measures that have gone
13	through the NQF process.
14	MEMBER HANDY: Sure.
15	DR. BADHWAR: Brief comment. I
16	appreciate that definition. It's very helpful.
17	I just want to emphasize what Amy had mentioned,
18	that there is still some practice variability
19	that exists and this full endorsement is so
20	important to practicing surgeons that take a
21	shortcut. It is a little harder to do a mammary
22	artery than a vein graft, and I just wanted to

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emphasize that one point.

2 MS. MUNTHALI: And we just want to emphasize that the measure would still be 3 4 endorsed. You're not losing endorsement. It's 5 just that it wouldn't go through its periodic maintenance review. 6 7 MEMBER HANDY: Thank you. CO-CHAIR FLEISHER: Rick? Comment? 8 9 MEMBER DUTTON: Okay. Just a comment 10 on the reserve history. So we did this a couple 11 years ago with some of the antibiotic measures. 12 I don't know if it contributed or not, but 13 certainly within the next year CMS moved those 14 out of PORS as being topped out. Is this still a 15 PQRS measure for you guys? 16 (No audible response.) 17 MEMBER DUTTON: Okay. That they also 18 told us, Anesthesia, that we had to take it out 19 of our QCDR measure set for CMS, because we 20 initially did that with it. And we did that for 21 one year, but then they told us we had to remove 22 it from that use.

We do still find that antibiotic 1 2 measure very useful. A lot of our members still It's useful for hospitals and 3 report it. 4 insurance companies and sort of internal quality 5 improvement, so lots of people are still capturing it. But that's been what's happened to 6 the measures that we've --7 8 CO-CHAIR FLEISHER: Thank you. 9 MEMBER DUTTON: -- seen on reserve. 10 This is the CO-CHAIR FLEISHER: 11 endorsement reserve status, and why don't we 12 We're up to 20. Could people re-vote just vote? 13 to make sure we get --14 (Voting.) 15 CO-CHAIR FLEISHER: Barbara? 16 MEMBER LEVY: So I actually have a 17 question about our definition of a moderate/low 18 performance gap. I mean, is that -- are there 19 metrics that we're supposed to use? Because I 20 think it's quite different for us to look at a 21 gap in the STS Database that has penetrance of 95 22 percent versus a measure that's electively

reported by people who think they do a good job 1 2 with it. And when we've got 95 percent penetrance and we do have a spectrum of people, I 3 think that's a different discussion than a 4 5 discussion about a topped out measure that's voluntarily reported among whoever feels like 6 7 they want to report it. CO-CHAIR FLEISHER: So I know of no 8 9 definitions that -- so I -- are you aware? Ι 10 mean, that's a good discussion that we'll put in 11 our report to send back to us, to you and I to 12 continue. 13 MEMBER LEVY: Thanks. We're really 14 creating a lot of work for ourselves, aren't we? 15 CO-CHAIR FLEISHER: Right. Allan? Because I want to move forward. 16 17 MEMBER SIPERSTEIN: But I think 18 relative to an individual measure like this, I 19 think we really have to look at is there 20 opportunity for improvement and is there 21 variability? And we've had data presented that 22 says yes.

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1	CO-CHAIR FLEISHER: Thank you.
2	MEMBER SIPERSTEIN: Even though the
3	number is high.
4	CO-CHAIR FLEISHER: So let's finish
5	the voting.
6	MS. QUINNONEZ: All votes are in and
7	voting is now closed. Okay. For performance
8	gaps of Measure 0134 the vote reads 10 percent
9	voted high; 52 percent voted moderate; 38 percent
10	voted low; and 0 percent for insufficient.
11	CO-CHAIR FLEISHER: So it passes,
12	correct?
13	MS. QUINNONEZ: Yes.
14	CO-CHAIR FLEISHER: Okay. So it's
15	still going forward for full endorsement.
16	Next, John?
17	MEMBER HANDY: Well, the rest of it's
18	pretty easy because the STS Database so
19	reliability with the track record, the construct
20	and the all the things that make the STS
20 21	and the all the things that make the STS Database an enviable thing. The reliability is

1 CO-CHAIR FLEISHER: Can we vote? 2 MS. QUINNONEZ: Voting is now open for 3 the reliability of Measure 0134. Option 1 is high; option 2 is moderate; option 3, low; and 4 5 option 4, insufficient. (Voting.) 6 7 MS. QUINNONEZ: All votes are in and voting is now closed. For the reliability of 8 9 Measure 0134, 81 percent voted high; 19 percent 10 voted moderate; 0 percent for low; and 0 percent insufficient. 11 12 CO-CHAIR FLEISHER: So I just -- like 13 reliability will be the same for any of these measures that are from the database. I would 14 15 I would like to know if anybody like to -- no? 16 would like to vote separately on reliability for 17 the measures. Or we -- as we come up to each 18 measure I will ask if anyone would like to vote 19 separately. 20 MEMBER PITZEN: I'm sorry. It was me 21 kind of shaking my head. I mean, the reliability 22 is dependent on the individual metric --

1	(Simultaneous speaking.)
2	CO-CHAIR FLEISHER: So we'll go by
3	each measure and say do we need to vote again or
4	can we take the previous vote?
5	Next.
6	MEMBER HANDY: So the same comments
7	about validity. The penetrance of the database
8	and the auditing habits or mandated auditing
9	characteristics of the database make it very
10	valid. And this is a very clear-cut. You either
11	did or you didn't use an IMA.
12	CO-CHAIR GUNNAR: Larry? Comments?
13	MEMBER MOSS: No.
14	CO-CHAIR FLEISHER: Any other
15	comments?
16	(No audible response.)
17	CO-CHAIR FLEISHER: Let's vote.
18	MS. QUINNONEZ: We are now voting on
19	the validity of Measure 0134. Option 1, high;
20	option 2, moderate; option 3, low; and option 4,
21	insufficient.
22	(Voting.)

1	MS. QUINNONEZ: All votes are in and
2	voting is now closed. For the validity of
3	Measure 0134, 86 percent voted high; 14 percent
4	voted moderate; 0 percent for low; and 0 percent
5	for insufficient.
6	CO-CHAIR FLEISHER: Next?
7	MEMBER HANDY: Same is true for
8	feasibility. Its penetrance in the adult cardiac
9	surgery arena in the United States is over 95
10	percent, so pretty much everybody is
11	participating in this database, so it's highly
12	feasible.
13	CO-CHAIR FLEISHER: Comments?
14	(No audible response.)
15	MS. QUINNONEZ: Voting is now open for
16	the feasibility of Measure 0134. Option 1 is
17	high; option 2, moderate; option 3, low; and
18	option 4, insufficient.
19	(Voting.)
20	MS. QUINNONEZ: All votes are in and
21	voting is now closed. For the feasibility of
22	Measure 0134, 67 percent voted high; 29 percent

voted moderate; 5 percent voted low; and 0 1 2 percent insufficient. CO-CHAIR FLEISHER: John? 3 4 MEMBER HANDY: Usability also high. 5 CO-CHAIR FLEISHER: We heard it's publicly reported. 6 7 MS. QUINNONEZ: Voting is now open for the usability and use of Measure 0134. Option 1 8 9 is high; option 2, moderate; option 3, low; and 10 option 4, insufficient information. 11 (Voting.) 12 MS. QUINNONEZ: All votes are in and 13 voting is now closed. For the usability and use 14 of Measure 0134, 67 percent voted high; 29 15 percent voted moderate; 5 percent voted low; and 16 0 percent voted for insufficient information. 17 MEMBER HANDY: There's really no 18 competing measures for this one. There's a lot 19 of related measures, but none competing. 20 CO-CHAIR FLEISHER: So any comments 21 before we vote on suitability for endorsement? 22 (No audible response.)

1	CO-CHAIR FLEISHER: Okay.
2	MS. QUINNONEZ: Voting is now open for
3	the overall suitability for endorsement of
4	Measure 0134. Option 1 is yes; option 2 is no.
5	(Voting.)
6	MS. QUINNONEZ: All votes are in and
7	voting is now closed. For the overall
8	suitability for endorsement of Measure 0134, 100
9	percent voted yes; 0 percent voted no.
10	CO-CHAIR FLEISHER: Thank you very
11	much. We will go back to 117. So what I'd like
12	to focus on is any change in evidence and a
13	little bit on gap, and those would be the
14	primary
15	DR. PAONE: Sure.
16	CO-CHAIR FLEISHER: focus to get
17	you
18	DR. PAONE: Okay. Well, then I'll
19	eliminate most of what I was going to say and
20	suggest that there have been some recent data
21	that suggests that use of beta blockers post-
22	cardiac surgery has demonstrated a synergistic

and additive effect at reducing mortality when 1 2 combined with statins at both a year and longer term at 11 years. And overall, patients -- it's 3 4 thought that in terms of secondary prevention 5 there's a survival advantage, not only in patients with previous heart attacks or heart 6 7 failure, but also now those with normal heart function. And so this essentially includes all 8 9 patients who undergo bypass surgery. The role of 10 discharge beta blockers remains a Level -- a 11 Class 1, Level B recommendation for patients with 12 atrial fibrillation to prevent atrial 13 fibrillation and the sequelae thereof. 14 In terms of a gap, this was considered 15 essentially topped out in 2012 at 95½ percent. 16 It was re-endorsed at that time. And since the 17 gap is really -- remains the same but similar to 18 the previous measure on IMAs, there is still a lower tail, not as much with the discharge as 19 20 with the preoperative beta blockers that we'll 21 discuss subsequently, but there still remains a 22 little bit of a gap in use.

Added to that is there really is no 1 2 burden added to the capture of this measure. It remains a component of our composite score and 3 4 one of 34 NQF-endorsed measures, and we believe 5 that removing it from active endorsement, like the other measures, could suggest that its 6 7 importance has somewhat lessened. I know we talked just a minute ago about the meaning of 8 9 "reserve status," that it maintains NQF 10 endorsement, but the added description of it sort 11 of being sunset I think is a little bit 12 concerning in terms of what that may at least 13 portray to those who don't understand the subtle 14 differences. 15 CO-CHAIR FLEISHER: Thank you. Lynn, 16 I think you're the primary and Kelsey is the 17 secondary. 18 MEMBER REEDE: Thank you. In 19 reference to the gap, it's still for the --20 CO-CHAIR FLEISHER: How about just --21 MEMBER REEDE: Okay. Well, he was --22 CO-CHAIR FLEISHER: -- any comments on

evidence?

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MEMBER REEDE: Evidence is fine. Good to go.

4 MEMBER McCARTY: So I do have a 5 question about the evidence. The guidelines that were submitted for this measure were from 2011, 6 and then this measure was endorsed in 2012. 7 There haven't been any updated guidelines since 8 9 then for CABG, but in 2014 the same group: ACC 10 and AHA, published guidelines for non-cardiac 11 surgery. And so where I'm going with this is 12 13 that in those guidelines beta blockers given on 14 the day of surgery are flagged. 15 CO-CHAIR FLEISHER: I'm the Chair of 16 that Guideline committee --17 MEMBER McCARTY: I saw that. I did. 18 CO-CHAIR FLEISHER: -- and it's not 19 relevant to this --20 MEMBER McCARTY: It's not? Okay. 21 CO-CHAIR FLEISHER: -- population. 22 MEMBER McCARTY: So as a layperson

there's -- it perfectly makes sense why it would 1 2 be so effective --CO-CHAIR FLEISHER: It's a 3 4 different --5 MEMBER McCARTY: -- in CABG and dangerous outside of that. 6 Okay. 7 CO-CHAIR FLEISHER: And to disclose on the task force that oversees all the guidelines, 8 9 this --10 MEMBER McCARTY: That was my --11 CO-CHAIR FLEISHER: -- they're not in 12 conflict. 13 MEMBER McCARTY: That was my question. 14 CO-CHAIR FLEISHER: So would anybody 15 like to vote on evidence or -- we'll continue. 16 Okay. Can you, Lynn, discuss gap? 17 MEMBER REEDE: So for gap it does 18 appear to be topped out except that in the 10th 19 decile it's gone from 73 percent in the 2013 to 20 '14 data down to 15 percent -- or 50 percent in 21 the '14 to '15 data. So there is some gap still 22 remaining in the measure.

1	CO-CHAIR FLEISHER: Kelsey, any
2	thoughts?
3	(No audible response.)
4	CO-CHAIR FLEISHER: Any comments?
5	(No audible response.)
6	MS. QUINNONEZ: Voting is now open.
7	We are voting on Measure 0
8	CO-CHAIR FLEISHER: Collette?
9	MEMBER PITZEN: I can comment now or
10	later. I just have a general comment about
11	performance gap in general and quality
12	improvement. And I know I'm in the minority. I
13	have a hard time with a measure that's nationally
14	at 98 percent, serving its purpose for moving
15	that quality needle forward. Granted, everybody
16	would want 100 percent, but when you're comparing
17	and trying to get better, it seems like there's a
18	lot of other places where we could be spending
19	our data collection resources and efforts. So
20	I'll try to refrain from those comments
21	throughout because I know everyone feels
22	differently.
CO-CHAIR FLEISHER: But it was 1 2 important to -- thank you for making the comment 3 as we --4 DR. PAONE: I would just -- if I 5 could, just very quickly respond to that. And I understand the idea of not wanting to waste 6 7 resources, but capturing this measure and bringing it forth in our -- in data set really is 8 9 of no particular burden. It's in the same list 10 as three other medicines and it's on the same 11 data set, and I don't think the computer 12 recognizes that extra data variable as a burden 13 either. 14 CO-CHAIR GUNNAR: But as chair and as 15 a matter of process what defines a topped-out 16 measure? If that doesn't define a topped-out 17 measure, we'll be at a loss for defining a 18 topped-out measure. 19 CO-CHAIR FLEISHER: Barbara? And then 20 Kelsey. 21 MEMBER LEVY: So I think again we need 22 to look at the STS 95 percent penetrance

differently than we would look at other types of 1 2 measures. And I think a measure can be for moving the needle, but it can also be for 3 4 maintaining the needle, to maintaining the 5 quality that we have established and holding people accountable for a certain standard. 6 And so I think we need to think about 7 it, Collette, maybe just a little bit differently 8 9 in that I think the concern that I'm hearing is 10 that if it is in reserve status or not endorsed, 11 that that sends a public message that says this 12 is less important. And there are certain things 13 that we want people to do every single time. And 14 I think this may be one of those things. 15 I would just comment that DR. PAONE: 16 I think that's exactly what we think. 17 CO-CHAIR FLEISHER: Go ahead. 18 CO-CHAIR GUNNAR: But again, reserve status and non-endorsement are 180 degrees from 19 20 one another. 21 CO-CHAIR GUNNAR: Lynn and Kelsey, did 22 you have other comments on this, or no?

Slightly different 1 MEMBER McCARTY: 2 aspect of the gap. I was going to bring this up in validity, but I think it overlaps with gap, 3 4 and that's that part of the measure allows the 5 surgeon to indicate that beta blockers are contraindicated. 6 7 So my first question is can they just write "contraindicated," or are there a set of 8 9 specific criteria that indicate that it's 10 contraindicated? 11 CO-CHAIR FLEISHER: Sounds like --12 that's validity, correct? 13 MEMBER McCARTY: So the reason I bring 14 that up in gap is because I'm curious. If they 15 just write "contraindicated" and doesn't have to 16 be supported by a specific criteria, I'm curious 17 what percentage of the registry passes the 18 measure by listing that, because beta blockers 19 have kind of had a long history of controversy. 20 And so, if someone doesn't agree in giving it and 21 can just write that down as this -- it's 22 contraindicated -- and then I'm curious what the

reliability testing is around that. Then there may actually be a larger opportunity for improvement in giving beta blockers than this percentage indicates.

5 Well, as is described, DR. PAONE: there are clearly contraindications clinically to 6 They generally are in 7 the use of beta blockers. this analogy, which is fairly unusual, but the 8 9 clinical ones are basically bradycardia or in 10 some patients with lung disease reactive lung 11 disease that may be an issue for some of the beta 12 blockers. There is some data in the report that 13 describes looking at the measure with and without 14 the exclusions and there are some slight 15 differences, but nothing that would suggest on a 16 large scale that physicians are just randomly 17 deciding they don't like beta blockers and 18 writing "contraindicated."

19 Certainly in response to your first 20 question, yes, I mean, theoretically we can just 21 write a note in the chart that says it's 22 contraindicated. And the measure requires a

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documentation, not just that it's 1 2 contraindicated, but the reason for that. And so, I don't think that this is a particularly 3 4 large problem in terms of the measure itself. 5 CO-CHAIR FLEISHER: Cliff? Just a short thing about 6 MEMBER KO: the topped out and reserve. I think that we have 7 to rework those -- the NQF should help us rework 8 9 those things, because if reserve is similar to 10 sunset, then this -- definitely not. But if this 11 reserve is topped out at 98 percent, all the 12 measures that we put on reserve status last time 13 were just these numbers exactly. 14 So when we think about it one way 15 versus the other, then we'll think about reserve 16 or not. For this, if we're thinking about 17 sunset, it probably should not be, but the

18 numbers would suggest that it should. So we need 19 some clarification from NQF.

20 CO-CHAIR FLEISHER: Great. So 21 unfortunately we don't have -- I think, Marcia, 22 we need to go back to the CSAC for some insights

on this, or do you have comments? It would
 really be helpful.

3	DR. WILSON: What I will mention is we
4	hear this argument I shouldn't say that. We
5	hear this discussion in every committee meeting.
6	There are great concerns about putting measures
7	in reserve and what message that sends. As you
8	heard from my colleagues, reserve status does not
9	remove endorsement. It is an endorsed measure.
10	It can be brought back, as Elisa said, for review
11	or if something were to change about that
12	measure, or if there would be an indication that
13	performance on that measure was not maintained at
14	the level when it was put in reserve.
15	So I don't have an easy answer for you
16	because this is somewhat of a philosophical
17	divide that we see in the committees where
18	members are reluctant to put a measure in reserve
19	because of the message that it's sending, and yet
20	at the same time at the other argument would
21	be at 98 percent, as one of our Co-Chairs said,
22	this measure is topped out. So it is you have

to make the decision yourself, but it is a 1 2 philosophical divide that we see often in our committees, if that helps. 3 MEMBER LEVY: So it helps and it 4 5 doesn't help. When we hear the consequences from the NACOR registry that measures that were put in 6 7 reserve status were pulled out of PQRS and that CMS has decided --8 9 CO-CHAIR FLEISHER: I think CMS had 10 already signaled they were pulling it out when we 11 put it on reserve status. 12 MEMBER LEVY: Okay. 13 CO-CHAIR FLEISHER: Because I already 14 was aware, unless you are aware of something 15 different. 16 MEMBER LEVY: No, it like happened 17 like --18 CO-CHAIR FLEISHER: Yes, because I was 19 already talking to CMS. 20 MEMBER DUTTON: Yes, I don't think 21 there's cause and effect there, more of a shared 22 perception. But the fact that we couldn't keep

it in the QCDR meant it had a huge economic 1 2 impact on our membership and that they had to go find another measure to report for PORS. 3 And 4 that's the real elephant in the room here, is if 5 reserve status means that you can't report it for your federal pay-for-performance requirements, 6 7 there is a huge impact on all of the physicians, all of the eligible providers who have to report 8 9 these measures. And that's one of the reasons 10 the discussion gets so difficult.

11 DR. PAONE: If I could make just one 12 last comment, and that's even at 98 percent, if 13 that's what the average number is, it's still --14 and there's many thousands of patients in the 15 And so, that's still a fair number of database. 16 patients that theoretically are being discharged 17 without beta blockers, without contraindications, 18 and at the present time the data is still fairly 19 significant that discharge beta blockers have a 20 survival advantage. So we would want to take 21 every opportunity to make certain that this stays 22 at the forefront and is an important part of our

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composite and our data collection.

2	CO-CHAIR FLEISHER: So we have a
3	couple comments, and we want to get through all
4	the measures. My one advice to you, your last
5	statement's an interesting one that isn't in the
6	report, but when you come back it may be useful
7	to say the gap represents X number of patients
8	nationally. Would people agree? And that would
9	really help in defining that it's really not
10	topped out. It really opportunity for
11	improvement I guess is a different way of saying
12	and the implications for improvement.
13	Yes, Larry and then not, not Larry.
14	We've got A.J. and, yes, Allan.
15	MEMBER SIPERSTEIN: Okay. So the
16	whole reason this reserve status came about is
17	the whole way that we define the gap and
18	necessitating an opportunity for improvement as
19	opposed to thinking about it in a little bit of a
20	wider scope, saying this is an important area to
21	maintain or to continue to monitor even though
22	the compliance may be high. So I think we may

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1	need to think about kind of broadening our
2	definition of, kind of, what constitutes a gap.
3	CO-CHAIR FLEISHER: A.J.?
4	MEMBER YATES: Yes, I think there's
5	more to it than just the number, 98 percent.
6	When we put the antibiotic process measure on
7	reserve, there was already literature in the
8	health economics literature showing that it
9	didn't improve inequality at any particular
10	hospital, that it was something that could be
11	done without improving quality and that it was
12	just a checklist sort of thing that you could do.
13	I would argue that the difference
14	the average readmission and complication rates in
15	the joints that we talked about yesterday was 4
16	percent, so why is 98 percent so much different
17	than 96 percent? I'd love to argue top those
18	out, but I think there's a difference in terms of
19	there being performance and quality using that
20	measure.
21	The two things I would say about this
22	is, one, does the two percent non-compliance

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1 track with less well-performing cardiac centers?
2 Are they lower-star centers? And the second
3 thing is, is that looking at the trend over the
4 last few years they actually had a worsening of
5 utilization of the beta blockers in those people
6 that -- in the lower 10th percentile, so they
7 were actually going backwards.

8 So we're not talking about a static 9 situation. We're talking about something that 10 hit the wall and came back and they're 11 retracting. And if it correlates with the 12 quality of the center, then I -- or their overall 13 quality, then I think it has some reason to be 14 continued to be captured.

15 CO-CHAIR FLEISHER: Okav. I would 16 like to move forward. Just remember that the 17 CSAC did say for -- if you consider this a never 18 or what should occur as a low-frequency event, 19 you can consider the gap being important. So 20 that's the counter-argument. Whether you think 21 never missing an antibiotic is one of those 22 events, that's how you should potentially think

about it. 1 2 Can we call for a vote? 3 MS. QUINNONEZ: We are now voting on 4 Measure 0117. Voting is now open for performance 5 gaps on Measure 0117. Option 1 is high; option 2, moderate; option 3, low; and option 4, 6 insufficient. 7 8 (Voting.) 9 MS. QUINNONEZ: All votes are in and 10 voting is now closed. For the performance gap of Measure 0117, 0 percent voted high; 62 percent 11 12 voted moderate; 38 percent voted low; and 0 13 percent insufficient. 14 CO-CHAIR FLEISHER: Okay. We will 15 keep going. Next, Lynn? 16 MEMBER REEDE: Reliability? 17 CO-CHAIR FLEISHER: Yes, any 18 differences from the previous measure? 19 MEMBER REEDE: Looked at the No. 20 measure score. Signal-to-noise was good. Ready 21 to go. 22 **CO-CHAIR FLEISHER:** Okay.

It's not risk-adjusted. 1 MEMBER REEDE: 2 CO-CHAIR FLEISHER: Any comments? (No audible response.) 3 4 CO-CHAIR FLEISHER: Would anybody like 5 to vote on this separately from our previous vote? 6 7 (No audible response.) CO-CHAIR FLEISHER: No. 8 Can we -- do 9 we have the right to continue our previous --10 okay. Validity? Right? 11 MEMBER REEDE: Is that enough? 12 CO-CHAIR FLEISHER: Yes. 13 MEMBER REEDE: You want to discuss 14 more? 15 CO-CHAIR FLEISHER: Validity, any 16 comments? 17 MEMBER McCARTY: I have one more 18 question about validity. So I know this is 19 suggested to be a companion measure to 20 preoperative beta blockers. My question is that 21 for whatever reason if preoperative beta blockers 22 aren't given, and for the most part they are;

we'll get to that gap in a minute -- but is it 1 2 dangerous to prescribe a beta blocker where you can't monitor the effects of what happens when 3 4 that patient goes home and takes it? CO-CHAIR FLEISHER: 5 Essentially unintended consequences is what you're asking? 6 7 MEMBER McCARTY: I quess so. I mean, I -- realistically 8 DR. PAONE: 9 there's always potential consequences any time 10 that we prescribe a medicine to any patient at 11 any time. I'm not sure what that has to do with 12 the measure per se. 13 MEMBER McCARTY: Well, I guess I --14 (Simultaneous speaking.) 15 DR. PAONE: We follow up. I mean, the 16 patients are followed by their surgeons, by their 17 cardiologists, by their internists after any 18 cardiac procedure, and we do take their heart 19 rate, their blood pressure, ask if there are any 20 problems. I'm not quite sure how else to answer 21 that. I mean, I can't --22 MEMBER McCARTY: Let me rephrase the

question.

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2 DR. PAONE: Sure. 3 MEMBER McCARTY: So I mean, I think 4 that the way that this has been studied has been 5 mostly like a beta-blocker regimen. So you start it preoperatively. You continue it at discharge. 6 7 And is there any evidence to suggest that if the first half of that process is missing that if 8 9 they don't start to get the drug in their system 10 prior to surgery that there is a risk of them 11 getting it after? So it's just a risk question 12 more than an unintended consequence question. 13 DR. BADHWAR: Brief response to that. 14 It's a good question, however, there's a dose-15 response to any medicine, and particularly 16 starting post-operatively, it's well known that 17 we are cautious in discharge beta blockers. They 18 don't start them on the max dose if they've never 19 seen it before. So I would just respond to that 20 as dose response like any other medicine? 21 MEMBER McCARTY: Thank you. 22 CO-CHAIR FLEISHER: Okay. Would

people like to vote for -- would anybody like to 1 2 vote? 3 (No audible response.) 4 CO-CHAIR FLEISHER: Yes? No? 5 (No audible response.) CO-CHAIR FLEISHER: No? 6 Okay. We'll 7 carry on the previous vote for validity. Next? 8 9 MEMBER REEDE: Feasibility. Collected 10 the same as the previous data. 11 CO-CHAIR FLEISHER: Any comments? 12 (No audible response.) 13 CO-CHAIR FLEISHER: No? Would anybody 14 like to vote separately on this measure? 15 (No audible response.) CO-CHAIR FLEISHER: Okay. 16 Next? Use 17 and usability. 18 MEMBER REEDE: Usability and use. 19 Same. 20 Any difference? CO-CHAIR FLEISHER: 21 (No audible response.) 22 CO-CHAIR FLEISHER: Anybody like to

1 vote separately? 2 (No audible response.) CO-CHAIR FLEISHER: 3 No. Okay. We're next at suitability for endorsement. 4 5 So, Desmirra, can you --MS. QUINNONEZ: We are now voting on 6 7 the overall suitability for endorsement of Measure 0117. Option 1 is yes; option 2 is no. 8 9 (Voting.) 10 MS. QUINNONEZ: Looking -- all votes 11 are in and voting is now closed. For the overall 12 suitability for endorsement of Measure 0117, 100 13 percent voted yes; 0 percent voted no. 14 CO-CHAIR FLEISHER: Okay. Moving on 15 to 0127, preoperative. So any changes in 16 evidence and comments on the gap? 17 DR. PAONE: No particular changes in 18 evidence worth noting, but I will comment on the 19 It remains actually more significant than qap. 20 the previous two measures. I think the lower 21 levels are down in the low 80s despite the high 22 average. And so for reasons that we've discussed for the previous two measures, but particularly with regards to an ongoing gap I think we would again strongly endorse, recommend endorsement.

As far as the -- well, I should go back and say for different -- for new information there is some controversy around this measure in the sense that recent studies looking at patients from the database have a large trial of over 500,000 patients looking at those with and without beta blockers.

Preoperatively there really was little difference in outcomes in that particular trial, and in that same journal Dr. Shahian, who is here in the audience today, had an invited commentary where he addressed many of the issues related to why those differences may have occurred.

17 One of the most significant 18 differences in the -- the fact of the incidence 19 of atrial fibrillation with and without beta 20 blockers, that's known to occur in 25 percent of 21 patients, carries a great deal of morbidity. And 22 over the years, 30-plus articles have clearly

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defined beta blockers as being of benefit in that population.

We have over the past iteration of the 3 4 data set, data collection vehicle, added an 5 additional data variable looking at beta blockers for greater than two weeks preoperatively in 6 7 addition to the one that's before us here today, which was less than 24 hours. And the reason for 8 9 adding that data point was to try to further 10 define the true benefits of this therapy. And in 11 addition to believing that beta blockers still 12 confer a benefit, the addition of that data set 13 will afford an opportunity to study this more 14 intensely going forward. And that's just another reason that we would like to maintain focus on 15 16 this measure. 17 CO-CHAIR FLEISHER: Kelsey, any 18 comment? 19 MEMBER McCARTY: Nothing new to add on 20 evidence or gap. 21 CO-CHAIR FLEISHER: Lynn, David, do 22 you want to make any comments?

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DR. SHAHIAN: No, I think --1 2 CO-CHAIR FLEISHER: Okay. So would anybody like to vote on evidence? 3 4 (No audible response.) 5 CO-CHAIR FLEISHER: No. Gap, Kelsey? MEMBER McCARTY: Just, I mentioned 6 7 that it was in the 80s, the data that I had from the measure worksheet is that it was in the 80s 8 9 back in 2012, but has risen to 93.5 now. So it 10 is quite a bit higher, but I still think that 11 shows opportunity for improvement. 12 CO-CHAIR FLEISHER: Okay. Any other 13 comments? 14 (No audible response.) 15 CO-CHAIR FLEISHER: No. Why don't we 16 vote? 17 MS. QUINNONEZ: We are now voting on 18 Measure 0127. Voting is now open for the 19 performance gap of Measure 0127. Option 1 is 20 high; option 2, moderate; option 3, low; and 21 option 4, insufficient. 22 (Voting.)

1	MS. QUINNONEZ: All votes are in and
2	voting is now closed. The results read 14
3	percent voted high; 81 percent voted moderate; 5
4	percent voted low; and 0 percent voted
5	insufficient.
6	CO-CHAIR FLEISHER: Sorry, Collette.
7	Did you have any comments? I'm sorry. I
8	missed
9	MEMBER PITZEN: That's okay. My
10	previous comments about performance gap apply
11	here as well.
12	CO-CHAIR FLEISHER: And when the
13	report comes out, remember everybody gets to see
14	the report that goes to CSAC. Please, if there
15	are sections that you want to emphasize something
16	that the CSAC should consider either for this
17	measure or in a greater sense, please make sure
18	that that's clearly articulated in the report to
19	reflect your concerns.
20	Okay. We're now up to reliability.
21	Kelsey?
22	MEMBER McCARTY: Nothing new to add.
-	

I have a question. 1 MEMBER PITZEN: So 2 please describe to me the numerator with the beta blocker less than 24 hours before discharge. 3 Is 4 that an understanding perhaps that the patient is 5 on the beta blocker preoperatively and that's continued in that dose the day of surgery given, 6 7 or what is that time frame? And when I'm looking at the actual data in the database, unlike the 8 9 discharge medication this just simply has a check 10 box for contraindicated without any reference to 11 criteria. 12 DR. PAONE: So the numerator is all 13 patients who receive beta blockers within 24 14 hours of surgery, and that's whether they've had 15 it for two weeks, two months or just started the 16 day before. 17 MEMBER PITZEN: Okay. So is it likely 18 or not likely that they would be given a beta 19 blocker the morning of surgery or for a very 20 first dose? 21 DR. PAONE: Yes, that's a very good 22 question. It's a great question. It's -- the

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ongoing controversy is in that question.

2 So in order to satisfy the measure, it was not uncommon, and this was one of the 3 4 criticisms of the study that I mentioned is that 5 we don't know the difference between a patient -the benefits of beta blockers in a patient who's 6 7 been on it for two weeks or two months versus a patient who comes into the hospital the morning 8 9 of surgery and is given a dose a beta blocker. 10 We -- and that is not -- has not been uncommon, 11 frankly, because it does satisfy the data set. 12 And that's where the new data variable added will 13 hopefully provide additional information. 14 The thought among many is it's 15 probably not the dose necessarily or even the 16 medicine but the physiologic response, and so 17 there are other variables in terms of the 18 specific medication given, how it's given and 19 then whether or not the patient has responded to 20 it. So there are some questions with this that I 21 think really is why we'd like to maintain it as an endorsed measure and enable us to continue to 22

look at this issue and study it further as the 1 2 number of patients increases in the database given the new added variable. 3 4 MEMBER PITZEN: So the way it -- as it 5 is now, it could be an unintended consequence that relates to patient safety. 6 Is that correct, 7 or is that taking it too far? I'm just thinking 8 of the patients perhaps that have never been on a 9 beta blocker. 10 DR. PAONE: I mean, I guess 11 theoretically there's always a potential for an 12 unintended consequence, but that certainly hasn't 13 been the experience. 14 CO-CHAIR FLEISHER: Rick? 15 MEMBER DUTTON: Yes, I do this about once a week, Collette. Same thing. Here's a 16 17 patient not on beta blockers scheduled for 18 It's indicated. There's a box in my surgery. 19 EHR that says I have to decide am I going to give 20 it or not. And different people play that 21 different ways. 22 Generally, we look at the patient. If

they're hypotensive or bradycardic already, we 1 2 would not give it and say contraindicated. That's what that box means. But it can be for a 3 4 number of different reasons based on my 5 assessment. And there are some anesthesiologists, honestly, who would give a 6 7 drop, a homeopathic dose to satisfy the regulatory requirement, but not have any 8 9 different physiologic effect, if that makes 10 sense. 11 DR. PAONE: I will add just on a 12 practical basis, there are not that many patients 13 that come into the hospital for coronary bypass 14 surgery not on beta blockers without a 15 contraindication, and one of the reasons to give 16 that dose of medicine isn't necessarily that they 17 haven't been on it, but it's because you can't 18 document that they've taken their last dose 19 within 24 hours. So even though you know they're 20 on it, you just can't find that documentation 21 anyway. So the easiest thing to do is just give 22 them a dose and then you write the time down in

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the medical record and now you've satisfied the 1 2 data set. CO-CHAIR GUNNAR: Okay. Would anybody 3 4 like to vote on reliability? 5 Collette, would you like us to do a separate vote on reliability? Does it matter? 6 7 MEMBER PITZEN: Sure. 8 CO-CHAIR FLEISHER: Sure. Why don't 9 we do it? 10 MS. QUINNONEZ: Voting is now open on the reliability of Measure 0127. Option 1, high; 11 12 option 2, moderate; option 3, low; and option 4, 13 insufficient. 14 (Voting.) 15 MS. QUINNONEZ: All votes are in and 16 voting is now closed. For the reliability of 17 Measure 0127, 33 percent voted high; 57 percent voted moderate; 10 percent voted low; and 0 18 19 percent for insufficient. 20 CO-CHAIR FLEISHER: Kelsey, validity? 21 MEMBER McCARTY: Nothing new to add. 22 CO-CHAIR FLEISHER: Since there was no

1	discussion, I will ask if the my habit now
2	will be is if there's discussion points, we'll
3	vote. If there's no discussion, we'll ask if
4	anyone would like to vote.
5	Is there any desire to vote?
6	(No audible response.)
7	CO-CHAIR FLEISHER: No. Let's move
8	on. So now we're onto feasibility.
9	MEMBER McCARTY: Same as before.
10	CO-CHAIR FLEISHER: Collette?
11	MEMBER PITZEN: May I just ask a
12	question again?
13	CO-CHAIR FLEISHER: Please.
14	MEMBER PITZEN: So when I think of
15	feasibility, I guess I'd like to ask the
16	developers how many of the participating
17	institutions have really a direct pass-through
18	from their electronic record to your registry,
19	because when I look at the data elements that are
20	collected in the registry, it assures my mind a
21	little bit if there's a lot of hospitals that
22	have this already built into their EHR without

the added abstraction that it would take to get this information.

DR. PAONE: Well, I can answer that as 3 4 someone who works very closely with the data 5 manager at our institution, and we have over the last two years instituted the use of the Epic 6 7 electronic health record. At our institution the pass-through is zero at this point, but we are 8 9 actively working with our IT people to institute 10 that. 11 One of the issues for us actually, 12 unrelated and just very quickly, is we've just 13 had to change our data set. The manufacturer of 14 the program that we use has just changed, so 15 we're in a six-month process of just changing 16 over the data set. 17 But that's a great question. And 18 everyone that does this is looking for ways to

19 automate this, and we are as well, but I don't 20 know what it is, what the penetrance of automated 21 data transfer is nationally, but we don't do it. 22 I would guess it's very low, yes.

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1 MEMBER PITZEN: Thank you. And the 2 reason I ask that question again is the costbenefit of data collection versus the output. 3 4 And there is -- you guys have great measures. 5 I'm just talking about some of the process ones that are topped out and then the future potential 6 7 to build new great measures from your registry. Yes, just very quickly I 8 DR. PAONE: 9 would add for the same reason as the others, 10 there's really no added burden to checking off a 11 box for pre-op beta blockers. 12 CO-CHAIR FLEISHER: Yes, David? 13 DR. SHAHIAN: Just in terms of 14 automated extraction, it is an important point 15 and we have explored multiple avenues to make 16 that possible. Needless to say the EHR 17 manufacturers have not been particularly 18 interested in these efforts so far. We're 19 continuing to work with them. But there are 20 major differences between the unstructured data 21 fields in EHRs and the highly structured, highly 22 defined data fields we have in clinical

registries. That's what makes clinical
 registries so powerful.

And we caution people about trying to 3 4 extract data from EHRs, particularly some of our 5 more complex definitions. It's very difficult to do it even with natural language processing and 6 7 all those sorts of things. So it's an interesting area. We'd like to reduce data 8 9 collection burden. It isn't happening much so 10 far. So, but good question. Thank you. 11 CO-CHAIR FLEISHER: Would you like --12 shall we vote then, since there were questions? 13 (No audible response.) 14 CO-CHAIR FLEISHER: Go ahead. 15 MS. QUINNONEZ: Voting is now open for 16 the feasibility of Measure 0127. Option 1 is 17 high; option 2 is moderate; option 3 is low; and 18 option 4, insufficient. 19 (Voting.) 20 MS. QUINNONEZ: All votes are in and 21 voting is now closed. For the feasibility of 22 Measure 0127, 57 percent voted high; 38 percent

voted moderate; 5 percent voted low; and 0
 percent for insufficient.

CO-CHAIR FLEISHER: 3 Great. A.J.? 4 MEMBER YATES: This is not intended 5 just for STS, but STS routinely points out how reasonable their price is to participate and how 6 7 it's underwritten and everything else, but that's the cost of being in the registry. The cost of 8 9 uploading to the registry is not insignificant 10 and can run six figures in terms of the people 11 you have to support to do all that for you and 12 make sure that your i's are dotted and your t's 13 are crossed.

14 So I think for registry data that's 15 being put in that's not EMR direct pass-through, 16 which I would agree is not the sine qua non of 17 excellence; it may be that it's not as good as we 18 would like, it would be great if there was an 19 estimate of what the real true cost to the 20 hospital is for participating in the registry, 21 not just the cost to -- the contract cost with 22 STS. And I think that would be a reasonable

thing to expect from another developer, so I put 1 2 that out as one of the things on the wish list 3 that we can add to the conversation for down the 4 road. 5 CO-CHAIR FLEISHER: Thank you. CO-CHAIR GUNNAR: Just for perspective 6 7 for the group, what's the number of data fields that have to be extracted in place per case? 8 I think it was 178 this last time. 9 10 DR. PAONE: I honestly -- and maybe 11 David knows the exact number. It's probably more 12 than --13 About 200 --DR. SHAHIAN: DR. PAONE: Yes. 14 15 DR. SHAHIAN: -- or 250, something 16 like that. 17 DR. PAONE: Yes, I think so. Yes. 18 MEMBER YATES: Which I respect 19 immensely but -- and I think that's where 20 registries have to go, but I think you have to 21 recognize that there is a cost per each 22 institution, and it's not just the 3,000 for

being contracted with the registry. 1 2 DR. SHAHIAN: And I think for valve 3 repairs you've actually expanded that even farther, right? 4 5 CO-CHAIR FLEISHER: So -- and we recognize that it is fortunate the STS model is 6 7 to get the hospital to underwrite this. So I think it's a very good point and we'll put it 8 9 into the report and you'll be responsible for 10 making sure it's well said as far as --11 Yes, sir, and I will MEMBER YATES: 12 emphasize the fact that I really think the 13 hospital should pay for it. 14 (Laughter.) 15 CO-CHAIR FLEISHER: Thank you. 16 MEMBER YATES: For other registries as 17 well. 18 CO-CHAIR FLEISHER: And that's a --19 the only reason is I hear that, but you guys were 20 -- you were the first, you were the best in 21 initiating. 22 Use and usability? Comments?

1	MEMBER McCARTY: Nothing to add.
2	CO-CHAIR FLEISHER: Nothing? Anybody
3	want to vote?
4	(No audible response.)
5	CO-CHAIR FLEISHER: Okay. So are we
6	up to voting for the measure?
7	(No audible response.)
8	CO-CHAIR FLEISHER: Okay. We are on
9	time.
10	MS. QUINNONEZ: We are now voting for
11	the overall suitability for endorsement of
12	Measure 0127. Option 1 is yes; option 2, no.
13	(Voting.)
14	MS. QUINNONEZ: All votes are in;
15	voting is now closed. For the overall
16	suitability for endorsement of Measure 0127, 95
17	percent voted yes; 5 percent voted no.
18	CO-CHAIR FLEISHER: Okay. Now we get
19	to actually the composite. So 3030.
20	DR. BADHWAR: So Composite Measure
21	3030 is a multi-procedural/multi-dimensional
22	composite measure on the STS individual surgeon

composite measure for adult cardiac surgery. 1 It 2 includes five major operations: isolated coronary bypass grafting; isolated aortic valve 3 4 replacement; AVR plus CABG; isolated mitral valve 5 repair or replacement, or what we term as MVRR; and MVRR plus CABG, and it comprises a risk-6 7 adjusted operative mortality domain and the riskadjusted major morbidity domain consistent with 8 9 all of our previous measures. And those domains 10 are five: major complication composite, prolonged 11 ventilation, deep sternal wound infection, 12 permanent stroke, renal failure and re-operations 13 of cardiac origin such as bleeding, coronary 14 graft occlusion, valve disfunction, et cetera. 15 This includes seven previous NQF-16 endorsed risk-adjusted mortality outcome measures 17 and five endorsed risk-adjusted complications as 18 noted. In the scientific aspects of this 19 composite, a lot of effort was made to assure its 20 reliability. In similar models it's a Markov 21 chain simulation, 95 percent Bayesian probability interval. 22 The evidence missing is only 0.4

percent for mortality and 0.3 percent for 1 2 morbidity. And the composite consists of the reliability of each of these. 3 4 And just for frame of reference, which 5 I won't be duplicative in the next comments, for CABG it was 0.77 reliability, isolated AVR 0.52, 6 AVR CABG 0.5, isolated MVRR 0.58, and MVRR plus 7 CABG is 0.5. And so this data set is three 8 9 years, from July 2011 to July -- sorry, June 2014 10 involving 2,286 surgeons, 621,489 cases, and it 11 is the highest reliability of all of our measures 12 ever performed at 0.81. 13 And so, with this the objective is --14 it's an implicit weighted score, and we propose 15 this for our next composite measure for adult 16 cardiac surgery. 17 CO-CHAIR FLEISHER: Great. Thank you.

18 An important point; I just checked with Melinda, 19 while they do mention the Star Ratings, we do not 20 endorse the way they actually report it. We 21 endorse the measure. But whether it's one star, 22 two star and how they define the stars is not
1 part of our endorsement process. 2 DR. BADHWAR: I intentionally didn't mention that. 3 4 CO-CHAIR FLEISHER: Thank you, but it 5 was sitting in front of me, so I had to make a comment --6 DR. BADHWAR: No problem. 7 CO-CHAIR FLEISHER: -- for the 8 9 Committee to recognize, because that would 10 probably take another three-hour debate about how 11 they actually defined that. So we have -- our discussants are Karl 12 13 and Barbara. Karl? 14 MEMBER BILIMORIA: Great. So that was 15 a good overview and covers a lot of it. I think 16 under the evidence category, mortality is clearly 17 decreasing and they make a nice point about being 18 able to focus on quality of patients who survive. 19 And so this composite does that. The 20 complication rates still remain pretty high with 21 13.7 percent prolonged ventilation. Mortality 22 still remains 2.3 percent. So I think the

evidence is there for measuring these outcomes. 1 2 As mentioned, all 12 of the components are NQF-3 endorsed already. 4 CO-CHAIR FLEISHER: So any comments, 5 because Barbara -- can we vote on evidence? (No audible response.) 6 7 MS. QUINNONEZ: We are now voting on the evidence for Measure 3030. Option 1 is yes; 8 9 option 2 is no. 10 (Voting.) 11 MS. QUINNONEZ: All votes are in and 12 voting is now closed. For the evidence of 13 Measure 3030, 100 percent voted yes; 0 percent 14 voted no. 15 MEMBER BILIMORIA: All right. So for 16 the performance gap I think it's pretty obvious 17 they had 9 percent of surgeons being noted to be 18 worse than expected and 18 percent better. 19 Clearly there's variability here that's 20 meaningful. 21 CO-CHAIR FLEISHER: Melinda is just 22 going to comment about one thing.

1 MS. MURPHY: The component measures 2 are specified for analysis at the group or practice level, and this measure is applicable at 3 4 the individual physician level. So we had a fair 5 amount of discussion internally about that because the question is the endorsement or the 6 consideration of the component measures. And the 7 discussion was, if it is suitable for use at a 8 9 group or practice level, you could have a group 10 or practice of two physicians and what is the 11 difference between applying it to two versus one? 12 So I only say that as a point of the way in which 13 the component measure is endorsed and the way 14 this measure will be used. 15 MEMBER BILIMORIA: I think it's more 16 about the specifications that have already been 17 well established in those prior metrics, and we 18 can talk a little bit about some of the 19 differences by surgeon as we move on for this 20 composite. But as I mentioned, we have a good 21 performance gap undoubtedly, so should we -- are

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there any other comments?

1 CO-CHAIR FLEISHER: Comments? 2 MEMBER LEVY: Just in general, and 3 this is more of a clinical comment than an 4 evidence comment, but cardiac surgery is a team 5 It's very unlikely that an outcome is sport. related, particularly a morbidity or mortality 6 7 outcome is related to an individual. And so, I would just ask the developers why report this at 8 9 an individual level? Why did you decide to 10 report this at an individual level rather than at 11 the group level? 12 DR. BADHWAR: I will make a brief 13 comment on that. That's a very insightful 14 comment, and we agree with you that cardiac 15 surgery is a team sport. However, currently in 16 the United States, surgeon-level reporting using 17 claims data is going on, and it is an unfortunate 18 situation because that data is often not as 19 accurate as the STS Database and the clinical 20 registry that we have. And so we wanted to form 21 this in the most scientifically valid way we 22 possibly can to address that. And it's already

something that we are being asked for, and to do
 so in the most responsible way forward is what
 the objective was.

4 CO-CHAIR FLEISHER: Thank you. But 5 you also report it at the group level, correct? This particular measure 6 DR. BADHWAR: 7 is not. This is an individual surgeon measure. CO-CHAIR FLEISHER: There is a 8 Okay. 9 debate actually at the Board when I was briefly 10 on it of the consumerism approach of they want 11 individual practitioner-level measures. Most of 12 us around this table agree it's a team sport. 13 Being an anesthesiologist, very much a team sport 14 in many of these things. Intensivist. But that 15 debate is beyond the purview of this Committee 16 alone. 17 A.J.?

18 MEMBER YATES: Yes, I share the same 19 concerns as Barbara, and in the past, STS has 20 rejected the idea that they could do this at the 21 individual level because of small sample size 22 analysis and the like.

I have a question and then -- a real 1 2 quick question, then I want to just make a point. What's the exclusion criteria by volume? 3 4 MEMBER LEVY: Yes, it's 100 cases over 5 3 years. Thank you. 6 DR. BADHWAR: Yes. 7 MEMBER YATES: Okay. So it has to be 8 100 over 3 years? 9 DR. BADHWAR: There's a minimum. 10 MEMBER YATES: So it's pretty low. 11 It's pretty low in terms of 50 a year? 12 DR. BADHWAR: Correct. 13 MEMBER YATES: Or, excuse me, 30 a 14 year. 15 DR. BADHWAR: Yes. 16 MEMBER YATES: My one question, and I 17 would have to delve into the actual measure 18 specifics more than time allows, but do you take 19 the sum total of reports from a particular 20 institution? And since you're not reporting this 21 by institution, do you take the sum total of the 22 results and then use that as a risk factor for

poorly performing institutions that may not have the best intensive care units or the best cardiologists or the best anesthesiologists; not that any anesthesiologist isn't perfect, Dr. Fleisher --

(Laughter.)

MEMBER YATES: -- but do you not -- do 7 you take -- do you do -- risk-adjust for the 8 9 environment that the surgeon is working in since 10 it is a team sport? And I -- because I would 11 think that that would be an important feedback 12 loop to make sure that they're not analyzed in 13 such a way that it takes the environment out of 14 the picture.

15 It's another insightful DR. BADHWAR: 16 comment. While we have site-specific data, this 17 is tracked directly to the surgeon ID number, and 18 there are many situations -- unlike major 19 academic institutions, there are many situations 20 where surgeons operate in different institutions 21 and this -- the purpose of this measure is to 22 track by surgeon, though your points are valid.

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1	MEMBER YATES: Well, those effects of
2	those institutions though because they have to
3	be reporting registered institutions for those to
4	count, those could be proportionally weighted.
5	DR. BADHWAR: That's valid.
6	CO-CHAIR GUNNAR: So just to be clear,
7	the purpose of this, one of the purposes of this
8	was if I'm operating at four institutions, this
9	is a collection of all of my cases for that
10	period of time at all of those institutions?
11	DR. BADHWAR: Correct.
12	MEMBER YATES: I'm sorry to follow up
13	without being called on, but one of the
14	unintended consequences of not doing a risk-
15	adjusting for that is that, of those four
16	institutions, a really good surgeon realizes that
17	one of them is one where it's really hard to get
18	as good a result as he can other places, yet
19	that's an isolated location and his expertise is
20	all they're going to get. There's a chance that
21	he'll stop going to that institution if it's
22	going to bring down his reporting. And I just

1

throw that out for consideration.

2	CO-CHAIR GUNNAR: So this goes back to
3	NQF again about is the measure this measure is
4	actually at its core is about ongoing
5	professional practice evaluation. It's not about
6	quality improvement at any one institution. And
7	so philosophically is that in line with the
8	mission and vision of the NQF?
9	CO-CHAIR FLEISHER: See, I would
10	actually argue that that surgeon should stop
11	operating at that institution that's dragging
12	down his numbers, and that's what the public
13	wants. The public wants us to say, if I look bad
14	because of one institution, then I'm going to say
15	to the institution I can't operate there anymore.
16	You shouldn't be doing cardiac surgery unless
17	I'm
18	(Simultaneous speaking.)
19	MEMBER YATES: administration of
20	that institution and say I'm taking my patients
21	and going elsewhere unless you improve the
22	quality of your ICU, your cardiac anesthesia and

<pre>1 so forth. So there is an opportunity to provid 2 quality improvement. 3 CO-CHAIR FLEISHER: Right. Thank y 4 We're saying actually the same</pre>	you.
3 CO-CHAIR FLEISHER: Right. Thank y 4 We're saying actually the same	
4 We're saying actually the same	
	c
	2
5 MEMBER YATES: Yes.	C
6 CO-CHAIR FLEISHER: thing. Rick	
7 and	
8 (Simultaneous speaking.)	
9 MEMBER DUTTON: Does your as you	1
10 present this as an individual result, does your	2
11 statistical model include hierarchical modeling	J
12 of the facility? So is the facility affecting	
13 the risk-adjustment?	
14 DR. BADHWAR: I believe so, yes.	
15 MEMBER DUTTON: And asked the other	5
16 way, if you were reporting this at the facility	7
17 level; so you're reporting to a facility their	
18 performance on this composite, would you adjust	:
19 it for the surgeon?	
20 DR. BADHWAR: So at this point that	:'s
21 not part of our formulation to have a surgeon-	
22 level variable, though that's an interesting	

point.

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2 MEMBER BILIMORIA: No, I mean as I 3 think that the public wants it, surgeons want it, this -- some things drive institutional 4 5 improvement, and this will drive surgeon-level improvement even if you can't be responsible --6 7 (Simultaneous speaking.) CO-CHAIR GUNNAR: I don't know if 8 9 surgeons want it. 10 (Simultaneous speaking.) 11 MEMBER BILIMORIA: -- the entire 12 outcome --13 (Simultaneous speaking.) 14 CO-CHAIR GUNNAR: There's no vote on 15 I mean, nobody raised their hand. I mean, that. 16 one of the interesting things about public 17 reporting -- what's the penetrance now for public reporting requests? 18 19 DR. BADHWAR: Forty-nine percent 20 for --21 (Simultaneous speaking.) 22 CO-CHAIR GUNNAR: Forty-nine percent.

And that's at the group or at the --1 2 DR. BADHWAR: That's at a site 3 participant level. 4 CO-CHAIR GUNNAR: -- site participant 5 level. DR. SHAHIAN: Can I just make one 6 7 comment? CO-CHAIR FLEISHER: Yes, David, but it 8 9 would be -- go ahead. Can you come up? You're 10 allowed. He is a Board member. 11 (Laughter.) 12 CO-CHAIR FLEISHER: So if you could 13 come up here? 14 DR. SHAHIAN: Just informational, just 15 in terms of the philosophy of developing this 16 measure, the comments are absolutely correct that 17 we have historically avoided surgeon-level 18 measures for the exact reasons that were noted: 19 sample size and the fact that it's a team sport. 20 But the problem is that there are entities out 21 there that are publishing grossly flawed data and 22 we've seen two very good examples of it just in

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the last year.

2	Several of us in the room have been
3	involved in critiques of some of these grossly
4	flawed measures, and we wanted to have something
5	that was scientifically valid that if we were in
6	a position of having to provide surgeon-level
7	data, we wanted to have the best possible
8	measure. That's what we've tried to do with this
9	measure which encompasses about 80 percent of a
10	typical cardiac surgeon's workload through these
11	five procedures. So having five procedures, two
12	domains, which each of them themselves have
13	multiple measures within them, and then three
14	years of data, that's why we have this very high
15	reliability.
16	So it's not a measure that frankly we
17	probably would have developed had not these other
18	forces beyond our control sort of pushed towards,
19	but we do have now a measure that we have a great

20 deal of confidence in.

21 CO-CHAIR GUNNAR: So are you currently 22 reporting the measure?

DR. SHAHIAN: No, our plan with this 1 2 measure is to provide this individually to surgeons only, their own results, for 6 to 12 3 4 months and make sure that they're comfortable 5 with it, and that there's nothing that we haven't thought of, although we've spent two years 6 developing this. So I think it's pretty 7 unlikely. But we're going to do this 8 9 confidentially to the surgeons for about a year, 10 and only then and probably only if we're pressed 11 are we going to start publicly reporting it. But 12 we want to have it ready. And I would not be at 13 all surprised that the way things are moving that 14 there will be public reporting of this measure 15 within a year. 16 CO-CHAIR FLEISHER: So just to -- in

17 the use and -- in the committee that looked at 18 intended use this idea of having the end user be able to review the data was one of the major 20 themes that came out of it. So the process 21 you're talking about is actually this idea, if 22 I'm thinking -- remembering correctly -- Marcia

is shaking her head -- that this would be the 1 2 process that you might get to NQF endorsementplus, that we wanted the -- so you're actually 3 4 foreshadowing the idea that we want -- that once 5 measures are out, we'd like it publicly reported. But that would be what could be the next stage of 6 the game is people being comfortable with the 7 8 data. 9 DR. SHAHIAN: Yes. 10 CO-CHAIR FLEISHER: Larry and Barry. 11 We need to keep moving because they have to 12 leave. 13 MEMBER MOSS: Just wanted to offer an 14 alternative point of view. I agree that surgery 15 is a team sport, but a patient goes to the 16 operating room not with an institution, but with 17 an individual surgeon and needs to choose an 18 individual surgeon. And every one of us knows in 19 this room, regardless of how uncomfortable it 20 might make us, that there is variation in 21 individual surgeons' talent and performance. 22 So I support what you're doing. Ι

think it's the right thing to do. We may not be 1 2 able to ideally compare surgeons, but it's a step in the right direction and I support you. 3 4 DR. BADHWAR: Thank you. CO-CHAIR FLEISHER: Thank you. 5 And to be clear, from the consumerism standpoint that's 6 7 the way they think about it. Who takes how to look at the team and whether the surgeon has to 8 9 -- if they're not having a great result, look at 10 the whole team, so to the comment you made. 11 Barry? 12 MEMBER MARKMAN: Do you an education 13 process with poor outliers? I mean, you have the 14 data, so what do you plan to do with it? 15 DR. BADHWAR: That's part of the 16 process of feedback reports and looking at and 17 tracking quality improvement, but that's why this 18 is -- your point is important. We don't have an 19 answer yet, but maybe we will in a few years. 20 CO-CHAIR FLEISHER: So let's vote on 21 performance gap. 22 MS. QUINNONEZ: Voting is now open for

1	performance gaps of Measure 3030. Option 1 is
2	high; option 2 is moderate; option 3, low; and
3	option 4, insufficient.
4	(Voting.)
5	MS. QUINNONEZ: Looking for one more
6	vote. If you could resubmit your votes, please?
7	(Voting.)
8	CO-CHAIR FLEISHER: Okay.
9	MS. QUINNONEZ: Okay. Voting is now
10	closed. For performance gaps of Measure 3030, 60
11	percent voted high; 40 percent voted moderate; 0
12	percent for low; and 0 percent for insufficient.
13	CO-CHAIR FLEISHER: Okay. Next?
14	MEMBER BILIMORIA: So we need to touch
15	on the quality construct. Is that the next
16	piece?
17	(No audible response.)
18	MEMBER BILIMORIA: So I think
19	CO-CHAIR FLEISHER: Next is
20	MEMBER BILIMORIA: Yes, for the
21	composite.
22	CO-CHAIR FLEISHER: the composite.

1 MEMBER BILIMORIA: Yes, the quality 2 constructs of the composite. CO-CHAIR FLEISHER: 3 Right. 4 MEMBER BILIMORIA: So if it was -- as 5 mentioned, it gives a pretty comprehensive view of the individual surgeon's practice. 6 It's 80 7 percent of their practice. Clearly, mortality and morbidity are important. The weighting and 8 9 the approach to putting together the composite is 10 well described, and we can talk about it below in 11 validity, but it was vetted by an expert panel. 12 And so, I think it's well described at this 13 point. 14 Any other points that we should touch 15 on in the composite construct? 16 CO-CHAIR FLEISHER: Any other 17 comments? 18 (No audible response.) 19 CO-CHAIR FLEISHER: Okay. Let's vote. 20 MS. QUINNONEZ: Voting is now open for 21 the composite quality construct of Measure 3030. 22 Option 1 is high; option 2 is moderate; option 3,

1	low; and option 4, insufficient.
2	(Voting.)
3	MS. QUINNONEZ: Voting is now closed.
4	For the composite of Measure 3030, 85 percent
5	voted high; 15 percent voted moderate; 0 percent
6	for low; and 0 percent insufficient.
7	CO-CHAIR FLEISHER: Karl, do you want
8	to continue?
9	MEMBER BILIMORIA: Yes, so moving on
10	to reliability. I think the specifications are
11	they're well specified. They're the same
12	specifications from prior NQF measures. They do
13	audits, as mentioned, on about 10 percent. And
14	in terms of formal reliability testing, that was
15	well covered here using multiple approaches. And
16	the reliability for surgeons with greater than
17	100 cases was 0.81. And so, I think that's
18	probably one of the best that we've seen so far.
19	So I have no issues on reliability.
20	CO-CHAIR FLEISHER: Do you think this
21	is different? It's a composite. So let's vote.
22	MS. QUINNONEZ: Voting is now open for

the reliability of Measure 3030. Option 1, high; 1 2 option 2, moderate; option 3, low; and option 4, 3 insufficient. 4 (Voting.) 5 MS. QUINNONEZ: All votes are in and voting is now closed. For the reliability of 6 7 Measure 3030, 86 percent voted high; 14 percent voted moderate; 0 percent, low; and 0 percent 8 9 insufficient. 10 All right. Moving MEMBER BILIMORIA: 11 on to validity, there are clearly significant and 12 meaningful differences in performance between 13 providers. Again, the expert panel reviewed 14 which measures were included under weights. 15 Missing data is a small problem at 0.4 percent. 16 Missing data and all the analyses around the 17 missing data do not really change the results. 18 It's a 0.99 correlation with and without the 19 missing data imputed. 20 The one question I had here was that 21 they mention that the SDS factors could not be 22 examined here, but they examined them in some of

the other subsequent factors. I know this is the 1 2 surgeon-level model, but I thought if you could just comment on how you addressed -- or why you 3 4 didn't address the sociodemographic status. DR. BADHWAR: So we wanted to focus 5 strictly on the major issues of complications and 6 7 mortality. And so, if I'm understanding your question correctly, I mean, these are fairly 8 9 defined measures, and so we didn't delve into the 10 items that may or not have -- while I respect 11 your comment on socioeconomic factors influencing 12 outcome, we've done separate analyses on the 13 influence of that. 14 And in terms of the weighting of 15 importance for this type of measure, we actually 16 looked at different areas of the country and the 17 impact was not huge. 18 MEMBER BILIMORIA: I would agree that 19 the theoretical underpinning for -- to include 20 SDS is not there, but I was wondering if you did 21 examine it in this particular measure and see 22 whether it had an influence.

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DR. SHAHIAN: We did not do it in the 1 2 manner we did it for example for our readmission measure where I think there is a much more 3 4 plausible relationship between some of the 5 sociodemographic factors and the outcome. We actually think that for morbidity and mortality 6 7 that relationship is a little more questionable. And we've been working on this measure actually 8 9 for about two-and-a-half years and actually did 10 most of the original analytic work even before 11 NQF considered the possibility of including SES 12 So we did not have it. factors. 13 We could, although frankly dual-

14 eligible status, for example, for our readmission 15 measure showed essentially no impact. I think 16 the granularity of the data that we have and most 17 registries have for these sociodemographic 18 factors is probably inadequate to demonstrate a 19 difference and it's probably going to require 20 things like geocoding, which we don't have 21 available.

22

MEMBER BILIMORIA: To be clear, I

don't think that it is necessary here, but I just 1 2 wanted to bring it up since it was pointed out. CO-CHAIR FLEISHER: Barbara and then 3 A.J. 4 I just think from a 5 MEMBER LEVY: theoretical standpoint the risk-adjustment for 6 7 clinical factors should correct for that. CO-CHAIR FLEISHER: 8 A.J.? 9 MEMBER YATES: Yes, unlike my concern 10 more about an urban population yesterday, my 11 concern here is geographic disparities in terms 12 of isolation. And having lived in Wyoming for a 13 while, I worry about a town like Billings or 14 Missoula or someplace like that where there may 15 -- those might even be too big, but there are 16 places where people with chest pain have to see a 17 cardiologist, have to have a cath and the cath 18 lab has to have a cardiac surgeon nearby. And if 19 it's a smaller hospital with very wide geographic 20 distances between it and the next center, there 21 is a risk of mortality or morbidity for not being 22 able to get the patient somewhere where this sort

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of service exists. And you run the risk of those
 isolated areas.

Maybe they score poorly. 3 Maybe they're one of the 18 percent of the cardiac 4 5 surgeons that score poorly and they realize that they can't win there and they leave. 6 Then the 7 cath lab shuts down and there's no cardiologist anymore and all of a sudden there's a big hole in 8 9 the geography of the United States for that rural 10 environment.

11 So if I was to throw out anything as 12 being a potential risk of disparity, it would be 13 the question of geographic isolation. And there 14 are places where things like chest pain happen 15 even though you live way out on a farm somewhere 16 and it may not be possible to get to the next 17 state in time. And I would hate to see something 18 drive that availability. Even if it's at a 19 slightly little level of performance, let them 20 try and improve, but I worry about cardiac 21 surgeons leaving that environment because of 22 feeling chastised.

1 CO-CHAIR FLEISHER: Thank you. Other 2 comments? (No audible response.) 3 4 MS. QUINNONEZ: Voting is now open for 5 the validity of Measure 3030. Option 1 is high; option 2, moderate; option 3, low; and option 4, 6 7 insufficient. 8 (Voting.) 9 MS. QUINNONEZ: All votes are in and 10 voting is now closed. For the validity of 11 Measure 3030, 52 percent voted high; 48 percent 12 voted moderate; 0 percent low; and 0 percent 13 insufficient. 14 MEMBER BILIMORIA: In respect to the 15 scientific acceptability for the composite, they 16 did look at correlations between morbidity and 17 mortality and how much drove the overall score. 18 It was mostly driven by morbidity. That's also 19 where the weight is, but that also makes sense 20 given their underlying premise. Also, the 21 weights were done empirically and also then 22 validated by the expert panel, so I think there

is acceptability around how the weighting was 1 2 done for composite. CO-CHAIR FLEISHER: Other comments? 3 4 Let's vote. 5 MS. QUINNONEZ: Voting is now open for the composite scientific acceptability of measure 6 7 3030. Option 1 is high; option 2, moderate; option 3, low; and option 4, insufficient. 8 9 (Voting.) 10 MS. QUINNONEZ: All votes are in and 11 voting is now closed. Seventy-one percent voted 12 high; 29 percent voted moderate; 0 percent, low; 13 and 0 percent, insufficient. 14 MEMBER BILIMORIA: Moving onto 15 feasibility. This captures most of the surgeons 16 in the country and most of the programs. All the 17 data are already collected and well demonstrated 18 to be collected in a standard fashion. Question? 19 Go ahead. 20 CO-CHAIR FLEISHER: Collette? 21 MEMBER PITZEN: I just have a general 22 comment. We had talked about the size of the STS

I was pretty sure the cardiac data 1 Database. 2 elements was around 800. I just double checked It is 800 data elements for the cardiac 3 again. 4 surgery database. So again, as a comment in 5 general, not picking on STS, again the cost benefit of collecting data. And I just want to 6 7 say really unrelated to this measure, I am supportive of this composite. 8

9 DR. SHAHIAN: Very quick response. 10 There are probably more than 800 elements 11 available, but not every one of them is coded for 12 every case and for a typical CABG or valve, much 13 fewer than that. Many of the elements are child 14 fields of parents, so once the parent field is 15 coded as no, all those child fields go away.

16 MEMBER PITZEN: I understand that. 17 It's still resource time to look in the record 18 and verify that initial process that the fields 19 don't apply.

20 CO-CHAIR GUNNAR: That was A.J.'s 21 point. It requires an extractor.

CO-CHAIR FLEISHER: Interesting

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1 question for NQF for how we put this in 2 perspective. I don't think we've ever looked at

cost as part of our mandate.

3

DR. SHAHIAN: Having just spent \$1.2 billion at partners to implement Epic, that is not without cost either.

7 MEMBER DUTTON: Lee, just very quickly, the metrics that could be on there for 8 9 developers to show would be very helpful. The 10 total number of fields has been discussed, but 11 also the throughput of one abstracter in a year. 12 How many cases does one abstracter look at in a 13 year or put another way, how many abstracters do 14 I need to hire?

DR. SHAHIAN: We know that. It averages between 300 and 500 cases per year per abstracter, depending on the overall complexity of the case mix.

MEMBER PITZEN: Thank you.
MEMBER BILIMORIA: I think we should
be a little careful about what we criticize.
Yesterday, we were picking on administrative data

and now we're criticizing what we were calling
 the gold standard yesterday. This is why we like
 the registries.

4 CO-CHAIR FLEISHER: I was reminded by 5 Melinda and Lisa and this is under feasibility is 6 the cost and the burden and so it is something if 7 this committee wants to see and it sounds like we 8 do the next time, want to see that as part of our 9 considerations. But I also heard you, Collette 10 and Karl.

So other comments? No. Can we vote? MS. QUINNONEZ: Voting is now open for the feasibility of measure 3030. Option 1 is high; option 2, moderate; option 3, low; and option 4, insufficient. (Voting.)

17 Looking for two more votes.

18 (Voting.)

All votes are in and voting is now
closed. For the feasibility of measure 3030, 48
percent voted high; 48 percent voted moderate; 5
percent voted low; and 0 percent voted

insufficient.

1

2 MEMBER BILIMORIA: And then with respect to usability and use, again it's in use, 3 most surgeons. And there hasn't been sort of a 4 5 national revolt yet, so I think it's in good 6 shape. 7 CO-CHAIR FLEISHER: But not publicly 8 reported yet. 9 MEMBER BILIMORIA: Not publicly 10 reported, not this particular measure, but some 11 of the components are. 12 CO-CHAIR GUNNAR: When did you start 13 giving positions, this data? DR. BADHWAR: This will commence in --14 15 DR. SHAHIAN: Later this year. 16 CO-CHAIR GUNNAR: So it has not come 17 out to be clear. 18 CO-CHAIR FLEISHER: Amy. 19 MEMBER MOYER: So two things on this, 20 first, thank you for the measure. Hopefully, I 21 didn't need to disclose. We've been cheering 22 this on from the sidelines, but not involved in

1

the measure.

2	I have a pro and a con. One of the
3	things that I appreciate about STS is that you
4	allow people who participate in your registry to
5	use their data as they see fit. That's something
6	all registries do and so that makes it easier for
7	them to use it and for us to work with them to
8	use in our programs.
9	We've already been discussing with
10	organizations in our state how this might be
11	publicly reported and one of the things we've
12	heard back is that apparently there's a
13	significant cost to them to license the data from
14	STS to formally publicly report. I've heard this
15	from the Wisconsin Collaborative for Healthcare
16	Quality.
17	So for them, that's a usability factor
18	that they're at least pushing back on us with. I

know it's not free. I can't imagine how much it costs to develop this, so what are you going to do? But just throwing that out there.

DR. SHAHIAN: Once a program receives

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21

its scores, they can do anything they want with 1 2 So, for example, if they state work a it. mandate that to do cardiac surgery in your state 3 you have to provide the state with your data, you 4 5 have the right to do that. You can do with your 6 data, whatever you want. 7 MEMBER MOYER: And I think that's 8 awesome. 9 DR. SHAHIAN: Yes, okay. 10 CO-CHAIR FLEISHER: Allan. 11 MEMBER SIPERSTEIN: Specific question 12 for the developer on the unintended consequence 13 of surgeons being shy to operate on the very 14 sickest of the patients. I know that you address 15 that quite nicely for the individual components 16 of this measure when we last reviewed them, but 17 has that been looked at for this particular 18 Particularly, because we're now dealing measure? 19 with individual attribution. 20 DR. BADHWAR: A general comment that 21 the concept of risk aversion, of course, is ever

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present and something of major consideration for

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all of our measures in the entire public
 reporting initiative to which your question
 reflects, so it's an important one.

4 However, the robustness of the risk 5 models really adjusts for all these, the sort of I do the highest risk operations, so I'm not 6 7 going to do it because I'm being publicly scrutinized. And that's something of 8 9 communication we focus on. So the risk models 10 are very focused on adjusting for those types of 11 high-risk patients to avoid the risk-aversion 12 behavior.

13 DR. SHAHIAN: One of the things about 14 risk aversion is that we always think of it as 15 negative, but there are three things that can 16 happen in a risk-averse environment. One is that 17 you can avoid operating on patients who should be 18 operated on. That's bad. The second thing is, 19 however, that you can avoid those patients who 20 are hopelessly ill. And the third thing is that 21 there's evidence from New York State that in a 22 public reporting environment that patients are

better matched to programs and surgeons who are 1 2 able to take care of them. So you may make the surgeon of lesser ability risk adverse to take on 3 4 a higher-risk patient, but that patient's 5 probably going to get taken care at a much better place for their problem. So risk aversion -- we 6 had to be careful about how we defined that. 7 It sometimes has advantages actually. 8

9 CO-CHAIR FLEISHER: So what I'm 10 hearing, since this is about to be rolled out as 11 in their maintenance a year from now, we'd like 12 for you to address how the plan is rolled out and 13 the risk aversion issue as part of the one year 14 and when it comes back for maintenance. Those 15 should be in the database of what we want to see 16 for re-endorsement.

17Other comments before we vote on use18and usability? We're defining excellent points19which I think is part of our job. Is a part of20our job.

21 MEMBER TEMPLE: I clearly missed 22 something. Why is it coming back in a year, this

1 measure? 2 CO-CHAIR FLEISHER: All measures come 3 back with a report from maintenance. It usually 4 just goes to staff. 5 MEMBER TEMPLE: I see. CO-CHAIR FLEISHER: 6 No? 7 (Laughter.) MS. MUNTHALI: So we have an annual 8 9 update process which allows developers to come to 10 us if there are changes to the measure. They're 11 typically coding changes, minor changes that won't change the specifications significantly. 12 13 If those changes do change the 14 specification significantly, that would trigger 15 an ad hoc review and that would come back to the 16 committee. 17 CO-CHAIR FLEISHER: Thank you. But 18 that points out as we define some of the things 19 we're concerned about, if there's a change, it 20 will come back to the committee. If it's on 21 track with addressing your concerns, then it 22 could be just signed off or we might hear about

it. 1 2 Are we ready to vote? 3 MS. QUINNONEZ: Voting is now open for 4 usability and use of measure 3030. Option 1, 5 high; option 2, moderate; option 3, low; and option 4, insufficient information. 6 7 (Voting.) All votes are in and voting is now 8 9 closed. For the usability and use of measure 10 3030, 43 percent voted high; 52 voted moderate; 5 11 percent voted low; and 0 percent insufficient 12 information. 13 CO-CHAIR FLEISHER: Okay, what's next? 14 Endorsement. Okay, voting for endorsement. Any 15 last comments? No. Let's --16 MS. QUINNONEZ: Voting is now open for 17 the overall suitability for endorsement of 18 measure 3030. Option 1, yes; option 2, no. 19 (Voting.) 20 Okay, all votes are in and voting is 21 now closed. For the overall suitability for 22 endorsement of measure 3030, 95 percent voted
1 yes; 5 percent voted no. 2 CO-CHAIR FLEISHER: Thank you. We have 15 minutes to get through the last two, so 3 Robert and John. 4 3031. Measure 3031 --5 DR. BADHWAR: CO-CHAIR FLEISHER: Robert is not on 6 today, right? 7 8 MEMBER HANDY: I'm the primary 9 discussant therefore. 10 CO-CHAIR FLEISHER: Okay, 3031. 11 DR. BADHWAR: Measure 3031 involves mitral valve repair and/or replacement as a 12 13 composite score. And after CABG/AVR, AVR/CABG, 14 isolated mitral valve operations are the most 15 common procedures performed. 16 From July 2011 to June of 2014, 62,118 17 patients underwent mitral valve repair or 18 replacement plus or minus tricuspid valve repair 19 or a surgical ablation procedure or a PFO or ASD 20 closure which is considered to be part of the 21 mitral operation. Further discussion can happen 22 on that if you wish.

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1	Of those patients, we looked at a two
2	domain composite of operative mortality and
3	absence of major morbidity. I won't be
4	repetitive, it's the same morbidity items of 5 as
5	mentioned earlier.
6	The missing evidence of this data
7	field was 0.5 percent for mortality and 0.4
8	percent for morbidity. The c-statistic was .746
9	for morbidity and .807 for mortality. The
10	scaling of the measure was .74 for mortality and
11	.26 for major morbidity.
12	Looking at the three-year reliability
13	testing, we settled on one case per month or 36
14	cases involving 462 sites or 52,841 patients who
15	were arriving at a reliability of .58 for the
16	measure. That concludes my summary.
17	CO-CHAIR FLEISHER: John.
18	MEMBER HANDY: The evidence is good
19	for this. I mean it's just got face validity
20	with regard to this being a composite score that
21	covers all the adverse outcomes possible.
22	CO-CHAIR GUNNAR: As this is a new

1	measure, I think we have to vote on the evidence.
2	MS. QUINNONEZ: We are now voting on
3	measure 3031. Voting is now open for the
4	evidence. Option 1, yes; option 2, no.
5	(Voting.)
6	Okay, all votes are in and voting is
7	now closed. For the evidence of measure 3031,
8	100 percent voted yes; 0 percent no.
9	CO-CHAIR FLEISHER: Gap.
10	MEMBER HANDY: So for gap was the as-
11	expected performers had a respective mortality
12	and measure of 3.2 and 16.9 percent and the lower
13	than expected performers were double both of
14	those. So that's a substantial gap.
15	Actually, the higher than performers
16	were about half of each of those.
17	CO-CHAIR FLEISHER: Comments? Let's
18	vote.
19	MS. QUINNONEZ: Voting is now open for
20	performance gap of measure 3031. Option 1, high;
21	option 2, moderate; option 3, low; and option 4,
22	insufficient.

1	(Voting.)
2	All votes are in and voting is now
3	closed. For performance gap of measure 3031, 50
4	percent voted high; 50 percent voted moderate; 0
5	percent for low; and 0 percent insufficient.
6	MEMBER HANDY: So for the composite
7	construct, the reason for putting this measure
8	forward is that the mortality associated with
9	mitral valve surgery is low. And this gives you
10	a more protean picture of the surgical
11	experience. So I think this is a high quality
12	construct.
13	MEMBER EREKSON: So I have to say I
14	really like this measure in combining the
15	morbidity and mortality and giving us a little
16	bit more information. If I had a wish list of
17	everything that STS could do for us, when they
18	lead the way in showing us to look at these
19	quality metrics, I would love to see more
20	functional status six months and a year down the
21	road in future measures. And I know that's
22	probably something that you guys would love to

1	capture as well. But I really like this measure
2	in combining the mortality and the morbidity.
3	DR. BADHWAR: We share your comments.
4	CO-CHAIR FLEISHER: Great. Are we
5	ready to vote?
6	MS. QUINNONEZ: Voting is now open for
7	the composite for measure 3031. Option 1, high;
8	option 2, moderate; option 3, low; and option 4,
9	insufficient.
10	(Voting.)
11	Looking for three more, two more
12	votes. Okay, all votes are in and voting is now
13	closed. For the composite of measure 3031, 84
14	percent voted high; 16 percent voted moderate; 0
15	percent for low; and 0 percent insufficient.
16	CO-CHAIR FLEISHER: Yes, A.J.
17	MEMBER YATES: We're in middle of
18	this, but the disparity information could use a
19	real quick explanation because there's a lot of P
20	values less than .001 and it looks to me like
21	those are all correlating with being under 65.
22	But if we could go to the disparity list, it's

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the chart with the -- it's under gap -- right 1 2 there. Go up. And am I to understand that all those 3 4 things are patients under 65 or does ethnicity 5 have a significant factor? DR. BADHWAR: So that goes into the 6 logistic regression model as you can see there. 7 So we adjust for those items to your point. 8 9 MEMBER YATES: Right. We're looking 10 at the order. I don't want to drag it out, but 11 is -- are we interpreting --12 CO-CHAIR FLEISHER: Is race separate 13 from the insurance? So the insurance status is 14 one characteristic and then race is a separate 15 one, correct? 16 DR. BADHWAR: Correct. 17 CO-CHAIR FLEISHER: It's not related 18 to the above or below 65? 19 DR. BADHWAR: That's correct. 20 MEMBER YATES: So race did stand out 21 as something that was important in this case? 22 CO-CHAIR FLEISHER: Yes, but this is

what we want to see so that we can correct it and 1 2 be transparent about this. 3 Exactly correct. DR. BADHWAR: 4 MEMBER YATES: It went by. It was 5 hard to read the chart. CO-CHAIR FLEISHER: 6 Thank you. 7 Reliability. Reliability was high 8 MEMBER HANDY: 9 for the three years' worth of data that was 10 You have to have a case cut off of 36 tested. 11 cases so it's about a case per month over 3 years 12 was 0.58. 13 CO-CHAIR FLEISHER: Other comments? 14 No. Shall we vote? 15 MS. QUINNONEZ: Voting is now open for 16 reliability of measure 3031. Option 1, high; 17 option 2, moderate; option 3, low; and option 4, 18 insufficient. 19 (Voting.) 20 CO-CHAIR FLEISHER: Validity. 21 MS. QUINNONEZ: All votes are in and 22 voting is now closed. For the reliability of

measure 3031, 79 percent voted high; 21 percent 1 2 voted moderate; 0 percent low; and 0 percent 3 insufficient. 4 MEMBER HANDY: So for validity that 5 was sort of demonstrated by looking at fairly consistent performance over the two time frames 6 7 that were looked at. They were overlapping time frames, 2011 to 2014 and 2012 to 2015. So that 8 9 was considered therefore valid. 10 CO-CHAIR FLEISHER: Comments? No. 11 MS. QUINNONEZ: Voting is now open for 12 validity of measure 3031. Option 1, high; option 13 2, moderate; option 3, low; and option 4, insufficient. 14 15 (Voting.) 16 All votes are in and voting is now 17 closed. For the validity of measure 3031, 58 18 percent voted high; 42 percent voted moderate; 0 19 percent voted low; and 0 voted sufficient. 20 MEMBER HANDY: Nothing new to add 21 regarding feasibility. 22 CO-CHAIR FLEISHER: Would anybody like

to vote on that? Is it similar to the others? 1 2 MEMBER HANDY: Probably because it's 3 a new measure we --4 CO-CHAIR FLEISHER: Okay, we'll go 5 ahead and vote. MS. QUINNONEZ: Voting is now open for 6 7 feasibility of measure 3031. Option 1, high; option 2, moderate; option 3, low; and option 4, 8 insufficient. 9 10 (Voting.) 11 All votes are in and voting is now 12 closed. For feasibility of measure 3031, 63 13 percent voted high; 26 percent voted moderate; 11 14 percent voted low; and 0 percent voted 15 insufficient. 16 MEMBER HANDY: Same is true for 17 usability. 18 MS. QUINNONEZ: Voting is now open for 19 usability and use of measure 3031. Option 1 is 20 high; option 2 is moderate; option 3 is low; and 21 option 4, insufficient information. 22 (Voting.)

117

All votes are in and voting is now 1 2 closed. For usability and use of measure 3031, 58 percent voted high; 42 percent voted moderate; 3 4 0 percent for low; and 0 percent for insufficient 5 information. CO-CHAIR FLEISHER: Okay, Melinda 6 pointed out that many of these outcome measures 7 have face validity and therefore their validity 8 9 cannot be high. So the answer is that the 10 maximum is moderate. 11 Is there any who are uncomfortable 12 moving any high to moderate as a top level? So 13 essentially all high votes will now be reflected 14 as moderate votes where that is the top option. 15 Comments? CO-CHAIR GUNNAR: Congratulations to 16 17 those who voted moderate. 18 CO-CHAIR FLEISHER: They got it right. 19 CO-CHAIR GUNNAR: They got it right. 20 CO-CHAIR FLEISHER: That gets them 21 another six years on this committee. No. 22 DR. SHAHIAN: Can I just make one

I don't believe that face validity has 1 comment? 2 been the only type of validity demonstrated by the developers. 3 4 Construct validity, for example, the 5 correlation of the rating categories with other

measures' predictive validity. And that was 7 mentioned. So I don't think face validity was the only measure of validity that we 8 9 demonstrated.

10 MS. MURPHY: Okay, so we'll go back 11 and look. What we have from the submissions, as 12 we understand them is that that's where they sit 13 at this moment, but we'll go back and check and 14 if that is the case, we'll correct it with the 15 group and reflect that.

I would agree with 16 MEMBER BILIMORIA: 17 that in the measures that we reviewed. It was 18 not just case validity. There were other things 19 mentioned in the documents.

20 CO-CHAIR FLEISHER: Next. Suitability 21 for endorsement. Please vote.

MS. QUINNONEZ: Voting is now open for

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1	overall suitability for endorsement of measure
2	3031. Option 1 is yes. Option 2 is no.
3	(Voting.)
4	All votes are in and voting is now
5	closed. For overall suitability for endorsement
6	of measure 3031, 100 percent voted yes; 0 percent
7	voted no.
8	CO-CHAIR FLEISHER: Okay, we are now
9	down to the final measure, 3032. We have three
10	minutes within the time frame of when we're
11	supposed to be closed. So we'll assume that that
12	is an ex-surgical closure, so we have about 15
13	minutes left when we do the timing.
14	(Laughter.)
15	DR. BADHWAR: They have an hour to
16	wake up their patients.
17	CO-CHAIR FLEISHER: I know that, too.
18	DR. BADHWAR: We have faster PAs where
19	we are.
20	(Laughter.)
21	CO-CHAIR FLEISHER: We've been
22	exchanging this all week. So if you could just

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briefly go into that.

2	DR. BADHWAR: So briefly after the
3	aforementioned operations previously discussed,
4	mitral valve repair/replacement plus CABG is the
5	next most common operative procedure for measure
6	3032. And this involves a similar data set from
7	July 2011 to June 2014 where 26,355 cases were
8	analyzed and for at least 10 patients over the 3-
9	year period.
10	The missing evidence was .55 for
11	mortality, .44 for morbidity, the same two domain
12	composite exactly as the previous measure.
13	The scalability of the composite was
14	.78 for mortality, .22 for morbidity with a c-
15	statistic of .708 for morbidity and .738 for
16	mortality, arriving at a reliability for 25 cases
17	over three years and 341 sites or 18,924 patients
18	at .50.
19	MEMBER HANDY: Me still. Nothing to
20	add. This is the same measure, just with
21	coronary bypass thrown in.
22	CO-CHAIR FLEISHER: So and this is

1 a new measure. 2 MEMBER HANDY: A new measure also. 3 New composite measure. 4 CO-CHAIR FLEISHER: So we will need to 5 vote. MS. QUINNONEZ: Voting is now open for 6 7 measure 3032. We're voting on evidence. Option 8 1 is yes. Option 2 is now. 9 (Voting.) 10 One hundred Voting is now closed. 11 percent voted yes for the evidence of measure 12 3032 and 0 percent voted no. 13 CO-CHAIR FLEISHER: Next. 14 In the gap, this was as MEMBER HANDY: 15 expected performers had a mortality and morbidity 16 of 6.5 and 29 percent, respectively. And it was 17 for those that were lower than expected 18 performers. That was about double and for those 19 that were higher than expected it was not quite 20 half, actually. It was just somewhat approved, 21 4.3 versus 19.8 percent. So there is a gap. 22 CO-CHAIR FLEISHER: Any comments?

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Ready to vote.

2 MS. QUINNONEZ: Voting is now open for performance gap of measure 3032. Option 1, high; 3 4 option 2, moderate; option 3, low; option 4, 5 insufficient. (Voting.) 6 All votes are in and voting is now 7 For performance gap of measure 3032, 63 8 closed. 9 percent voted high; 37 percent voted moderate; 0 10 percent voted low; and 0 percent voted insufficient. 11 12 MEMBER HANDY: So for the quality 13 construct the same comments apply to this 14 measure, too, is that mortality is low and 15 therefore a more global protean picture of 16 combined mortality and morbidity, gives you more 17 accurate picture of the performance. Quality 18 construct is good. 19 CO-CHAIR FLEISHER: Comments? No. 20 MS. QUINNONEZ: Voting is now open for 21 composite of measure 3032. Option 1, high; 22 option 2, moderate; option 3, low; option 4,

insufficient. 1 2 (Voting.) All votes are in. Voting is now 3 4 closed. For the composite of measure 3032, 74 5 percent voted high; 26 percent voted moderate; 0 percent for low; and 0 percent insufficient. 6 7 MEMBER HANDY: So for reliability of the three years' worth of data for the 8 9 participants that had at least 25 cases, the 10 reliability was 0.5. 11 CO-CHAIR FLEISHER: Is this any 12 different than --13 MEMBER HANDY: A little smaller number with the last measure I think it was 0.57. 14 15 CO-CHAIR FLEISHER: So do you 16 recommend voting? 17 MEMBER HANDY: Yes. 18 MS. QUINNONEZ: Voting is now open for 19 reliability of measure 3032. Option 1, high; 20 option 2, moderate; option 3, low; and option 4, insufficient. 21 22 (Voting.)

1	All votes are in. Voting is now
2	closed. For the reliability of measure 3032, 55
3	percent voted high; 45 percent voted moderate; 0
4	percent for low; and 0 percent insufficient.
5	MEMBER HANDY: So the same comments
6	about validity for this measure apply for the
7	last two measures.
8	CO-CHAIR FLEISHER: Further comments
9	about our discussion with validity?
10	MS. MURPHY: They should go ahead and
11	vote. Given the discussion, you should if
12	you're voting as opposed to carrying the other
13	votes forward, you should continue to vote
14	high/moderate because there is the issue that we
15	have to resolve.
16	MS. QUINNONEZ: Voting is now open for
17	validity of measure 3032. Option 1, high; option
18	2, moderate; option 3, low; and option 4,
19	insufficient.
20	CO-CHAIR GUNNAR: But this is a test.
21	MS. QUINNONEZ: All votes are in and
22	voting is now closed. Sixty percent voted high;

40 percent voted moderate; 0 percent low; and 0 1 2 percent insufficient. CO-CHAIR FLEISHER: 3 Construct. 4 MEMBER HANDY: Same comments as the 5 last two measures. MS. QUINNONEZ: Voting is open, is now 6 7 open for composite of scientific acceptability of measure 3032. Option 1, high; option 2, 8 9 moderate; option 3, low; and option 4, 10 insufficient. 11 (Voting.) 12 Looking for two more votes. 13 (Voting.) 14 Voting is now closed. For the 15 composite construct of measure 3032, 78 percent 16 voted high; 22 percent voted moderate; 0 percent 17 voted low; and 0 percent voted insufficient. 18 MEMBER HANDY: So usability is high. 19 Sorry, I didn't really we jumped -- also high. 20 MS. QUINNONEZ: Voting is now open for 21 the feasibility of measure 3032. Option 1, high; 22 option 2, moderate; option 3, low; and option 4,

insufficient. 1 2 (Voting.) Voting is now closed. For the 3 4 feasibility of measure 3032, 63 document voted 5 high; 26 percent voted moderate; 11 percent voted low; and 0 percent insufficient. 6 CO-CHAIR FLEISHER: Any comments? 7 MS. QUINNONEZ: Voting is now open for 8 9 usability and use of measure 3032. Option 1, 10 high; option 2, moderate; option 3, low; and 11 option 4, insufficient information. 12 (Voting.) 13 All votes are in and voting is now 14 closed. For the usability and use of measure 15 3032, 63 document voted high; 376 percent voted 16 moderate; 0 percent voted low; and 0 percent 17 insufficient information. 18 CO-CHAIR FLEISHER: Any comments 19 before we vote on overall suitability? No, 20 please vote. 21 MS. QUINNONEZ: Voting is now open for 22 overall suitability for endorsement of measure

3032. Option 1 is yes. Option 2 is no. 1 2 CO-CHAIR FLEISHER: Cliff, you were clearly right. I misjudged the end. The patient 3 4 is still asleep. So we actually beat our 5 anticipated time and we're only off 7 minutes from being off an hour and 30 minutes. 6 7 (Voting.) MS. QUINNONEZ: For the overall 8 9 suitability for endorsement of measure 3032, 100 10 percent voted yes; 0 percent voted no. 11 CO-CHAIR FLEISHER: So we will take a 12 break, a ten-minute break. And then we will get 13 Bruce, you're ready, you're up next. 14 DR. BADHWAR: Thanks very much. 15 CO-CHAIR FLEISHER: Thank you. Thank 16 you for staying. We really appreciate it. 17 (Whereupon, the above-entitled matter 18 went off the record at 10:06 a.m. and resumed at 19 10:17 a.m.) 20 CO-CHAIR GUNNAR: Yes, we already had 21 the two-minute warning, so coming back. 22 So Liz, you know you're on this solo?

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Are we ready, Christy?

2 So the next measure is 0697, risk-3 adjusted case mix adjusted elderly surgery 4 outcomes measure. American College of Surgeons 5 and developers, you have three minutes to provide 6 an overview.

7 DR. HALL: Thank you, Dr. Gunnar and Dr. Fletcher. Thank you, committee. I'm Bruce 8 9 I'm a surgeon at Wash. U. in St. Louis and Hall. 10 the Vice President in the BJC HealthCare System. I'm representing the American College of Surgeons 11 12 today with Dr. Julia Berian next to me, who is 13 one of our surgical scholars who has worked 14 intently on this work.

We also have our senior scientist on the phone, Dr. Mark Cohen, and obviously, Dr. Ko is here, but is abstaining from the discussion with respect to this measure.

19Dr. Fleisher and Dr. Gunner advised me20to make a few brief remarks. We'll be happy to21return to any category where there are more22specific questions.

We're starting with the first of two measures in front of you for maintenance today, the elderly measure which has been in use since 2011. It is a risk-adjusted measure of outcomes, death or serious mortality. That's death, returned to OR unanticipated, and 12 other mortalities, rigorously defined.

And importantly, this is a measure of 8 9 30-day outcomes, strict 30-day time horizon which 10 really differentiates us from many other quality 11 measurement programs. This measure focuses on 12 patients 65 and older and has a denominator of 13 2900 CPT codes. Notably, we have removed VTE 14 from the prior specification of this measure 15 which we can describe in more detail, but that 16 was done because of the recently revealed bias in 17 that that has been widely published, and we 18 investigated, but did not add socio-demographic 19 factors which I'll be happy to comment on.

The NSQIP in the private sector has been in place for 11 years or more and as you know in the VA the parallel program has been in

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place probably twice that long. We've had five
 measures in front of the NQF and are just
 discussing two today.

We don't feel, under the category of importance, we don't feel there's major change to evidence. We do continue to demonstrate a variance in care. Almost 40 percent variance in care and we do continue to demonstrate ability to detect outliers.

10 In the category of scientific 11 criteria, in terms of both reliability and 12 validity, there are several aspects of how we 13 specify our data fields and our program that 14 yield high reliability and validity. That 15 includes rigorous definitions, trained data 16 collectors who are also examined, a community of 17 data collectors continuously exchanging best 18 practices.

We also audit nationally more than 12,000 data fields per year and have a national community which meets annually. We importantly provide feedback and revision from all national users to our program in Chicago so that our data fields and variables are constantly scrutinized and revised over time and that includes some variables that have been in place for 11 plus years, as I mentioned.

Institutions also perform internal inter-rater reliability auditing and that is fed back to the college for continuous improvement of all of our data fields.

10 In terms of validity specifically, we 11 have an outcome measure here which has inherent 12 face validity as you have mentioned, but we also 13 feel that we are representing an expert panel, so 14 to speak, of more than 30,000 surgeons who have 15 been using these data fields and this measure for 16 years now. And particularly in the geriatric 17 aspects of our program, we have a focused 18 steering group and expert panel that provides 19 sort of validity feedback, if you will, on all of 20 the aspects of these data fields in this measure. 21 And based on that, we've also shown widely across 22 the program the programmatic improvement. And so

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again, evidence of validity of various kinds. 1 2 The risk adjustment for this measure involves three main factors, the patient's ASA 3 class CPT code linear risk and the patient's 4 5 functional status. And so those represent both the patient's biology, the procedural endogenous 6 7 risk, and then we turn those into obviously the reported hospital effect. It is a hierarchical 8 9 adjustment scheme which does involve Bayesian 10 smoothing which has more or less become standard 11 across NQF measures nowadays. 12 And we are dealing with a focused 13 population here. Obviously, 65 and older, 14 largely Medicare covered and somewhat focused in 15 terms of biology and presentation. As I 16 mentioned, we investigated SDS and I've not

17 included which I can describe in more detail and18 we have removed VTE.

In terms of feasibility, we have again
almost 800 hospitals and 30,000 surgeons using
this measure and like measures across the country
now. So we know that it's feasible and useable.

And for whatever burden is attached to the way we specify data, I want to just emphasize that because we're using a strict 30-day time horizon which differentiates us from most every other program in the country, that there is a bit of a tradeoff there between burden and complexity and unique added value of our program.

We do also know the true cost of 8 9 participation in our program. The subscription 10 fee in our program now varies between \$10,000 and 11 \$25,000 and you basically need some fraction of 12 an FTE varying between one guarter and one. And 13 if it's one, then you're going to pay that person 14 probably \$70,000. Then you are talking about a 15 participation cost annually of something like 16 \$75,000 to \$100,000. However, that covers 200 17 models across a variety of surgical specialties. 18 So to say that that's the true cost of this measure in front of you would not be accurate. 19 20 This measure in front of you represents probably 21 less than a percent of everything that is 22 obtained by participation in our program. So the

true cost is actually substantially smaller than 1 2 what it might first appear to be. With that, I'll pause and I'm happy to 3 take further questions as the categories arise. 4 CO-CHAIR GUNNAR: Dr. Erekson. 5 MEMBER EREKSON: So I think the first 6 7 thing to talk about, this is an already-approved measure coming up for renewal, so the first thing 8 9 to talk about is evidence. One of the new pieces 10 of evidence that came out since this measure was 11 first approved was the joint statement from the 12 American College of Surgeons and the American 13 Geriatric Society about optimal preoperative 14 And I think that only advances that there care. 15 is good evidence that there are processes that we 16 can do to perform -- to affect quality 17 performance in this area. 18 The question from the NQF staffers is 19 why wasn't this measure inclusive of patients 20 younger than the age of 65, and then the other

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question by people who completed the survey

before our meeting was why aren't we looking at

people over the age of -- higher age ranges. 1 2 So we're looking at patients who are 80 and over; is that going to get us more bang for our 3 4 buck? I don't think there is the perfect age to 5 set that cutoff at. I think there is good data to show that there is cognitive impact at the age 6 7 of 60 that undergoing surgery could have some effects, and so I think the age of 65 is 8 9 So we could vote on new evidence, or acceptable. 10 we could leave it as is. 11 CO-CHAIR GUNNAR: So what's your 12 recommendation? Should we vote on evidence, Dr. 13 Erekson? 14 MEMBER EREKSON: I would say no. 15 CO-CHAIR GUNNAR: Okay, Dr. Dutton. 16 MEMBER DUTTON: Just a question for 17 any of the smart people in the room. We tossed 18 I get that. But we also tossed out PE out DVT. 19 with that. Is PE better defined? It's obviously 20 a very serious outcome for the patient. Should 21 that have been kept in? 22 DR. HALL: We can comment. The PE

side of that equation is much more rare than the 1 2 DVT side of that equation, so as a rare event it has an even smaller impact on our assessments. 3 4 We do find that combined, there was an impact on 5 assessments, but we feel that it's a biased That was our decision for this program. 6 impact. 7 MEMBER BILIMORIA: The literature also shows that the same surveillance bias is visit 8 9 for PE when examined separately, especially with 10 new CT scanners picking up smaller and smaller sub-clinical PEs. So the same impact is seen as 11 12 DVT. 13 CO-CHAIR GUNNAR: Moving along, does 14 anyone feel that we need to vote on evidence? 15 Hearing none, we'll go to gap. 16 MEMBER EREKSON: So currently, in the 17 measure description, there are 460 hospitals that 18 participate in the ACS NSQIP which is not a full 19 penetrance across the country. But you have a 20 good spread of risk adjusted O/E ratios between 21 0.59 and 1.69. 22 In the body of the measure, the

measure developers cite that there are 49 low 1 2 outlying hospitals and 34 high-outlier hospitals that are statistically significant, representing 3 4 a gap. 5 CO-CHAIR GUNNAR: Any additional 6 comments? We'll vote on gap. 7 MS. QUINNONEZ: We are now voting on measure 0697. Voting is now open for performance 8 9 Option 1, high; option 2, moderate; option gap. 10 3, low; and option 4, insufficient. 11 (Voting.) 12 MS. QUINNONEZ: All votes are in. 13 Voting is now closed. For the performance gap of 14 measure 0697 45 percent voted high; 55 percent 15 voted moderate; 0 percent low; and 0 percent 16 insufficient. 17 CO-CHAIR GUNNAR: Next for 18 reliability. 19 MEMBER EREKSON: So for reliability 20 testing, I think we've already been presented 21 data showing the data element reliability of the 22 ACS NSQIP. What the authors and the developer

did in addition is they tested the reliability of 1 2 their modeling programs, and they actually published this in the peer-reviewed literature 3 and included that article in this measure 4 5 submission. For this measure, the sample size that 6 a hospital would need to achieve to have 7 reliability at a threshold of 0.4 which is what 8 9 they propose as moderate reliability is 180 10 cases, and they report that 85 percent of their 11 hospitals meet this threshold. 12 CO-CHAIR GUNNAR: Any other comments? 13 We can vote. 14 MS. QUINNONEZ: Okay, voting is now 15 open for reliability of measure 0697. Option 1, 16 high; option 2, moderate; option 3, low; and 17 option 4, insufficient. 18 (Voting.) MS. QUINNONEZ: Voting is now closed. 19 20 For reliability of measure 0697, 53 percent voted 21 high; 47 percent voted moderate; 0 percent low; 22 and 0 percent insufficient.

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1 CO-CHAIR GUNNAR: Validity, please. 2 MEMBER EREKSON: So I think this is the appropriate place to talk about what the 3 NSOIP does monitor and doesn't monitor in terms 4 5 of outcomes. And when you look at outcomes in the geriatric population, some of the things that are 6 7 very meaningful cannot be captured in the NSQIP. That would include post-operative delirium that 8 9 has to be caught, and it's not very reliable to 10 find post-operative delirium in chart reviews. 11 That also includes falls outside of the hospital, 12 which are also not incorporated in the NSQIP. 13 What the NSQIP does very well is they 14 are incorporating functional status, and a lot of 15 the things that others, not even just the NSQIP, 16 have shown had been very predictive in these --17 in geriatric surgery. 18 So the first thing is that while we

don't have everything that we would like to have in a geriatric model of what surgery is, we have a lot. And then when you go on to the validity of the actual models, we have a c-statistic of

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.75 to .77. And there is good data provided on 1 2 including the SE status, not including the SE status and inclusion of the venous --3 4 CO-CHAIR GUNNAR: Collette? MEMBER PITZEN: Yes, I'm wondering if 5 you could comment a little bit about the validity 6 of the data that's collected in NSQIP versus 7 perhaps against the medical record? 8 9 DR. HALL: I will take that question 10 and I would like to just let Dr. Berian comment 11 on the last remark first if that's okay. 12 DR. BERIAN: So I did want to comment 13 for the record that we have a Geriatric Surgery 14 Pilot Project that includes 26 different 15 hospitals which are attempting to collect some of 16 those more kind of patient-centered variables 17 including things like delirium, mobility, 18 functional status later down the road after an 19 operation. 20 DR. HALL: In terms of the validity of 21 the fields that we do capture, again, we have 22 fields that have largely been in place for tenplus years and have been used by tens of
 thousands of surgeons demonstrating that
 improvement can occur using these fields, so I
 think in terms of what you often see for validity
 assessment is an expert panel. You may have
 eight experts and six of them say yes, it looks
 valid to me.

In fact, I think in this case, you've 8 9 got 30,000 surgeons who have said over the past 10 decade these are valid to us because we're 11 participating, we're using them, and we're 12 driving improvement with them. So I would say 13 whether you want to call that only isolated face 14 validity, or however you want to consider that, I 15 think it's good evidence of practical validity in 16 this case.

17 MEMBER PITZEN: Right. To clarify, I 18 was talking more about the data element validity. 19 So if you were looking for complications of wound 20 disruption or infection, deep incisional surgical 21 site, do you have some prior testing where you 22 are looking at a sample of what's submitted into

1 the registry versus what's reflected in the 2 patient record?

3 DR. HALL: Yes, I'm sorry. So in that 4 case, we would consider that a form of 5 reproducibility at the data element level, and as I said, we audit programs annually across the 6 7 country. We shoot for between 5 and 10 percent of all programs being audited annually which 8 9 means something like 10,000 to 15,000 fields get 10 audited. And across variables, our 11 reproducibility or our inter-rater reliability is 12 uniformly 97 to 98 percent. 13 MEMBER PITZEN: That's fabulous. 14 Probably for a future application, you could 15 include that, and I wouldn't have any questions. I think it's 16 DR. HALL: Thank you. 17 stated in one way or another in the material, but 18 we can clarify. 19 MEMBER PITZEN: Okay. Thank you. 20 DR. HALL: Thank you. 21 CO-CHAIR GUNNAR: Lee. 22 CO-CHAIR FLEISHER: I may have missed

the reliability, but after the 30-day mortality 1 2 in CABG I got lots of calls from The New York Times, ended up in The Times, related to the 3 4 unintended consequence of cutting off the 30 days 5 and therefore potentially individuals at day 31 being put on palliative care. And I don't know 6 7 if that's validity or reliability. But have you looked at whether or not your 30-day outcomes are 8 9 having unintended consequences? 10 DR. HALL: Well, that's a very 11 insightful and also complex question. What we 12 can tell you is that we have looked at the decay 13 function, the time decay function of different 14 outcomes over time. We know that no outcome is 15 100 percent captured at 30 days. But that the 16 rate of capture decays dramatically over time 17 with slightly different curves for different 18 outcomes. 19 And what we have decided over the 20 years is that the 30-day cutoff is a balance of

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capturing enough of those signals to generate

good quality improvement versus the ongoing
1	burden of following patients longer and longer in
2	outlying settings. So that's part one.
3	Part two is
4	CO-CHAIR FLEISHER: I'm talking about
5	inpatient, in other words, dying at day 31 in the
6	hospital.
7	DR. HALL: So yes, I think part two is
8	that we have not done a dedicated study on
9	whether patients are dying at day 31, but there
10	is such a study that's being that is coming
11	out in the literature now. It was not done by
12	our group. It was done by another group. So
13	there is a very good study appearing in the
14	literature now that indicates that there is no
15	such bias, but that was not done by us.
16	CO-CHAIR GUNNAR: Actually, I
17	published that study.
18	CO-CHAIR FLEISHER: Okay, good.
19	CO-CHAIR GUNNAR: In January.
20	CO-CHAIR FLEISHER: Can you send that?
21	CO-CHAIR GUNNAR: I can send it to
22	you. There is no bias.

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1 DR. HALL: I didn't want to put you on 2 the spot. CO-CHAIR FLEISHER: Where was it 3 4 published? 5 CO-CHAIR GUNNAR: JAMA Surgery. CO-CHAIR FLEISHER: 6 Thank you. When they call us after this measure is approved --7 DR. HALL: I didn't want to appear to 8 9 be sucking up to Dr. Gunnar. 10 (Laughter.) 11 CO-CHAIR GUNNAR: Any other -- Karl. 12 MEMBER EREKSON: I just had one other 13 comment for the developers. I didn't see because 14 this is a composite, so we lumped a bunch of 15 outcomes together to get to the composite score. 16 I didn't see in this measure submission what is 17 driving the composite. 18 Have you looked at, if you take out 19 let's say -- I know you looked at VTE, but did 20 you look at UTI? Is UTI driving the composite 21 because it's so much more common than some of 22 these other rare events? And can you comment on

147

whether or not those should be weighted in terms
of looking at the outcome or if they're not
weighted?

4 DR. HALL: Thank you, yes. So this is 5 what we refer to as an unweighted aggregate. We don't consider this a composite. 6 A true 7 composite would be where you actually model each outcome, and then you aggregate the results of 8 9 those models. In fact, what we do is we create 10 an aggregate outcome. It's unweighted. Every 11 outcome in the aggregate is treated equally.

12 Over the years, based on experience 13 with hundreds of models across NSQIP, we have 14 removed a few things such as superficial 15 infections because superficial infections would 16 swamp other important events and drive the 17 composite.

And so we've reached this combination of what we refer to as death or serious morbidity based on the signals that we've seen across hundreds of models over the last ten years. They're not weighted. Each is treated equally,

so in answer to that part of your question, it's 1 2 an unweighted aggregate outcome. Does that 3 answer the question? Okay, thanks. CO-CHAIR GUNNAR: A.J. 4 5 MEMBER YATES: Yes, I would just second what was just said and others. 6 Ideally, 7 the NQF's endorsed measures are patient-centric, and so you would want to have some sense of what 8 9 has import to the patient. And I dare to say 10 that if you were to do a Delphi on this and count 11 7 to 10 as being dire outcomes to the patient, 12 they probably wouldn't rank an asymptomatic 13 urinary tract infection or an incidental pickup 14 of pneumonia on a chest x-ray as a dire outcome. 15 And so it really comes down to a lot 16 of the -- if you have a hospital that is very --17 most of them are backing off now, but if you have 18 a hospital that's adamant about its fevers of 19 unknown origin, work up on post-update, too, 20 they're going to have a lot more little 21 pneumonias or over-called pneumonias and urinary 22 tract infections. It all depends on the

diagnostic intensity. So you don't have the denominator of how many tests are being ordered from one place or another. That's already been addressed. It's not weighted. It's the way it is. It's how you have your data over ten years. It won't change probably. But I would just throw out to you that it would be good to weight that with patient preference or patient weighting of that.

10 The one question that you might want 11 to answer or change would be, you exclude major 12 Is the major trauma exclusion based on a trauma. 13 trauma score, which you know, there's good 14 scoring for that. Or is that an arbitrary, this 15 is major, or that's minor? Because with trauma 16 scores that are out there, it would be easy 17 enough to make somebody, you know, above a 5 18 major, and below minor.

19DR. HALL: Thank you, two great20insights. First on the aspects of the aggregate21that you mentioned, for instance, we don't22capture asymptomatic "UTIs". We don't capture

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what are not true pneumonias. Our specifications 1 2 are fairly rigorous. And I think that goes part way towards smoothing out that effect that you 3 4 mentioned of perhaps different importance for 5 different fields to patients. But that's not 6 unique to us. 7 We've just heard about combining death and other morbidities for different cardiac 8 9 procedures as well. And weighting these outcomes 10 by patient-graded severity is something that our 11 profession as a whole is struggling with, and it 12 does apply to us, but it does not uniquely apply 13 All of us in the profession are to us. 14 struggling with that right now. 15 On the second aspect of your question, 16 which was? 17 MEMBER YATES: The fact that there's 18 trauma scores that exist, so are you delineating 19 major versus minor traumas by the score? 20 DR. HALL: We are not using trauma 21 score to do that. We're using a diagnosis 22 category to do that, so if the patient has a

1	diagnostic code of trauma, then they're excluded.
2	There are some minor traumas which we still
3	allow, such as an isolated fracture or same level
4	fall, but otherwise, any diagnostic code that
5	indicates major or multi-system trauma gets
6	excluded. In fact, we don't even it's not
7	excluded in terms of actually being captured and
8	then excluded. It's just they're not even
9	eligible for accrual.
10	Our patient population is a focused
11	population. It does not include transplant
12	surgery. It does not include major or multi-
13	system traumas.
14	DR. HALL: And I would just say that
15	even isolated fractures that come in, it depends
16	on how they arrive there, and if they come in by
17	chopper, and they were extracted, they may have
18	an isolated fracture when it's all said and done.
19	But in the meanwhile, they've got the three CT
20	scans are already done, cooked, and have to
21	billed for, and so they get coded out potentially
22	as a trauma.

MEMBER YATES: Yes, I don't disagree 1 2 that there are potential shortcomings in the way we code in our profession absolutely. But any 3 4 diagnosis of major multi-system trauma would be 5 excluded. DR. HALL: Ms. Whitaker. 6 7 MEMBER WHITAKER: Thank you. In the numerator, are you including other -- if a 8 9 patient leaves the hospital where they had the 10 surgery and then is readmitted to another 11 hospital for one of those factors? Or dies at 12 home? 13 We -- if we learn about a DR. HALL: 14 death that occurred at home within the 30-day 15 time period, it would be included. Readmissions 16 are not part of this measure if that was your 17 question. 18 MEMBER WHITAKER: I understand, but 19 admissions for one of the morbidities. 20 DR. HALL: Yes. 21 MEMBER WHITAKER: So surgery, then 22 followed by pneumonia or something like that.

1	DR. HALL: Right. So if, in fact, the
2	outcome in question happened outside of the
3	original hospitalization, then we rely on them
4	either coming back to the same hospital, or we
5	rely on communicating directly with the patient
6	and family to determine that that occurred, yes.
7	MEMBER WHITAKER: Thank you.
8	CO-CHAIR GUNNAR: So as an aside, we
9	welcome Dr. Whitaker who's new to the committee.
10	We'll all get to know her over the next couple of
11	years.
12	So we're back to validity. Any other
13	comments? Amy.
14	MEMBER MOYER: I just want to make
15	sure I'm completely understanding the composite.
16	So the measure is the number of observed adverse
17	events. So if a patient has multiple things go
18	wrong, sometimes they start down the cascade, are
19	each of those separate events calculated into the
20	composite?
21	DR. HALL: So each of those different
22	separated events might be reported out under

different models, but in that case it would be 1 2 one case could only count as one event in the overall model. But if a patient had pneumonia 3 4 and an MI, and we were modeling both of those in 5 separate models, we would report both. Overall, they can only count once in the overall. 6 7 CO-CHAIR GUNNAR: Shall we vote on validity? 8 9 MS. QUINNONEZ: Voting is now open for 10 validity of measure 0697. Option 1, moderate; option 2, low; and option 3, insufficient. 11 12 (Voting.) 13 MS. QUINNONEZ: Voting is now closed. 14 For the validity of measure 0697, 68 percent 15 voted moderate; 32 percent voted low; and 0 16 percent voted insufficient. 17 CO-CHAIR GUNNAR: Moving on to 18 feasibility. 19 MS. JOHNSON: Excuse me. If you don't 20 mind, I'd like to just put in a little comment 21 here. The staff had originally assessed this as 22 an insufficient, mainly because the information

on testing was not included in the submission. 1 2 So you -- I'm assuming you have voted based on what Dr. Hall mentioned in terms of their data 3 4 element testing. So what we will ask them to do 5 is go back. We will open up their forms so that they can put that information into the 6 7 submission. We want everything to be very transparent so that we understand why you guys 8 9 voted the way you did. 10 DR. HALL: And we did provide those 11 responses. 12 MS. JOHNSON: Did you go ahead and add 13 them into -- okay, yes, we need added into the 14 Thank you very much. forms. 15 CO-CHAIR GUNNAR: Feasibility. 16 MEMBER EREKSON: I think we've had a 17 lot of debate over the last day or two on claims data versus registry data, and I don't have a lot 18 19 to add. 20 CO-CHAIR GUNNAR: Any other comments? 21 Go ahead and vote. 22 MS. QUINNONEZ: Voting is now open for

feasibility of measure 0697. Option 1, high; 1 2 option 2, moderate; option 3, low; and option 4, 3 insufficient. 4 (Voting.) 5 MS. QUINNONEZ: All votes are in. Voting is now closed. For the feasibility of 6 7 measure 0697, 21 percent voted high; 79 percent voted moderate; 0 percent voted low; and 0 8 9 percent voted insufficient. 10 CO-CHAIR GUNNAR: Moving on to use and 11 usability. 12 MEMBER EREKSON: As far as I can tell 13 from the submission, public reporting is an 14 aspect of this but is not required, so there's 15 currently 131 hospitals who publicly report out 16 of the 460 hospitals in the program. 17 DR. HALL: Correct, all of our 18 programs across the country are making use of 19 this information. And then inside of NSQIP, as 20 an institution, you can volunteer to publicly 21 report on Hospital Compare. So as you said, a 22 subpopulation of hospitals are already doing

1	that. But all the hospitals in the program are
2	making use of this information already.
3	CO-CHAIR GUNNAR: Any Collette.
4	MEMBER PITZEN: Just a quick question.
5	Are the participants in the database provided
6	back what happened for these patients so they can
7	drill down further on their data?
8	DR. HALL: Every case in this entire
9	in our entire registry program, if you will,
10	is transparent and visible to the institution.
11	You can reopen every single case and dive back
12	into all details.
13	MEMBER PITZEN: Right, so if I had
14	someone hit on this composite, I could drill down
15	at my own institution and see was it an MI; was
16	it a death, cardiac arrest, et cetera.
17	DR. HALL: Absolutely, yes.
18	MEMBER PITZEN: Thank you.
19	DR. HALL: The public can't do that.
20	That's not what you're asking, right? Okay.
21	CO-CHAIR GUNNAR: To yes, to
22	clarify, it's the extractor which is what it's

whoever has the data resource, they can drill down.

MEMBER PITZEN: Yes, only comment to 3 4 the measures that I have grouped outcomes 5 together from a quality improvement standpoint to the providers that are providing that care, if 6 7 they can understand their combined score better, it can provide directions for them to work on. 8 9 DR. HALL: We agree. We absolutely 10 enable that. 11 CO-CHAIR GUNNAR: Any other comments 12 on usability and use? Hearing none. 13 MS. QUINNONEZ: Voting is now open for 14 usability and use of measure 0697. Option 1, 15 high; option 2, moderate; option 3, low; and 16 option 4, insufficient information. 17 (Voting.) MS. QUINNONEZ: All votes are in. 18 19 Voting is now closed. For usability and use of 20 measure 0697, 57 percent voted high; 43 percent 21 voted moderate; 0 percent low; and 0 percent insufficient information. 22

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CO-CHAIR GUNNAR: Overall endorsement.
MS. QUINNONEZ: Voting is now open for
overall suitability for endorsement of measure
0697. Option 1, yes; option 2, no.
(Voting.)
MS. QUINNONEZ: All votes are in.
Voting is now closed. For the overall suitability
for endorsement of measure 0697, 100 percent voted
yes; 0 percent voted no.
CO-CHAIR GUNNAR: So we'll move on to
the second ACS measure which is for review which
is 0706, risk-adjusted colon surgery outcome
measure. This is a maintenance measure. Dr.
Hall?
DR. HALL: I can be even more brief.
This measure is very parallel to what we just
discussed. This is a maintenance measure that's
been in use since 2011. It is again a risk-
adjusted measurement of outcomes; the same death
or serious morbidity aggregate outcome at 30 days.
It's defined by a limited set of colon CPT codes.
Once again, we removed VTE from the prior

specification, and we investigated, but did not 1 2 add SDS factors. My other comments are very parallel to 3 4 the prior, so I will just -- I'll stop there. CO-CHAIR GUNNAR: Discussants are Drs. 5 Temple and Siperstein. 6 Clarissa. 7 MEMBER TEMPLE: I don't think we need 8 to review the evidence. We can move on. 9 10 CO-CHAIR GUNNAR: Yes, okay. Gap. 11 Anyone else want to vote on the evidence? Okay. 12 MEMBER TEMPLE: So there's clearly 13 differences in colon surgery outcomes. The 14 authors report differences in ethnicity, as well 15 as in socio-economic status and that there are 16 discrepancies in the country. They did not use --17 Bruce, maybe you can clarify, but I didn't 18 actually see changes in this score between 2011 and now to sort of demonstrate an improvement 19 20 and/or that disparities exist with this O/E ratio. Thank you. 21 DR. HALL: Right. So the 22 odds ratio we see for this measure in the last

reporting period varies between about .66 and .14 1 2 at the 10/90 level. That's about a 40 percent up/down, if you will. And within this measure, we 3 still do discriminate outliers even at the highest 4 5 statistical level, even at the 95 percent confidence level. So if you convert that into 6 7 kind of a standardized rate which everyone knows is just a construct and is not reality, but that 8 9 would reflect a standardized rate across the 10 country, that would vary from a 5 percent complication rate to a 30-plus percent 11 complication rate. So that's the variance in 12 13 performance that we're talking about. 14 That's very, very MEMBER TEMPLE: 15 helpful. I just didn't see that. And so I think 16 that's clear, there's a very high performance gap. 17 CO-CHAIR GUNNAR: Dr. Siperstein, 18 anything else? 19 MEMBER SIPERSTEIN: I agree, there's a 20 high gap with this measure. 21 CO-CHAIR GUNNAR: Any other comments? 22 Go ahead and vote.

1	MS. QUINNONEZ: We are now voting on
2	measure 0706 for performance gap. Voting is now
3	open. Option 1, high; option 2, moderate; option
4	3, low; and option 4, insufficient.
5	(Voting.)
6	MS. QUINNONEZ: All votes are in.
7	Voting is now closed. For performance gap of
8	measure 0706, 94 percent voted high; 6 percent
9	voted moderate; 0 percent for low; and 0 percent
10	voted insufficient.
11	CO-CHAIR GUNNAR: All right, moving on
12	to reliability. Dr. Temple.
13	MEMBER TEMPLE: So again, the numerator
14	and denominator are clear. The only piece that
15	perhaps you'd want to comment on is that the
16	reliability of .04 is present when there are 99
17	colon cases 91 or 99 cases reported in a given
18	year in NSQIP. So given the way the data is
19	captured, sometimes less than 99 cases would be
20	collected, unless you are doing a disease-specific
21	data entry. So do you want to comment on that?
22	DR. HALL: Sure. That's a very

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insightful comment. In an implementation, 1 2 obviously, we would strive to have the implementation specified that X number of cases 3 4 would need to be accrued. As Dr. Temple 5 indicated, our number looks to be about 199. It is still possible that some 6 7 hospitals in the country might not do that many colectomies in a year. We've identified from the 8 9 AHA database that that probably is the case, but 10 that is a larger policy problem than the problem 11 of internally in this metric. If some hospitals 12 are not doing enough cases to be evaluated on 13 quality, then that needs to be addressed in a 14 different way. 15 MEMBER TEMPLE: So when you report out 16 the O/E ratios for the various institutions, do 17 you actually report out the confidence intervals 18 as well? 19 DR. HALL: We do. 20 MEMBER TEMPLE: Okay. 21 DR. HALL: Yes. 22 CO-CHAIR GUNNAR: Any other comments on

reliability? Go ahead and vote. 1 2 MS. QUINNONEZ: Voting is now open for the reliability of measure 0706. Option 1, high; 3 option 2, moderate; option 3, low; and option 4, 4 5 insufficient. 6 (Voting.) MS. QUINNONEZ: All votes are in. 7 Voting is now closed. For the reliability of 8 9 measure 0706, 52 percent voted high; 48 percent 10 voted moderate; 0 percent voted low; and 0 percent 11 voted insufficient. 12 CO-CHAIR GUNNAR: Regarding validity, 13 the same applies as before, Karen? 14 MS. JOHNSON: Yes, we would ask you to 15 -- we will open up your forms and ask you to 16 insert the information that you mentioned earlier, 17 if that's the same. 18 MEMBER TEMPLE: So my only comment is 19 the same as well in that 10 UTIs is very different 20 than 10 deaths, and the way this measure works is 21 it's the same score for those two outcomes based 22 on my understanding. And so I think that's the

standard of measurement today, but I'd like to see the standard of measurement with NSQIP different in five years.

The other piece with the validity is that the risk model is sort of not available. It's clearly proprietary, and so just to comment there's several publications with the risk model, but it's not in the public domain to look at.

9 DR. HALL: Thank you again for those 10 comments. So we agree again, severity weighting 11 of outcomes is a challenge for all of us, not 12 unique to us, but we agree that our profession 13 needs to make some progress on that.

Our risk elements in the model are 14 15 provided. We didn't provide coefficients on them, 16 but we do state that if this were implemented 17 publicly that we would provide those 18 specifications to the public if that's the intent 19 of the measure. 20 Yes, Larry? 21 MEMBER MOSS: To the developers,

22 patients under 18 years of age are excluded. And

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I understand that there's a strong clinical 1 2 rationale why you wouldn't lump them in this particular measure, but I think it's important for 3 4 measure development and specifications that it be 5 noted as an exclusion with a written rationale why. And I'd further suggest that in the 6 7 committee's report, given the high morbidity of colon surgery in children, that we make a note 8 9 that there's a gap there and an opportunity for 10 measure development. 11 DR. HALL: Thank you for that comment. 12 That's a NSQIP platform-wide cutoff. And we would 13 certainly agree that that calls out for more 14 development on the pediatric side. 15 MEMBER SIPERSTEIN: Larry, just to 16 comment, there is a separate pediatric NSQIP 17 program that addresses this. 18 MEMBER MOSS: No, I understand that 19 Allan. I think in NSQIP that's well understood, 20 but I would like to see the NOF not exclude 21 children as standard operating procedure, but recognize when they're excluded. And if there's 22

a rationale, state the rationale, and if there's 1 2 a need, state the need. CO-CHAIR GUNNAR: Any other comments 3 regarding validity? Dr. Siperstein? Shall 4 No. 5 we vote? MS. QUINNONEZ: Voting is now open for 6 validity of measure 0706. Option 1 is moderate; 7 option 2 is low; option 3 is insufficient. 8 9 (Voting.) 10 MS. QUINNONEZ: All votes are in, and 11 voting is now closed. For the validity of measure 12 0706, 90 percent voted moderate; 10 percent voted 13 low; 0 percent voted insufficient. 14 CO-CHAIR GUNNAR: Moving on to 15 feasibility. 16 MEMBER TEMPLE: I think the comments 17 from the previous discussion hold. 18 CO-CHAIR GUNNAR: Any other comments? 19 MEMBER MOYER: This is probably a 20 comment that may have gone better with the last 21 measure. Most of the business we do is in a state 22 that has a significant proportion of critical

access hospitals, and when I hear the overall 1 2 structure of this registry described, it really sounds like something that would be very hard for 3 4 them to do. And while they're not doing 5 cardiothoracic surgery, good, they probably are doing a lot of the -- a fair amount of procedures 6 7 that may be captured by a database like this. Ι don't have a really good solution for that, but it 8 9 feels like there's a chunk of hospitals where 10 programs for which reporting those or tracking 11 this kind of data isn't an option.

12 DR. HALL: Thank you. That's a very 13 appropriate comment and I would say two things. 14 First of all, we do have a population of critical 15 access hospitals that participate in the program 16 now, so we know that it is feasible, and we do 17 reduce both the current cost and FTE requirement 18 for them. In the future, however, in an implementation of this metric we would not require 19 20 hospitals to be NSQIP participants. We would just 21 guide them on the acquisition of these fields for 22 this metric or the prior metric.

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MEMBER MOYER: Terrific. Thank you. 1 2 CO-CHAIR GUNNAR: Any other comments regarding feasibility? Go ahead and vote. 3 4 MS. QUINNONEZ: Voting is now open for 5 feasibility of measure 0706. Option 1, high; option 2, moderate; option 3, low; and option 4, 6 7 insufficient. 8 (Voting.) 9 MS. QUINNONEZ: All votes are in, and 10 voting is now closed. For the feasibility of 11 measure 0706, 35 percent voted high; 65 percent 12 voted moderate; 0 percent voted low; and 0 percent 13 voted insufficient. 14 CO-CHAIR GUNNAR: Usability and use. 15 MEMBER TEMPLE: I think the comments 16 are the same. 17 CO-CHAIR GUNNAR: Any other discussion? 18 Go ahead and vote. 19 MS. QUINNONEZ: Voting is now open for 20 usability and use of measure 0706. Option 1, 21 high; option 2, moderate; option 3, low; option 4, insufficient information. 22

1	(Voting.)
2	MS. QUINNONEZ: All votes are in, and
3	voting is now closed for usability and use of
4	measure 0706. Fifty percent voted high; 50
5	percent moderate; 0 percent voted low; and 0
6	percent voted insufficient information.
7	CO-CHAIR GUNNAR: Voting for overall
8	suitability.
9	MS. QUINNONEZ: Voting is now open for
10	overall suitability for endorsement of measure
11	0706. Option 1, yes; option 2, no.
12	(Voting.)
13	MS. QUINNONEZ: All votes are in, and
14	voting is now closed for the overall suitability
15	for endorsement of measure 0706. 100 percent
16	voted yes; 0 percent voted no.
17	DR. HALL: Thank you for your
18	consideration.
19	CO-CHAIR GUNNAR: All right, next
20	measure for discussion is 2998, infection rate in
21	bicondylar tibial plateau. It is a new measure.
22	Developers are present at the table. If you'll

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take three minutes to provide an overview.

2 DR. AHN: Good morning. My name is Jaimo Ahn, and I'm an orthopedic trauma surgeon at 3 4 the University of Pennsylvania. And I am here on 5 behalf of the Orthopedic Trauma Association for a measure regarding the measurement of infection 6 7 rates in bicondylar tibial plateau fractures. I do want to emphasize that this has 8 9 been a collaborative effort within one of the 10 committees at the OTA. And Dr. Bill Obremskey, 11 who has been one of the main shepherds of this, 12 was not able to be here today because he's at the 13 Metrics Consortium, which is a federally-funded 14 meeting that he had to attend. 15 So with that said, this is really the 16 OTA's foray into a national measure, so I wanted 17 to give you a little bit more background because 18 I think the measure itself is actually pretty simple and won't require a lot of debate or 19 20 questions. I quess we'll see about that. 21 But in terms of the injury itself, many 22 of you may not have been exposed to this since you

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were in training. It's a bicondylar tibial plateau fracture, and very simply put, what that means is the lower end of the knee or the upper part of the tibia is shattered. And the bicondylar means that it's both the inside and the outside of the knee making this a pretty significant injury.

And as the committee was talking about 8 9 measures potentially put forward to the NOF, the 10 reason this came up was multifold. One is that 11 it's a pretty devastating injury. Perhaps not as 12 quite life altering as a hip fracture, but you 13 have one of these fractures, and you're 14 essentially non-weight bearing for three months or 15 So it substantially changes your life. more. It 16 also puts you at future risk of degenerative 17 arthritis such that 20 percent or more will go on 18 to need a knee replacement at a later time. So we 19 thought that it was an important injury to think 20 about.

21 The reason that this specific fracture 22 pattern really came to our light is that even

though it's not terribly common, it's common enough that everyone at community hospitals will see it, and orthopedic surgeons at community hospitals will treat it, but they won't really understand their patterns because it's just rare enough that they're not going to see too many at their hospitals.

As the Level 1 trauma centers have been 8 9 informally tracking this, not as part of a 10 national initiative but just of our own accord, 11 one of the things that we realized is that the infection rate is highly variable and really way 12 13 too high. So if you were to sustain a standard, 14 let's say an ankle fracture today and went to the 15 operating room for a surgery, your infection rate 16 would be maybe 1 percent, low single digits, in 17 some places less than 1 percent. With these 18 bicondylar tibial plateau fractures, we found that 19 the reported rates of infection, even at highly 20 specialized centers range somewhere from 8 to the 21 mid-20s or higher. So we realized there was a big 22 variance here in the discrepancy, and it's

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something that we don't really know the answer to. 1 2 But the fact that the event rate is relatively high and an injury that's not too 3 4 common, so it wouldn't be burdensome for the 5 people initially reporting, we felt would make a good combination for a national measure such as 6 7 this. In terms of the actual outcome that 8 9 we're trying to measure, infection, we would use

10 the CDC criteria for deep infection. And when 11 this involves implants, it actually goes up to a 12 year, and so our -- the obligation would be for 13 surgeons to track this for a year and report it, 14 during that year period.

15 And also to give you just a little more 16 background, the consequences of this infection is 17 not just to go and wash it out. It's actually 18 much more substantial because there's hardware 19 involved and a fracture involved. This often 20 means that you have to multiple stage 21 debridements. Sometimes removal of the hardware 22 and further reconstruction, so the burden isn't

just let's take care of the infection, you're on 1 2 your way; the burden is also very high. So we felt that because there were so 3 4 many of these different elements incorporated: 5 there's a joint; there's the bone; there's infection, that this measure as a starting point 6 7 for the Orthopedic Trauma Association would also be good, not only in its simplicity, but the 8 9 implications that we could learn a lot about soft

10 tissues, how the joint is affected, the timing of 11 surgery, and I can get more into the variables 12 that we'd be interested in looking at in terms of 13 further improving what we do as fracture surgeons 14 as we go on.

15 So in terms of some of the nitty-16 gritty, the numerator/denominator is relatively 17 The numerator would be patients who simple. 18 sustain a deep surgical site infection according 19 to CDC criteria. The numerator, we can discuss 20 the appropriateness of excluding patients 18 and 21 younger, but as for 18 and older that come in with 22 a specific type of tibial plateau fracture, the

bicondylar tibial fracture, these are easily
identified now using ICD-10 as well as CPT codes
for the fracture treatment. Even in the old
system, the ICD-9 would have identified it as
well. And we feel that this is going to be -- the
reliability and validity are going to be high.

7 The reliability we actually don't have a registry to look at currently, but when we did 8 9 look at a larger study and applied some 10 reliability criteria, we found that we could 11 accurately, with both high sensitivity and 12 specificity apply the correct criteria so that we 13 would identify these injuries with a complication. 14 And that it's a -- it has face validity. We 15 understand already what the implications of 16 infection are because that's been studied for 17 these injuries for many, many years.

And the final thing that I think really drew us to this, before I entertain questions, is the fact that again because of the relatively high event rate and our ability to look at factors such as would a wound back potentially mitigate the

infection rate, because there was a small 1 2 randomized control trial suggesting that even the 3 way we dress the wound may affect the infection Do we have to rethink antibiosis for these 4 rate. 5 injuries because it's so high? Should we really stop at 24 hours of prophylaxis? Is the timing of 6 7 surgery important? We know that it's important for femoral shaft fractures. Is that going to be 8 9 important for these as well considering again the 10 soft tissue envelope, the joint, and some of the 11 implications of further treatment. And with that, I will entertain 12 13 questions. 14 CO-CHAIR GUNNAR: Discussants are Dr. 15 Ko and Dr. Olsen. Dr. Ko. 16 DR. KO: Great. How much time do we 17 have? 18 (Laughter.) 19 CO-CHAIR GUNNAR: As much as you'd 20 like. That's not a good sign. 21 DR. KO: 22 CO-CHAIR GUNNAR: It's a new measure,

so evidence -- take your time with the evidence. 1 2 DR. KO: Okay, so this NQF measure 2998, the title of it is infection rate of 3 bicondylar tibial plateau fractures, and as was 4 just stated, this is an important clinical issue, 5 6 and this is a new measure, as Dr. Gunnar said. 7 This is an outcome measure, and in that 8 regard, there are likely processes that influence 9 There are, as was stated, there is the outcome. 10 a variation in the SSI rates. After this, ranging 11 from 8 to 30 or even higher, 8 to 30 percent, and 12 that's three peer-reviewed published studies. So 13 I think that's the evidence. Is there anything 14 further? I don't know where to 15 MEMBER DUTTON: 16 fit this in, so if you want to bring it back 17 later, that's fine. But I agree, the first thing 18 we need to know is just the demographics, the 19 incidence of the event across facilities. But 20 risk adjustment is going to be absolutely critical 21 in understanding these outcomes and particularly

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open/closed, transfused/not transfused, age of

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patient, nutritional status. 1 2 DR. KO: I think we'll talk about the risk adjustment in the validity. At least I'll 3 bring it up then, so maybe we can do it then. 4 5 MEMBER DUTTON: Fair enough. I'm sorry, who is the other 6 DR. KO: 7 discussant? CO-CHAIR GUNNAR: Dr. Keith Olsen. 8 9 DR. KO: Okay, sorry. Dr. Olsen, do 10 you have anything? 11 CO-CHAIR GUNNAR: A.J. 12 MEMBER YATES: As the only orthopedic 13 surgeon on the panel, I don't have any 14 relationship with OTA, but I'd like to just put 15 this in perspective as we discuss it. Orthopedics 16 is one of the gaps that was identified by the 17 panel last year, and the fact that one of the 18 specialty societies has responded to that gap 19 should be recognized. 20 The second thing is is that the -- we 21 may not be doing the injury justice, but as a 22 particular injury to gauge the quality of one

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trauma center versus another or a set of orthopedic trauma surgeons, they've picked a disease that has a very high incidence and a very difficult problem to adjust to, so I think they should be applauded for that.

And the third thing to put it in 6 7 perspective is is that since this is a brand new measure from a relatively young organization as 8 9 compared to say the American College of Surgeons, 10 it does have -- we do have the option of giving it 11 a provisional approval so that they can collect 12 the data and come back and seek a more permanent 13 endorsement or a more standing endorsement.

So with those things said, I just want to make sure that the OTA has a chance just to put this in perspective, what's your penetrance into the trauma centers across the country? How many people are members? How many people are expected to respond?

20 And then the last question is -- and we 21 will come to risk adjustment -- but you say you 22 have no data for risk adjustment, but have you

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established by consensus and literature review 1 2 what risk factors you are going to collect in anticipation of establishing what may be high 3 4 correlates of bad outcomes through regression 5 analysis after you start to collect? So those three things: penetrance, likelihood of response, 6 and have you established de novo through a 7 consensus process which risk factors are you going 8 9 to collect? 10 Can we just do the first two DR. KO: 11 and then we'll talk about the risk factors in the 12 validity? 13 MEMBER YATES: You can do that. I'm 14 just saying that -- it's -- I just want to know 15 what the homework is, just so you have a chance to 16 present that up front. 17 DR. AHN: So in terms of penetrance of 18 OTA members, essentially every Level 1 trauma 19 center is going to be covered by members of the 20 Orthopedic Trauma Association. In terms of 21 centers that don't have trauma designation and how 22 many members are OTA and what percentage would be

covered, I actually do not have that information 1 2 at my fingertips. MEMBER YATES: And participation in a 3 4 registry? 5 So participation in a DR. AHN: registry is something that the OTA members have 6 7 definitely expressed an interest in. In fact, this grew out of a task force within the -- under 8 9 the Evidence Base Committee where there was a 10 strong interest in developing a database. 11 And so that's something that the OTA 12 has been working on, of having a registry. We do 13 have a fledgling registry, but it's something that 14 we wanted to nationalize and make something that 15 would have more of an impact. And by working with 16 NQF, for instance, we felt that we would increase 17 the compliance and be able to actually have more 18 people enter into the registry. 19 MEMBER YATES: And then I'll defer the 20 risk question as requested by Dr. Ko and then 21 these are Schatzker Vs and VIs or just Vs? 22 These would be Schatzker Vs DR. AHN:

and VIs. Anything that would be coded as being
 bicondylar.

3 MEMBER YATES: And for the audience, 4 Schatzker VI means that it's not just split into 5 both condyles, but it's also fractured below in 6 the shaft of the tibia, so it's a disassociated 7 bicondylar fracture.

So just for the 8 CO-CHAIR FLEISHER: 9 committee's purpose, there is no conditional 10 endorsement any longer. It's either endorsed or 11 not. And should we get that -- when we get there 12 and should we get there, I mean it's either 13 endorsed or not and if they need to come back 14 either short term or long term, we'll address 15 But the goal would be to focus on whether that. 16 or not this deserves endorsement.

MEMBER YATES: Am I correct in sayingthat we used to have that?

19 CO-CHAIR FLEISHER: We did have a
20 conditional endorsement, but we now only endorse
21 or do not endorse.

MEMBER YATES: I think the handbook

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needs to be updated then or maybe I missed 1 2 something. CO-CHAIR GUNNAR: So from an evidence 3 4 point of view, A.J., is it your opinion that 5 what's presented is -- that clearly links these infection outcomes to best practice and high 6 7 quality processes, that if measured would drive that? 8 9 MEMBER YATES: The literature would 10 support that, yes. The evidence supports that. 11 CO-CHAIR GUNNAR: That is the fundamental question that we are voting on in one 12 13 minute or in 30 seconds. Any other discussion? 14 MEMBER GROVER: I'm going to recuse 15 myself from the voting. 16 CO-CHAIR GUNNAR: Thank you. Very 17 good. 18 MS. QUINNONEZ: We are now voting on 19 measure 2998. Voting is now open for evidence. 20 Option 1, yes; option 2, no. 21 (Voting.) 22 MS. QUINNONEZ: All votes are in and

voting is now closed. For the evidence of measure 1 2 2998, 89 percent voted yes, and 11 percent voted 3 no. 4 CO-CHAIR GUNNAR: So carrying onto gap. 5 Dr. Ko. DR. KO: So the studies that were 6 7 cited, there are three studies in the gap, in the spread in the SSI rates after this procedure. 8 9 They range from 8 percent to 30 or above percent, 10 so that's the gap. 11 MEMBER YATES: I would say that I'm 12 struggling with that gap based on three 13 retrospective single center studies with --14 involved less than 500 patients total. 15 CO-CHAIR GUNNAR: Any other comments? 16 Shall we vote? 17 (Off microphone comment.) 18 DR. AHN: The question was asked --19 somebody was asking about the incidence of the 20 injury. It is a relatively low occurrence event. 21 So the best estimate is probably 1 in 100,000 per 22 year, so -- and it constitutes, we believe, to be

approximately 1 percent of all bony fractures. 1 2 So depending on how you estimate the number of fractures in the U.S. a year, even 3 4 incidental ones could be up to -- in the millions, 5 up to ten million. So it does mean that there are thousands across the U.S., but any given center --6 it's not like a hip fracture where you have many, 7 many events, but we're measuring things for hip 8 9 fracture like in-hospital mortality and one-year 10 mortality. So I think that's very different than 11 looking at something like an infection. 12 And as the OTA thought about this, 13 that's why we migrated towards something that was 14 common enough so that the OTA members would not 15 feel burdened in terms of reporting it, but common 16 enough and yet have a complication rate with an 17 event rate that would be measurable and would be 18 meaningful. Collette. 19 CO-CHAIR GUNNAR: 20 MEMBER PITZEN: I just wanted to make 21 a couple comments. I applaud the Orthopedic 22 Trauma Association again for tackling what is a

known problem, high infection rates. And just a 1 2 comment that a registry doesn't have to be in place in order to collect data and have a measure. 3 4 CO-CHAIR GUNNAR: Dr. Yates. 5 MEMBER YATES: Yes, my one statement is is that the positive reported outcomes bias in 6 7 orthopedics borders around .7. In terms of people wanting to -- in 8 9 terms of in the literature, people wanting to 10 report what their infection rates are for a particular disease, if you're a high rate, you're 11 12 not reporting it on a pretty regular basis. The 13 fact that we have that big a spread in the 14 literature, even though it's sparse, it's the 15 literature and the problem is we don't have the 16 registry and we don't have a way of collecting 17 that through ICD-9 codes for the majority of 18 trauma patients that lay outside of the say CMS 19 databases. 20 DR. AHN: And if I may, one last thing, 21 the study by Barei that has the lowest in the 22 spread is from Harvard U Medical Center which in

the orthopedic trauma world is like the mecca, 1 2 That's where they strive for perfection. right? They have -- they keep amazing records. 3 That is 4 where they're trying to do -- sort of sets the 5 standard for the rest of the country. And when a center like that reports a rate of over 8 percent 6 whereas a standard fracture at a standard 7 community hospital will have an infection SSI rate 8 9 of 1 percent or less, I think that also speaks to 10 what a problem this is. 11 CO-CHAIR GUNNAR: Any other discussion? 12 So we are voting on performance gap. 13 MS. QUINNONEZ: Voting is now open for 14 performance gap of measure 2998. Option 1, high; 15 option 2, moderate; option 3, low; and option 4, insufficient. 16 17 (Voting.) 18 MS. QUINNONEZ: All votes are in and 19 voting is now closed. For performance gap of 20 measure 2998, 56 percent voted high; 39 percent 21 voted moderate; 0 percent voted low; and 6 percent 22 voted insufficient.

CO-CHAIR GUNNAR: Carrying forward to 1 2 reliability. DR. KO: So here are some -- I'll 3 4 report the reliability issues and then maybe I 5 have some questions for the developer. So first of all, this is a measure 6 7 that's 18 and over, and I'll save Dr. Moss the time, why is it not the children? And the 8 9 inclusion is to have a fracture in an open 10 reduction internal fixation and there's one-year 11 follow up with three-year aggregate of the data. 12 So that's the data. 13 The numerator, it was a little difficult to understand from the measure 14 15 description because there seemed to be three 16 options for numerators. So number one is a CPT 17 code of a post-op wound, irrigation, and 18 debridement. Number two was in the medical record 19 an irrigation debridement and a confirmed positive 20 culture. And number three was more like the CDC 21 where there was a deep-space SSI in the deep soft 22 tissue and it's purulent and all the clinical

2 So it seemed like there were three 3 options for wound infection for the numerator and 4 so are they all three or is there just one that's 5 doing that? The denominator is relatively easy, 6 18 and over which, Dr. Moss, and then the 7 fracture.

things and constitutional symptoms of fever.

The data source was a registry that is 8 9 from the OTA website that is seemingly a QCDR 10 registry, so that it's really made for the providers to participate in the Quality Payment 11 12 Program with this, but it doesn't seem like this 13 is in there already. We can talk about either 14 here in reliability or feasibility, and that's the 15 data source.

16 The testing of reliability is largely 17 based on the two studies that have been quoted 18 previously which are, as Dr. Olsen said, single 19 institution retrospective studies of approximately 20 400 patients where it showed really good agreement 21 sensitivity and specificity and positive 22 predictive values. But it is in two retrospective

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studies that are in the literature and not 1 2 necessarily with these definitions or a registry. So let me stop there and those are the 3 issues of reliability. 4 The age issue I think is a 5 DR. AHN: relatively simple one. If we went -- I don't 6 7 think it's unreasonable to look at that population at some point, but because of the physeal closure 8 9 and the timing of physeal closure depending on the 10 age, I think that would complicate the issue more. So I think that would be a more advanced stage. 11 12 The other is some of these implants are 13 not actually acutely indicated for patients under 14 the age of 18, so that would also make it very 15 hard to capture these patients. 16 In terms of the multi-numerator, I think that came out because there were multiple 17 18 surgeons having a discussion about this. What it 19 really comes down to is the CDC definition. And 20 the CDC definition, the one complication here or 21 not complication but modifier is the fact there is 22 hardware involved, so the typical shorter term

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definition doesn't apply anymore and now it
 applies to a year.

And of course, as orthopedic surgeons, 3 4 we have to sort of discuss and say okay, we 5 recognize that it's going to be up to a year. But the other is that when there's a deep surgical 6 7 site infection that involves hardware, our standard of care as OTA members is to debride it. 8 9 And so I think that's where some of the 10 confusion is, does it have to be debrided? Well, 11 technically, it doesn't, but our standard of care 12 right now is that we do debride it, so it should 13 be captured by a debridement CPT code. But that 14 -- as I look at this, that should not be a 15 necessary component, but just because it's a 16 standard of care.

17 The retrospective study, I'm going to 18 perhaps use that to implore all of you to consider 19 making this a more national prospective-type 20 collection. That is the state of orthopedic 21 trauma, especially in the U.S. Canadians have 22 been better, and other countries with national

registries have been much better at collecting this data, but this is the state that we're in now and we are trying to make that move of trying to create more pre-thought out, pre-meditated prospective registries.

CO-CHAIR GUNNAR: Dr. Dutton.

7 MEMBER DUTTON: Well, I admit to having worked for many years at an inferior trauma center 8 9 in Baltimore, but we did do a lot of washouts, 10 routine washouts when there was associated soft 11 tissue injury. So that wouldn't necessarily be 12 infected -- or maybe would be, I'll ask the 13 orthopods here -- but how would you discriminate 14 that in the numerator, scheduled or planned washed 15 out for an open wound versus one done specifically because there was a deep infection? 16

DR. AHN: It's actually -- it's nicely built into the system because I use it a lot for staged washouts. For an open fraction is a 1101X code. So that would be easily distinguishable and if the surgeon has any amount of detail in their operative record, it will give the Gustilo-

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Anderson classification or some openness. 1 2 The fact that they're doing a debridement as well as a plan to return, but even 3 based on the procedural code itself, the code that 4 5 we use for an open fracture stage planned debridement is very different than if there's an 6 7 infection and you're going in to treat that infection. 8 9 CO-CHAIR GUNNAR: Dr. Moss. 10 MEMBER MOSS: I appreciate your 11 comments on the care of children, I just want to 12 make two additional comments. 13 The growth rate issues do increase the 14 complexity, but children do still have these 15 operations and they are at risk for infection. 16 There are very compelling data that the subset of 17 children who receive surgical care in adult 18 institutions in the United States is the trauma 19 population. So the injured children that have 20 these injuries are likely to be cared for by 21 members of your organization, so I think it's 22 particularly noteworthy to keep it under

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consideration.

2	CO-CHAIR GUNNAR: So the other question
3	I had, we just verified that it is 90 days for CDC
4	follow-up. Would you modify your measure from one
5	year to within year of release, at least
6	recognizing that?
7	DR. AHN: So from what I saw that
8	within one year if implant is in place and the
9	infection appears to be related to the operation,
10	so that's a modifier in the CDC definition. But
11	regardless of that modification, our plan
12	because the general outcome now not relates
13	specifically for infection, but when we look at
14	patient-reported outcomes, the OTA has basically
15	decided that we would do a year and we thought
16	that coincided well with the modification of
17	implant in a year. And since we try striving for
18	patient-oriented outcomes collection at a year
19	that would be a good time frame.
20	CO-CHAIR GUNNAR: Dr. Ko, any other
21	comments regarding reliability?
22	DR. KO: No.

CO-CHAIR GUNNAR: Dr. Olsen? 1 All 2 right. Ready to vote. MS. QUINNONEZ: Voting is now open for 3 4 reliability of measure 2998. Option 1, high; option 2, moderate; option 3, low; and option 4, 5 insufficient. 6 7 (Voting.) MS. QUINNONEZ: All votes are in and 8 9 voting is now closed. The reliability of measure 10 2998, 5 percent voted high; 90 percent voted 11 moderate; 5 percent voted low; and 0 percent voted 12 insufficient. 13 CO-CHAIR GUNNAR: Moving on to 14 validity. 15 DR. KO: So validity, this is an 16 outcomes measure. The outcome, as we just heard, 17 is going to be aligned with the CDC definition 18 which I think most everyone uses for wound 19 infection. So that is a valid -- and that's 20 within the reliability, but the issue that Rick 21 brought up and A.J. brought up is the risk 22 adjustment.

196

1 This is a non-adjusted outcome measure 2 and so they do cite some potential items that can be risk adjusted, but because this is not in place 3 4 and they don't have those factors, they have not 5 done the modeling to figure out if the modeling makes a difference or not, so that might be the 6 7 reason why it's not risk adjusted and nonstratified so if the developer could address that. 8 9 The data source, as was mentioned, is 10 an OTA certified QCDR which will be used and so 11 the operative word there is will. This is, as I 12 understand it, not in the registry yet, but 13 probably can be put into the registry. 14 As far as SDS, there's a quote in there 15 and I couldn't remember it, so I wrote it down: 16 SDS patient factors, injury factors have not been 17 consistently associated with differences in SSI 18 rates so those were not included. 19 Again, the testing for validity are 20 based on the two studies that have been previously 21 discussed. And as far as threats to validity, 22 again, no risk models, no risk adjustment. The

missing data issue, it's unknown because it's not in the registry. The meaningful differences is unknown, so reliability of distinction is unknown. And there is -- the measure has a lot of good, thoughtful planning in it, but nothing has been demonstrated to date.

CO-CHAIR GUNNAR: Dr. Yates.

MEMBER YATES: And again, it's clear 8 9 that there's an intention to collect consensus 10 agreed upon risk factors that are listed in the 11 measure as submitted. And as noted, they can't 12 report on the reliability or the c-statistic of 13 those, but given the fact that it isn't collected 14 yet. But at face value, the injury itself has the 15 potential to -- because of its high rate of 16 infection, the injury itself may, in fact, 17 outweigh the risk factors. I mean it's a 18 devastating injury and very hard to take care of 19 in terms of avoiding complications.

20 You could almost do this study without 21 any risk adjustment in the first year and move the 22 needle in terms of the variabilities that are

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brought out from having collected it for other people to learn from. And if certain centers perform or are doing something different than other centers, then there may be an opportunity for a best practice to evolve, even a non-risk adjusted.

I would just point out that the CDC 7 criteria for hardware is a lot different than some 8 9 other CDC criteria in that bacteria are harbored 10 by prosthetics because of a number of reasons 11 including the propensity in a low-oxygen 12 environment for glycocalyxes and the like to form 13 and bacteria being resistant to antibiotics. But 14 on top of that, there are a number of these types 15 of infections in joint replacement as well as in 16 fractures that have hard to culture microbial 17 etiologies. And there's a number of low grade 18 skin bacteria. Propionibacteria is a classic that 19 might take up to 15 days to culture if your lab 20 even bothers to hold it that long.

21 So a draining sinus, purulence, and 22 elevated CRP and sed rate are some of the reasons

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1	why the CDC will allow that to count as an
2	infection and would insist that it be counted as
3	an infection so that those aren't missed just
4	because they're culture negative.
5	CO-CHAIR GUNNAR: Collette.
6	MEMBER PITZEN: I'm just going back to
7	the earlier discussion from Cliff about the
8	specification of the numerator. Are we
9	comfortable me not being an orthopedic person,
10	I don't know if I from the discussion would
11	understand okay, how would I count this deep wound
12	infection? So I guess I would recommend a little
13	bit of clarity around that.
14	DR. AHN: As I reread what we have
15	proposed, I think there is a little bit of
16	confusion. I think they're overlapping the
17	Venn diagrams that overlap. I think as you start
18	taking away some of the factors like one of the
19	ones I stated which is an orthopedic surgeon as a
20	standard of care, if somebody meets the CDC
21	definition of a deep infection in the setting of
22	hardware and metal, we'll take them to surgery.

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So I think that's why that was put in 1 2 because we were thinking of surgeons, but at the end of the day, the numerator will be a deep 3 4 infection. Now whether a surgeon decides to go 5 against what's considered a standard of care and not treat that appropriately, we can't really 6 7 control. But yes, the criteria should and will be the CDC definition of deep infection. 8 9 MEMBER PITZEN: Perfect. Thank you. 10 CO-CHAIR GUNNAR: Cliff or Lee, you 11 had a comment. 12 CO-CHAIR FLEISHER: Yes, risk 13 adjustment still concerns me and I'm not concerned 14 about you -- it's great that you're creating a 15 registry and following these patients. And we're 16 from the same institution, obviously. But what 17 I'm concerned about is what NOF endorsement means 18 as opposed to when a registry is ready for 19 actually having an NQF endorsement. 20 So if it's not risk adjusted for the 21 purposes for public reporting, would it be good 22 for somebody to know what your rates are unrisk-

adjusted? Would that help anybody telling you 1 2 whether that's a good hospital or a bad hospital if they get a trauma to be taken there? 3 4 Secondly, if you're talking about 5 comparison between hospitals, would it really tell you enough without that risk adjustment? 6 And the 7 third -- and looking through the report, there's a whole bunch about negative pressure, vacuums, 8 9 and other things. You actually talk about this 10 treatment. I don't want NQF to be caught up in 11 what our mission is versus any agenda with regard 12 -- it was just interesting. I've never seen a 13 company get so focused on acknowledging their own 14 studies to support the measure as opposed to 15 acknowledging how important it is to do something. 16 It almost appeared like -- and I'll say it for 17 the record, that if they endorse this and you 18 don't have a good rate, non-risk adjusted, you 19 should be using our devices.

20 So that's my question. Why do you 21 think this is ready -- why do you think this -- if 22 this went out to the public, would you be

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203

1 comfortable with Penn Presbyterian's rate, be
2 sitting out there unrisk-adjusted to drive the
3 public to whether or not they should come to us or
4 Rothman?

5 MEMBER MOYER: So related to that, if 6 this is trauma surgery, is the public choosing? 7 Probably, I'm guessing go where they're taken or 8 is this a surgery where there's a delay?

9 CO-CHAIR FLEISHER: Well, that's why I 10 actually said even comparing between hospitals so 11 they can drive each other, is it good enough to 12 risk adjust to drive improvement within a region?

DR. AHN: Our committee discussed this at length and I've had numerous conversations with Bill Obremskey about this. And we do realize that as it stands, not being able to risk stratify is a weakness, but we believe part of -- we also had a number of other measures that we were concerning.

At least part of the decision to move forward with something like this is because, for better or for worse, the OTA has not been able to

create registries like the American College of 1 2 Surgeons, that because the event rate is high, we believe that in the early time period that we'll 3 be able to collect the data to show the variation 4 5 and variability to be able to risk stratify. But without being able to collect that 6 7 data, and without putting this on the national agenda, orthopedic surgeons are not -- they 8 9 haven't been -- let's say the easiest -- my 10 colleagues haven't been the easiest to work with 11 in terms of driving those types of measures. So I think this was our way of saying we can make 12 13 this an important thing for the OTA. 14 The OTA Board has certainly signed on 15 to it and to make this an important agenda where 16 by collecting data, then we can risk stratify. 17 But I do agree with you that without that risk 18 stratification, then it becomes very difficult to 19 interpret and that's something that orthopedic 20 traumatologists have been saying all the time. 21 Without having that data, we say we take care of 22 the most mangled and sick patients and fractures.

We can't be held accountable in the same way as 1 2 another center that doesn't have this complexity. So I think that is something that is 3 4 foremost in our minds and that we hope by having 5 that data we'll be able to create that risk stratification. 6 7 CO-CHAIR GUNNAR: We'll go Fred, Karl, Chris, and then back to Cliff. 8 9 MEMBER GROVER: I mean I think it's a 10 reasonable strategy to collect data and have it 11 not risk adjusted until you have enough data to do 12 the model for risk adjustment. That's certainly 13 how we started the STS and you get a few thousand 14 patients or whatever it takes to develop your risk 15 model and then you go with that. 16 I guess the only question I would have 17 is now do you actually have people that are signed 18 up to do the database yet or not? 19 Yes, our incipient OTA DR. AHN: 20 database is something that people do contribute to 21 on a periodic active basis. 22 MEMBER GROVER: How many members are

signed up?

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2	DR. AHN: That I don't know.
3	MEMBER GROVER: One question I would
4	have and I think this is a very reasonable thing.
5	The question is to me when does it merit NQF
6	approval? Do we want to see some evidence of what
7	the participation is and the consistency and
8	reliability of the data that you are collecting?
9	And I think at some point we probably have got to
10	touch on that.
11	CO-CHAIR GUNNAR: Karl.
12	MEMBER BILIMORIA: Yes, I guess I'd
13	have sort of the end of Dr. Grover's comment is
14	the same as mine. At what point are we ready for
15	NQF endorsement? It just seems like it's
16	premature. It's NQF supported, maybe. We all
17	like the idea. It's a good measure, but should it
18	get the stamp based on where it is now? And as
19	the newcomer, I would just pose that as a question
20	to the group.
21	CO-CHAIR GUNNAR: So just historically,
22	there was an avenue for having that

We no longer have 1 MS. MUNTHALI: Yes. 2 We have it for eMeasures that are not fully that. spec'd. They don't have testing information. 3 4 You're going to hear from our colleague, Jason 5 Goldwater, who will talk about trial use, I think, for this project. For other projects, claim-based 6 7 or otherwise, no, there is no path. It would have 8 to be fulled spec'd. 9 CO-CHAIR GUNNAR: Chris. 10 MEMBER SAIGAL: Just a follow up on Dr. 11 Fleisher's comment. Is there some kind of 12 secondary gain by a company that's being promoted 13 in this measure? The developer didn't really 14 address that. Is there some involvement of the 15 company or -- I just want to clarify what he said. 16 DR. AHN: To tell you perfectly honestly, when Bill and I saw that, we thought it 17 18 was a little surprising too. We didn't really understand why a -- why Smith & Nephew would come 19 20 out in that fashion. I can tell you that I use 21 Smith & Nephew products, but I have no 22 relationship with them. And certainly between

Bill and myself, we have no relationship with 1 2 Smith & Nephew wound care. 3 Maybe they saw it as an opportunity to 4 have some spotlight, but the -- and because it is 5 an infection and involves wounds, but yes, we do not have any particular leaning toward the 6 7 utilization of a vac or any particular implant or device. 8 9 DR. KO: So I didn't want to make 10 editorialized comments in the beginning to start things off, but if I'm the last speaker for 11 12 validity, I will now. So -- oh, if I'm not the 13 last speaker, should I wait? Yes, wait? Okay. 14 CO-CHAIR GUNNAR: College, then Amy, 15 and then Cliff. 16 MEMBER PITZEN: This is Collette. Ι 17 just want to share my own experience. We have two 18 statewide orthopedic measures in Minnesota 19 implemented across all of the practices using a 20 direct data submission process from the practices, 21 so not a registry per se. But through the last 22 eight years that I've been working with NQF, I

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have had the fortune of bringing forward a measure that was almost done.

For example, we have a spine surgery 3 functional status measure and we were at the point 4 5 where we had picked variables for risk adjustment, but we had not enough data yet to run that. 6 And like an ad hoc process was evoked when we had that 7 information, so I don't know if there's any 8 9 If risk adjustment is the only thing avenue. 10 that's holding us back from a validity standpoint, 11 I guess I'm asking staff direction. Thank you. 12 MS. MUNTHALI: If you feel the measure 13 is fully specified and there is this aspect of 14 validity that you have some concerns with, we 15 could possibly ask the developer to come back 16 during the annual update process that I mentioned 17 before. That would be a significant change to the 18 We would bring it back in front of the measure. 19 committee to evaluate, to see if they've met that 20 condition.

21 But that would only mean that the rest 22 of the criterion have passed and you feel that

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they've met all of the conditions for endorsement. 1 2 CO-CHAIR GUNNAR: Amy. MEMBER MOYER: From validity 3 4 perspectives, it sounded like today individuals 5 are submitting data to this registry kind of on a voluntary -- it sounds like a little informal 6 7 basis. If you move to using a measure based on that data, I think you would need to be able to 8 9 demonstrate that individuals who are being 10 measured are necessarily submitting all of the 11 data and submitting all of their cases to the 12 registry, and can you talk a little bit about how 13 you plan to account for that? 14 DR. AHN: I'm not sure there's a great 15 external way of enforcing that. I think we could 16 certainly do data biopsies and see how much of the 17 data we feel have been submitted. But with many 18 -- similar to many other measures and things that the OTA has tried to do, I think it's going to be 19 20 very difficult to enforce that at an institution 21 level. 22 CO-CHAIR GUNNAR: Any other comments

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except for Dr. Ko? Cliff.

2	DR. KO: So I tried to as objectively
3	talk about the validity and a big thing is the
4	risk adjustment and it's not just the risk
5	adjustment wasn't there and we just said it
6	doesn't need it. We just don't know. And we
7	don't know because there's no data and we don't
8	know there's data because there hasn't been any
9	data collected except for these prior two studies.
10	Looking at just the application
11	overall, I think that nobody denies that this is
12	an important clinical topic. It is. And the
13	numbers would specify that it is. And SSI is a
14	very important thing and so that's absolutely
15	true. This is almost like a first draft of a term
16	paper where you need to write seven drafts to have
17	your final maybe not seven, maybe three. But
18	I think these are important topics and the
19	validity is important and it's going down the
20	road, but we can't really decide on validity
21	because we don't have enough data.
22	And this is how it's kind of how

validity and feasibility is kind of linked because 1 2 we can't get validity, the data for validity, until we address the feasibility of doing it 3 4 through a QCDR and all this stuff that was brought 5 It's voluntary and do people even do the QCDR up. and it's self-reported and all that stuff about 6 7 feasibility. So I think that this a great try and 8 9 it's a very worthy topic and that's why I think 10 A.J. said give it this status of keep going 11 because this is worthwhile. But it's probably not 12 -- it doesn't have -- we can't really address the 13 validity in a meaningful way because we don't have 14 enough data. 15 CO-CHAIR GUNNAR: Any other comments? 16 We will carry on. 17 MS. QUINNONEZ: Voting is now open for 18 the validity of measure 2998. Option 1, moderate; 19 option 2, low; option 3, insufficient. 20 (Voting.) 21 MS. QUINNONEZ: Voting is now closed. 22 For the validity of measure 2998, 0 percent voted

moderate; 16 percent voted low; and 84 percent 1 2 voted insufficient. CO-CHAIR GUNNAR: So does that close? 3 4 Okay. So the measure does not pass, but I think 5 the message is to continue and collect the data and work towards risk adjustment. 6 Any other 7 comments anyone else would like to add? I'm just curious, 8 CO-CHAIR FLEISHER: 9 Cliff, can the college at all provide some 10 quidance? DR. KO: Yes, I know that -- Fred and 11 12 I were talking about STS and the college would be 13 very happy to help because this is a very 14 worthwhile topic and so absolutely. 15 Thank you for the feedback. DR. AHN: 16 MEMBER MOYER: I'd just like to say in addition to being clinically important, I was 17 18 really impressed with the organization of the 19 application and the materials and the 20 presentation. I think you did a terrific job for 21 a first time. Thank you. 22 CO-CHAIR WARREN: So we have a didactic session next regarding eMeasures. Will someone
 introduce -- okay, great. Welcome.

So good afternoon, 3 MR. GOLDWATER: My name is Jason Goldwater. 4 evervone. I'm a 5 senior director here at NQF and I have a multiple number of responsibilities --- oh hi, Melinda --6 one of which is to oversee our eMeasure review and 7 acceptance cycle before these measures get to this 8 9 committee or any other committee.

I don't think it's a surprise to say that the dawn of eMeasures is upon us. The widespread implementation of electronic health records, of data registries that has been growing over the last several years has really led to a greater increase in the number of measures being submitted with electronic specifications.

17 I have been around this field long 18 enough -- 20-plus years, which I rarely admit to 19 people -- but long enough to know when CMS back in 20 the days when it was called HCFA was really trying 21 to move out of the chart abstraction into the 22 electronic measure form. And did not succeed as

much as they had hoped to largely because there was such low EHR adoption.

Now we flash forward into 2016, and 3 4 roughly 80 percent of hospitals and 75 percent of 5 physician offices have electronic health records and that continues to rise. So clearly, there is 6 7 a greater emphasis, not just from CMS, but from the quality improvement community to learn how to 8 9 develop electronic measure specifications and to 10 measure clinical quality electronically with the 11 technology that is available to them.

12 So what I'm going to do in the next few 13 minutes is not get into an elongated history of 14 the electronic measurement world because I'm sure 15 as much as all of you would appreciate hearing 16 about that, recognizing that I am the speaker 17 standing between you and lunch, I'm certainly not 18 going to do that.

But what I do want to talk about is sort of how we look at eMeasures, and in particular, the eMeasures that you all will be looking at and considering this afternoon. So

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next slide.

2	Reviewing electronic clinical quality
3	measures, this particular project, surgery
4	project, includes the evaluation of five eMeasures
5	that are being considered for trial use. Now what
6	do we mean by that?
7	When eMeasures are submitted to NQF for
8	review and moving onto a committee, they can come
9	in through one of four ways. The first way is a
10	de novo measure, obviously a brand new measure
11	that has been electronically specified.
12	Another one is what we would call a
13	respecified measure. So a claims-based measure or
14	a chart-abstracted measure that an organization,
15	usually sponsored by CMS, is transitioning from
16	chart abstraction into electronic measurement and
17	mapping the specifications accordingly.
18	The third one is what we call legacy
19	measure which is a measure that's already used in
20	a national program. It's also chart abstracted
21	and they are moving that as well into an
22	electronic specification.
And the fourth one is what we are doing 1 2 Given as I've already said that there has now. been significant rise in the amount of eMeasures 3 4 that are being submitted because there is such 5 rapid proliferation of electronic health record adoption in hospitals and physician offices, there 6 is still an issue at times when measures are being 7 created, brand new measures. And that is that the 8 9 data that is available to test the measure is not 10 always easily accessible because, as some of you 11 may know that are familiar with this technology, 12 if you've seen one EHR system, you have seen one 13 EHR system. 14 Even if it's the same vendor, there are very different EHR implementations. And one of

15 very different EHR implementations. And one of
16 those issues is that the way data is structured or
17 the way the data is captured in an EHR, or even in
18 a registry, can vary. Some of it is unstructured
19 elements. Some of it is structured elements.
20 Some of it conforms to a national standard. Some
21 of it does not.

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And so when someone is creating a brand

new measure that they want to use to fill what is an obvious gap, particularly in surgery, they may find it difficult when they get to the testing part because they don't have the data necessary to test the measure.

6 So do we stop the process then and 7 there and go well, that's too bad. We would like 8 to really put the kibosh on innovation and not let 9 you use your creativity to come up with something 10 that is needed. Obviously, the answer to that is 11 no. So we came up with the Trial Use Program.

12 The Trial Use Program is a path to 13 endorsement for new, innovative, electronically 14 specified measures that cannot at this time --15 emphasis cannot at this time -- fully satisfy NQF 16 testing requirements for endorsement, but they can 17 be implemented in the real world. So they can be 18 implemented in hospitals.

They can be implemented in physician
offices. In this case, it would just be
hospitals, I guess. So they can be implemented,
but they don't or are not able to get enough data

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for testing to adequately fulfill our criteria. 1 2 So we do not want to hinder that measure because that data is not available. 3 So 4 trial use is an ability to put the measure in the 5 field to be used and in essence, they are collecting data while the measure is being used. 6 7 Approval for trial use is not -- and I will reemphasize is not, and Elisa will quiz you 8 9 at the end of the day -- it is not NQF 10 endorsement. It is approval to continue to test 11 the measure. You are approving the measure to go 12 into the Trial Use Program, not for NQF 13 endorsement. It will not receive a number. It 14 will not be put into a national program. It will 15 not be considered endorsed. It will be considered 16 a trial use measure which means you're giving 17 approval for the measure to go into the field for 18 further testing. 19 The developer can then choose the sites

to put the measure in the field and they have a three-year window to bring back the testing for endorsement. So in other words, the measure

collects data while it's in the field. Once the 1 2 developer feels they have enough data because the measure has been used, that it adequately 3 satisfies the testing criteria for NOF. 4 They pull 5 the measure out of the Trial Use Program. They evaluate the testing results from the data that's 6 7 been collected and then they resubmit the measure for all of you to consider for endorsement at that 8 9 time.

10 So approval for trial use. Next slide. 11 This committee will consider the full NOF criteria 12 when reviewing these measures for approval, just 13 like you have been doing for the last day and a 14 half, but you'll only vote on selected criteria 15 due to limited testing data. You'll be looking at 16 evidence and performance gap, importance to 17 measure and report, and those are both voting 18 criteria for approval to trial use. 19 You'll vote on one portion of

scientific acceptability that the measure
specifications are consistent with evidence. This
is what we call a must pass criteria. This is

only what you will consider for trial use.
 Feasibility and usability and use should also be
 considered to determine if a measure should
 receive approval for trial use. However, please
 keep in mind what you're going to be looking in
 terms of results is not necessarily real live
 testing data.

8 What they have done is used a simulated 9 test data set to determine if the logic calculates 10 correctly and the measure is produced in the right 11 metric. And what they are using is the Bonnie 12 Tool that is developed and maintained by MITRE.

13 Brief aside, I always get asked this 14 question and this joke never fails. Everybody 15 generally asks me what does Bonnie mean? I have 16 absolutely no idea. It's not an acronym for 17 anything. If it is, nobody has told me. As a 18 former developer myself, we are very fond of 19 naming things after our pets or our children. Ι 20 would suspect that Bonnie is one of those two. 21 Bonnie is where you create a synthetic 22 test deck of patients that would normally be used

in the measure itself and they test to the measure 1 2 against that synthetic test to see if the logic is calculating correctly. Now that being said, it 3 4 doesn't mean that they create a test deck of 5 patients that are always going to pass. They have to be able to show you that the measure will use 6 the inclusion and exclusion criteria correctly so 7 that you know if the measure gets put into the 8 field it will calculate as it should. 9 10 Next slide. 11 So there are five measures that are 12 going to be considered for trial use. And these 13 are the five that are in front of you. So I'm 14 going to hang around for the first discussion in 15 case there's any questions that need to be 16 answered. But what I do want to emphasize are 17 three things. One is you're not reviewing for 18 endorsement. Again, you are not reviewing for 19 endorsement. You are reviewing for acceptance 20 into the program. 21

Number two, the criteria that you are
looking at is somewhat more limited than what you

have been using to date. And number three, if the 1 2 program, if the measure actually gets accepted into the program, it will be placed into the field 3 4 where it will be tested, and once that data is 5 collected they will pull out, analyze the testing results, and determine if the measure should come 6 7 back before this committee to be considered for full endorsement if the measure passes and there 8 9 is always the possibility that the measure may 10 not. 11 With that in mind, do you have any 12 questions? 13 CO-CHAIR FLEISHER: Larissa. MEMBER TEMPLE: 14 So I remember a couple 15 of years ago, we looked at some measures that had 16 gone through some sort of different process and we 17 were -- at the time, we were told not to evaluate 18 the measures for their importance in the gap and 19 evidence. If these measures, today, if we look at 20 the importance, the evidence, and the gaps, will 21 we reevaluate when it comes back or would that be 22 considered completed today?

MR. GOLDWATER: That would be 1 2 completed, yes. What you're looking at when the measure comes back are the results of the test --3 4 MEMBER TEMPLE: So just reliability and 5 validity then? 6 MR. GOLDWATER: That's correct. 7 MEMBER TEMPLE: Thank you. MEMBER SAIGAL: Just curious, that 8 9 ortho measure, couldn't that fall under this kind 10 of pilot testing? I mean why is this eMeasure 11 only? Is that a way to basically facilitate the 12 identification of measures before they're really 13 fully vetted, but they get the approval or the 14 endorsement of this group as being important and 15 then kind of like --16 MR. GOLDWATER: I think your point is 17 well made. At this point, the program is only for 18 And the reason for that is because of eMeasures. 19 the great emphasis that CMS is putting on, 20 transitioning out of chart abstraction into 21 eMeasures themselves. That has been a directive 22 they've given to us and that is something that

certainly the quality measurement community is trying to embrace. One of the difficulties, however, is the lack of available testing data which is why we've restricted this just to eMeasures only.

6 CO-CHAIR FLEISHER: So maybe you can, 7 Jason, define what the program is which is I think 8 the difference. In other words, trial use, a lot 9 of things are. How is the program going to 10 evaluate how eMeasures work which changes the 11 equation?

12 MR. GOLDWATER: So the Trial Use 13 Program, there's a difference between the Trial 14 Use Program and what we had in the past which was 15 time limited endorsement which is no longer.

16 Trial use in the eMeasure program is 17 you're evaluating the measure initially on the 18 criteria that I went over, importance to measure. 19 You're looking at feasibility only through a very 20 narrow lens of synthetic test results. But the 21 program itself is allowing the measure to get put 22 into the field because it is filling at least if

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the evidence is presented strongly enough, a 1 2 necessary gap in care in which a measure is clearly needed. The difficulty with putting this 3 4 measure into endorsement is that they are unable 5 to get enough testing data in the time that they had during the call for measures. So they decided 6 7 then to go this route which then allows them to submit the measure that it can be evaluated on 8 some criteria minus the testing. It goes into the 9 10 field itself. Data is collected and essentially 11 the measure is tested in a real-life setting. And 12 then it is brought back out once enough data is 13 collected to determine whether it can be moved on 14 for further consideration for endorsement. 15 CO-CHAIR FLEISHER: So getting back to 16 the problem of why the last one failed to extend 17 your question was they didn't have data on risk 18 adjustment was probably the biggest question. 19 MR. GOLDWATER: Right. 20 CO-CHAIR FLEISHER: If we find that the 21 measure should be risk adjusted, let's make a 22 supposition, would that be -- and it's an

eMeasure, and they don't have a model. Should it 1 2 be approved or should it not be approved? Because there's two different testing, testing of the 3 4 elements, obtaining it from an electronic record, 5 versus having built the correct model to allow --It's possible if they 6 MR. GOLDWATER: 7 want to resubmit for consideration for that program, but generally, when measures come in to 8 9 us it's indicated by the developer that they want 10 to be considered for trial use because of the 11 testing limitations. So The Joint Commission 12 submitted these five measures because in the 13 process of development were unable to find enough 14 testing data to sufficiently fill the criteria. 15 The measure that is before these was 16 not asked to be considered for trial use. So we 17 did not look at it in that terms. If they want to 18 do that, that is a potential consideration. 19 CO-CHAIR FLEISHER: See --20 MR. GOLDWATER: Was it an eMeasure? Ι 21 thought it was an eMeasure. 22 CO-CHAIR FLEISHER: No, it was not --

MR. GOLDWATER: If it's not an
 eMeasure, then we don't look at it in terms of
 trial use.

4 CO-CHAIR FLEISHER: But the second 5 question is if an eMeasure had a reason to be risk 6 adjusted, and they had no model built for risk 7 adjustment, should we approve that for trial use? 8 In other words, they may not have the data yet, 9 but suppose it was in a -- from a different data 10 source. I mean that's --

11 MR. GOLDWATER: You could consider that 12 for approval for trial use with the notation that 13 the data that they collect has to then be -- they 14 have to adequately risk adjust the measure once 15 the data has been collected.

16 CO-CHAIR FLEISHER: I think that would 17 concern me and perhaps others because that's not 18 testing. That's a threat to validity that we 19 would have concerns about. I would have concerns 20 about. So I'll let others -- Collette, Amy, and 21 then Fred. Do you have a comment you want to --22 MEMBER GROVER: My question is is there

a reason that they can't just do this without 1 2 coming to NQF first and then come back after they've done it showing that they're able to 3 collect the data and all the feasibility that 4 5 you're talking about? MR. GOLDWATER: There's the 6 7 possibility, but there's also the possibility that they may be contracted to develop these measures 8 9 and as a result of that do not have enough 10 available testing data to complete the process 11 which is why they're opting for the Trial Use 12 Program. 13 And I'm not aware of the situation. Τ 14 haven't inquired about that. But -- yes. 15 I'm Ann Watt from The Joint MS. WATT: 16 Commission. And this is our team you'll be 17 hearing from. We are not -- it's a very good 18 question. We've asked ourselves the same 19 question, why are we doing this? The answer is 20 because we have a great respect for the NQF 21 process and this is new for all of us. 22 These are not contracted measures.

These are measures that The Joint Commission has 1 2 chosen to develop because we feel that they are important measures. We are very interested in 3 4 this process. We also feel that approval for 5 trial use gives us an opportunity, some leverage with potential testing sites which nobody is 6 7 beating down our door these days to say yes, we'd love to test your measures. And so we're hoping 8 9 that this would provide that incentive, too. 10 CO-CHAIR FLEISHER: Collette. 11 MEMBER PITZEN: Can staff put up the 12 slide of the criteria that we are going to be 13 talking about today? And if gap is one of them, 14 I have a hard time just making a decision about 15 that with no data. So I just want to understand 16 better. 17 CO-CHAIR FLEISHER: Can you actually 18 describe any measures that have gone through this 19 trial of how other committees have looked at this? 20 MR. GOLDWATER: So there are a few 21 measures that have been passed and moved on to One of the most recent ones was a 22 trial use.

hemolysis measure which I'm just blanking on the exact specifications. But there was a strong evidence base as to why there is a current gap, why that process is not being used and the outcomes it's leading to if the measure was not implemented.

7 Unfortunately, there was not a lot of data to collect around hemolysis that would 8 9 provide enough to go through for endorsements, so 10 the measure was brought up for potential inclusion 11 in trial use and was passed because there was 12 enough evidence indicating a clear measurement gap 13 indicating that quality performance would be 14 improved if the measure was implemented, a strong 15 evidence base about its importance to measure and 16 report as well.

17 There was a small scientific 18 acceptability in that the developer created the 19 specifications that were consistent with the 20 evidence and actually had had those conversations 21 with CDC prior to submitting the measure 22 submission form and they did do a fairly

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comprehensive synthetic test deck in Bonnie to look at feasibility. So yes, it was done. It has been done.

4 MEMBER MOYER: So to follow up on that, 5 I think it would be useful to relook at performance gap after the measure has been tested 6 7 because part of it is is there gap in practice. But part of what we're also looking at, I believe, 8 9 as we're evaluating the measure is the measure's 10 ability as specified to identify and shed light on 11 that gap. So looking at it in the wild as it's 12 going to be used I think would be helpful for us 13 when we're actually endorsing it.

14 MR. GOLDWATER: Again, I do want to 15 emphasize this, again, you're not considering 16 endorsement. So this is not going to be an 17 endorsed measure.

18 CO-CHAIR FLEISHER: No, I think what's19 been said is when it comes back.

20 MR. GOLDWATER: When it comes -- okay. 21 CO-CHAIR FLEISHER: Can that be defined 22 as part of the CDP process? Because the concern

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is, at least what I'm hearing from the committee 1 2 is if this comes back we want to vote on certain other areas or we do not feel that the CDP process 3 4 has been fulfilled. So can we make that as a 5 requirement, at least if it comes back to this committee? 6 7 MS. MUNTHALI: A suggestion. 8 MR. GOLDWATER: A suggestion. 9 CO-CHAIR FLEISHER: Well, then we can 10 vote on -- we still vote on up or down if they 11 come back in for suitability for endorsement? 12 MS. MUNTHALI: Yes, we will do an 13 overall --14 CO-CHAIR FLEISHER: We will do an 15 overall. 16 MS. MUNTHALI: An overall. 17 CO-CHAIR FLEISHER: So people still 18 have the -- so what's been clarified is at the 19 end, we can vote, even if we don't get to vote for 20 gap, we've only made a suggestion. We still have 21 the overall endorsement question. 22 MR. GOLDWATER: Right. We can still

1	endorse it. Not today, when it comes back from
2	trial.
3	CO-CHAIR FLEISHER: Who is next? Liz,
4	Barry, Cliff.
5	MEMBER EREKSON: So throughout the last
6	day and a half, we've been talking about how we're
7	supposed to separate how things that we endorse
8	then get applied. And what I'm struggling to wrap
9	my brain around is how does approval for trial use
10	then get applied in the next three years as these
11	developers are using their data? What are the
12	ramifications of that? So I'm just trying to kind
13	of put it in context because we know what NQF
14	endorsement means and how that gets applied.
15	MR. GOLDWATER: I mean what you're
16	looking at is the only thing when it comes to
17	trial use, the only thing that is incomplete is
18	the testing component of this because there's not
19	enough data to adequately do the reliability and
20	validity testing and they've made that case when
21	the application came in.
22	The other information that is on the

measure submission form is articulated about why 1 2 there is a gap, the evidence for the measure, its importance to measure and report, what the metric 3 4 will produce, how the metric will improve quality. So they don't have the testing data to 5 go through the criteria that we've established. 6 7 But the other criteria that is essential, they've already addressed to that extent. So if the 8 9 measure is getting implemented, if you vote for 10 approval for trail use, and the measure gets put into the field, the measure at that moment then is 11 12 filling the gap that they've articulated and they 13 are then collecting data to determine whether the measure is reliable and valid and feasible. 14 15 That being said, there's always the 16 case that it may come back and it may not be. 17 That is the possibility. We are not saying that 18 every measure that goes through the Trial Use 19 Program is going to come back clean. It's just 20 not -- we can't possibly foresee that and neither 21 can the developer. But as I think Ann was

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articulating, it provides a basis to collect data

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1 that they otherwise would not be able to get. It
2 potentially makes it easier for them to implement
3 the measure in sites. And then it's possible to
4 evaluate whether the metric is driving potentially
5 systemic changes in quality that are needed that
6 they've articulated that are not there.

7 CO-CHAIR FLEISHER: So I spoke to other staff. The way I would frame this is we have 8 9 clearly articulated from several people that you 10 would like to vote on additional areas when this 11 Since we are not the ones who can comes back. 12 approve that change in the current process, that 13 will be taken into consideration by NQF and we'll 14 Today, we should vote on this process. get back. 15 MR. GOLDWATER: Correct. 16 CO-CHAIR FLEISHER: But the concerns of 17 the committee were clearly heard today. It just

18 can't be answered today. Fair? So that's very 19 clear. And we do vote again during that process, 20 we do get to vote a final approval or non-21 approval.

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Barry?

MEMBER MARKMAN: Yes, I think it's 1 2 important that -- I mean this is the future. This is coming into play, so I commend it, the forum to 3 -- in doing this. But it still has to meet the 4 5 importance and we can't stipulate, but we can make suggestions that when they do come back in three 6 7 years, like risk adjustment, that they should include that variable in the data set. 8 9 MR. GOLDWATER: Yes, you can make those 10 I wouldn't stop you from doing that. suggestions. 11 CO-CHAIR FLEISHER: That will be 12 clearly in the report to CSAC that the Board sees 13 the concerns. Yes, Barbee. 14 15 MEMBER WHITAKER: So we're not supposed 16 to address usability and use, but some of the 17 things that are questioned there including 18 unintended consequences are not covered elsewhere. 19 And I think those are important for determining 20 the validity or the value of the measure overall. 21 So can we include those in our discussion prior to 22 that?

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1	MR. GOLDWATER: Yes, you can include
2	those in the discussion, yes.
3	CO-CHAIR FLEISHER: So perhaps that
4	would be for when this comes back if we state
5	those concerns, they can be in the report so that
6	should the measure come back from The Joint
7	Commission, they should address these concerns and
8	that would be great to have in the report.
9	Larissa, then Collette.
10	MEMBER TEMPLE: So not to jump out of
11	turn, but there are some sort of scientific issues
12	with some of the measures that affect the
13	numerator and denominator which would
14	theoretically be within the discussion about
15	reliability. And I'm wondering where that
16	discussion will come up if we're not discussing
17	the testing characteristics because you'd hate
18	them to do something for three years and for us to
19	say the numerator and denominator were sort of
20	incorrect.
21	MR. GOLDWATER: Right, I understand.
22	So that's sort of where the Bonnie testing to some

extent comes into play because if the only 1 2 available test -- I mean what we ask the developers to do is to use Bonnie as a baseline. 3 4 And if they are able to to the best of their 5 extent get a test data extract that actually have allowed patients to use that as well. 6 MEMBER TEMPLE: So I'm actually talking 7 about the inclusion and exclusion criteria more 8 9 than the Bonnie testing. That's my question. 10 MR. GOLDWATER: Are you asking whether 11 -- I'm not sure what you're asking. 12 MEMBER TEMPLE: So if there's 13 discussion or concerns about the developers' 14 definitions for the numerator and denominator and 15 their choice of inclusion and exclusion, we 16 usually talk about that in the reliability section 17 of our discussions. 18 If we have concerns about the inclusion and exclusion criteria, where do we put that in 19 20 the context of this trial? 21 MR. GOLDWATER: So they had to use 22 Bonnie as the test data for the

inclusion/exclusion criteria. So they will 1 2 discuss it at that point in time. If you've got 3 an issue with the inclusion/exclusion or the 4 numerator/denominator section, that's where it 5 should be discussed. When they do the specifications --6 7 MS. MUNTHALI: It's in the measure specs, so even though you're not talking about 8 9 reliability and validity testing, you will talk 10 about it in specifications. 11 CO-CHAIR FLEISHER: Collette again, and 12 then Barbara. 13 MEMBER PITZEN: Did importance to 14 measure get added back into the criteria for 15 eMeasure review? 16 MR. GOLDWATER: Are you talking about 17 after the Bonnie -- after the approval for trial 18 use testing is completed to look at that? 19 MEMBER PITZEN: No, the high priority 20 importance to measure as a criteria, is that no 21 longer --22 MR. GOLDWATER: You're going to look at

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importance to measure.

2 CO-CHAIR FLEISHER: Barbara. MEMBER LEVY: So I still have a little 3 bit of problem with the unintended consequences. 4 5 We could potentially look at some of that when we look at the importance and the evidence. We could 6 7 bring it up in evidence, but I think it is important for us to look at that before we say go 8 9 ahead and put these measures out there. 10 Similarly, when we look at feasibility 11 and look at cost of some of these measures 12 potentially, and it's not just the cost to collect 13 the measure, but it's also the cost of the 14 intervention. So I think there's some things that 15 we do need to discuss that don't fit exactly into 16 the evidence and importance, but that actually 17 need to come up in the discussion before we send 18 a measure out for trial use. 19 I don't think it's just the testing 20 piece that's missing.

21 CO-CHAIR FLEISHER: So -- did you have 22 a comment?

So how would you, either Lisa or Jason 1 2 or Melinda, we'll clearly go through the traditional, but then what should we do before we 3 4 vote? 5 MR. GOLDWATER: I don't think there's any issue with discussing unintended consequences 6 7 if you feel that there are going to -- if that's potentially going to exist as a result of the 8 9 implementation of this measure. Clearly, if the 10 measure gets implemented in trial use, we don't --11 there's nobody that wants an unintended 12 consequence, but those do need to be articulated 13 to determine whether or not that's significant 14 enough to delay or to reject the approval into the 15 program. CO-CHAIR FLEISHER: So perhaps if we 16 17 continue the current way we do it, but not vote in 18 those areas --19 MR. GOLDWATER: Right. 20 CO-CHAIR FLEISHER: So reliability, 21 validity, and usability, we will actually 22 structure our discussion that way, if that's okay

with everyone. But it's more to give The Joint 1 2 Commission our concerns when they bring it back. There will not be a vote on -- is it those three 3 4 areas we do not vote on? That's right, because 5 MR. GOLDWATER: you won't have enough testing data to do so. 6 7 CO-CHAIR FLEISHER: Great. Barbara. So I agree that we don't 8 MEMBER LEVY: 9 have enough data to vote on those things, but it 10 might influence my decision to vote up or down to 11 release something for trial use. 12 CO-CHAIR FLEISHER: I didn't say we 13 shouldn't have a full discussion and response. 14 All I'm saying is we don't per NQF rules vote on 15 them. 16 MR. GOLDWATER: I want to go to the 17 last bullet point which is you do need to consider 18 feasibility and usability of use. They are going 19 to have granted synthetic data to indicate 20 feasibility and whether you believe that can be 21 extrapolated into the field once it's put into the 22 program. So those are -- I mean if you look at

their Bonnie test results and think to yourself, 1 2 well, this just doesn't seem feasible to me. And even with the way they structured this, this is 3 4 just simply not going to have any impact because 5 the data is not going to be available, the structure data is simply not there, and we don't 6 7 think that the results of the Bonnie test could be extrapolated into a real-life setting, that's the 8 9 discussion you need to have. I mean that's why 10 they have to do that testing. 11 CO-CHAIR FLEISHER: Shall we try one? 12 I think that's the best way. We have both Helen 13 back and we have Jason here. 14 MR. GOLDWATER: No, I'm going, bye-bye. 15 CO-CHAIR FLEISHER: No, you're not. 16 You had a lot of definitive comments. So if we 17 can ask our colleagues from The Joint Commission 18 to come up. One of the options is we all get the 19 food and -- good idea? 20 Okay, we will get food and in ten 21 minutes we will start. 22 (Whereupon, the above-entitled matter

went off the record at 12:21 p.m. and resumed at 1 2 12:34 p.m.) 3 CO-CHAIR FLEISHER: I essentially see 4 all of the standing committee back. So we will go 5 through these measures. These are the new guidelines of how 6 7 we're going to actually have the discussion. Importance to measure and report, we will vote on 8 9 evidence of the importance to measure and report 10 and performance gap. On the scientific 11 acceptability, we will only vote on the measure 12 specifications are consistent with the evidence. 13 We can discuss the other issues in that context what the concerns of the committee are. 14 15 Feasibility, usability and use, and then overall 16 suitability. 17 So we'll start with, and we'll see how 18 this goes, the preoperative 3016, preoperative 19 anemia screening, and if you could introduce 20 yourselves and give us a short --21 MS. DOMZALSKI: Good afternoon, 22 everyone. My name is Kathy Domzalski from The

Joint Commission. I'm the co-lead for the
 project. The other co-lead is Michelle Dardis,
 who is an informaticist. Also from The Joint
 Commission, we have Ann Watt and JohnMarc Alban
 who are project directors. And we're pleased to
 have with us Dr. Jonathan Waters who is the
 chairperson of our advisory panel.

Thank you for the opportunity to share 8 9 with you these five Joint Commission patient blood 10 management measures. Blood transfusion is the 11 most commonly performed procedure in hospitals 12 having increased 126 percent between 1997 and 13 2010. While it can be a life-saving procedure, it 14 does pose hazards such as risk of infection, 15 increased length of stay, decreased function at 16 discharge, and other associated complications. It 17 uses a resource that must be conserved for the 18 most urgent need and it has been unfortunately 19 assessed in one study to have a rate of 20 inappropriateness as high as 100 percent of the 21 time when the hemoglobin is over 8.0.

22

We have developed and assessed these

five evidence-based measures to assist hospitals 1 2 in identifying their opportunities to improve blood management efforts. While there are those 3 4 efforts currently underway in some U.S. hospitals, 5 certainly it needs to spread to all U.S. hospitals. And we look forward to your approval 6 7 for trial use. MS. DARDIS: And an overview of all 8

9 five measures, I briefly wanted to address the 10 testing that was performed on these measures thus 11 far.

12 Kathy did introduce me. My name is 13 Michelle. I am a nurse informaticist working for 14 The Joint Commission on eCQMs. And I was 15 responsible for much of the testing effort for 16 this project.

17 In addition to a clinical advisory 18 panel for the measures, we also had a Technical 19 Advisory Committee and that was made up of 20 hospital clinical analysts, informaticists, and 21 blood project leads from hospitals who could 22 advise on feasibility of the measures. And we

also performed site visits with five hospitals 1 2 where we watched through their blood work flows to assess how to structure the measures appropriately 3 4 for data capture with the EHR. So we'll be 5 sharing the results of those visits as well. MS. DOMZALSKI: Measure 3016 concerns 6 7 preoperative anemia screening. And it assesses the proportion of elective surgical patients who 8 9 had a timely preoperative anemia assessment. The 10 denominator is selected elective surgical patients 11 and the numerator is the number of them who had an 12 anemia assessment between 14 to 45 days prior to 13 the said scheduled surgical procedure. 14 Hospitals currently, by and large, do

15 anemia testing, but it is done so close to the 16 procedure that any assessment of the cause of 17 anemia or correction is virtually impossible to 18 effect.

19 The clinical intent is to ensure an 20 adequate preop time frame to assess and correct 21 anemia since uncorrected preop anemia really is 22 the biggest predictor of a perioperative

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transfusion.

2	Thank you.
3	CO-CHAIR FLEISHER: Thank you. Okay.
4	Amy, are you the lead discussant member.
5	MEMBER MOYER: So I think I was
6	initially partially thrown by the title of the
7	measure which was preoperative anemia screening
8	which to me suggested what we were looking to
9	address was a lack of screening of patients prior.
10	But it almost sounds like from your description of
11	it it's not that screening isn't happening, it's
12	that it's not happening in a timely manner. And
13	that wasn't clear to me until actually right now.
14	So in terms of the evidence, there was
15	evidence supported that anemia screening is
16	important to perform in certain procedures and
17	certain populations. In looking through the code
18	set, it seems consistent with the evidence
19	supplied, which was at a high quality.
20	I don't know that there was evidence
21	that the specific time frame given, the 14 to 45
22	days, is set forth in the evidence, but it sounds

like that is the practicality of resolving the 1 2 anemia prior to the surgery and that's the reasoning behind that. Those were my thoughts on 3 4 the science. Barbee, comments. 5 CO-CHAIR FLEISHER: 6 MEMBER WHITAKER: I don't really have 7 anything to add to that. CO-CHAIR FLEISHER: Rick. 8 9 MEMBER DUTTON: I think we all agree 10 that unnecessary transfusion is bad and these are 11 a series of sort of stacked measures to get at 12 that problem one of which is you have to assess 13 the patient in a timely-enough fashion that you 14 can produce an intervention and so Amy, the time 15 limit is picked to how long does it take for oral 16 IN therapy, for example, to work in a patient that 17 it's going to work in. 18 My concern with this is the unintended 19 There's also very good evidence that consequence. 20 there's a huge amount of unnecessary preoperative 21 testing in anesthesia. Lee has written some of 22 that literature. And I am concerned that the

simplest response to a measure like this would be
 well, let's just test everybody whether they need
 it or not because we can't tell.

So I asked the developers already this question. For me, this measure is going to very strongly depend on exactly what surgeries we're talking about which is going to be a moving target over time. A knee replacement got transfused five years ago. It doesn't today, for example.

And so having a SNOMED code for these are the operations we're including and I understand that's 2,000 very granular SNOMED codes. I get that, but we do need to hear what operations are we talking about here and how are you going to put that out to the public in this measure?

17 CO-CHAIR FLEISHER: So let's frame that 18 in the context of evidence as opposed to 19 specifications in that the evidence -- and I did 20 write some of the evidence -- that there's only 21 selected operations. But the way you, in some 22 ways, the way you specified it it says all

elective, your denominators are all elective
 surgery.

3	MS. DOMZALSKI: It's all selected
4	elective surgical patients. That list are value
5	set because of the complexity of ICD-10 and SNOMED
6	coding contains approximately 2,000 procedures.
7	However, they are all major procedures. We're not
8	talking about any old hernia repairs here. We're
9	talking about abdominal aortic aneurysms, those
10	procedures likely to require blood replacement.
11	CO-CHAIR FLEISHER: I have a question,
12	but I will defer to the phone and then we'll go
13	Barbee, we'll just go with this side. I'll amend
14	that. On the phone?
15	OPERATOR: To make a comment, please
16	press star 1.
17	CO-CHAIR FLEISHER: No, this is not
18	open for comment. Is there anybody on the
19	standing committee
20	OPERATOR: There are no committee
21	members on the phone at this time.
22	MEMBER WHITAKER: So I'm confused about

I
1	when to talk about the actual characteristics of
2	the measure. Is that now or is that at
3	CO-CHAIR FLEISHER: This is just about
4	evidence. There is evidence supporting obtaining
5	a
6	MEMBER WHITAKER: a timely.
7	CO-CHAIR FLEISHER: A timely
8	hemoglobin. Larissa.
9	MEMBER TEMPLE: So I guess what I'm
10	having troubles with is the supposition that all
11	patients preoperatively can be can go to the
12	operating room with normal hemoglobins and
13	particularly I think of the oncologic patients.
14	I don't think any patient undergoing ovarian
15	debulking will be anything but anemic. The
16	patients with pelvic radiation, colon cancer
17	surgeries, so I guess I'm having issues because I
18	don't know of any evidence that supports improving
19	preoperative hemoglobins in that kind of cohort.
20	And certainly, we wouldn't want to be advocating
21	Neupogen which is actually already black labeled
22	for cancer patients. So that's why I'm having

real problems with the evidence. 1 2 MS. DOMZALSKI: The measure only requires an assessment to be made. It does not 3 4 require the correction to be made. 5 CO-CHAIR FLEISHER: I'll follow that up so that you for Larissa's patients, should they 6 delay surgery to be able to meet the 14- to 35-day 7 window? 8 9 MS. DOMZALSKI: I don't see why that 10 would need to occur. 11 CO-CHAIR FLEISHER: I will tell you our 12 surgeons book things for within two days of seeing 13 a patient. 14 MS. DOMZALSKI: That has been a problem 15 across hospitals that we visited. The surgeons 16 want to operate quite quickly and this would 17 require a lengthier period of preoperative time in 18 order for an assessment to occur. 19 MEMBER TEMPLE: But that then implies 20 that I need to check the hemoglobin in these 21 patients and if it's low, I need to do something 22 about it before I take them to the operating room.

That's how I'm hearing this measure. And that's 1 2 what I'm hearing the rationale behind it. And I completely support optimizing patients 3 4 preoperatively, but there are some patients that 5 you just cannot and it's a fairly big proportion of patients. 6 MS. DOMZALSKI: I think that rationale 7 would apply to the next measure in which we look 8 9 at what the actual hemoglobin was prior to 10 surgery. But this measure only looks at the 11 assessment, that it's made in time. CO-CHAIR FLEISHER: A.J. and then 12 13 Allan. 14 MEMBER MOYER: Can I just jump in 15 really quickly to help inform this? 16 CO-CHAIR FLEISHER: Yes. 17 MEMBER MOYER: They did actually 18 provide the full code set of the specifications. 19 It took me a while to find it, so if you go on the 20 SharePoint site under this measure, the last spreadsheet listed has the SNOMED and the ICD-10 21 22 codes and everything for these code sets that

they're mentioning in the specification. It does
 include joint replacement to the point that was
 made earlier.

MEMBER YATES: It does not?

MEMBER MOYER: It does.

MEMBER YATES: It does include. 6 Right. 7 On a facetious basis, I'm surprised your surgeons wait two days, but a non-facetious -- I'm just 8 9 trying to tie the evidence to the measure. And in 10 the evidence they refer to hemoglobin as the test 11 and in the numerator in the measure is anemia 12 testing which is a very broad term. I mean I'm 13 not going to -- just to take it to hyperbole, I'm 14 not going to run sickle cell anemia tests or look 15 for macrocytic anemia or something like that with 16 Vitamin B12, etcetera, and serum iron levels.

17Does the literature imply that you're18asking for an H&H sometime between 45 and 14 days?19MS. DOMZALSKI: Correct. That's20correct.21MEMBER YATES: Then I would argue that22as opposed to anemia screening, it would be much

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better to say that hemoglobin screening would be 1 2 much more specific and much easier to understand. MS. DOMZALSKI: 3 Thank you. MS. DARDIS: And the actual 4 5 specification and the numerator looks just for hemoglobin screening. 6 I know, but the way it's 7 MEMBER YATES: phrased, anemia screening means a lot to -- it 8 9 means something a lot different to a hematologist 10 than it does to me. 11 MEMBER SIPERSTEIN: So my question is 12 kind of understanding the rationale of putting 13 together the numerator and the denominator. Τ 14 mean I understand the value of doing less 15 transfusions. I understand the value of doing 16 more anemia screening, but if you're following 17 this as a ratio over time, you may be in a system 18 where you have not cut down your transfusion rate 19 at all. You have simply quote gamed the system by 20 doing a bunch more screening. And that really 21 isn't -- you really haven't solved the problem 22 yet, even though your ratio has improved. So that

really is kind of my main problem in that the 1 2 number that you're going to follow really isn't focusing on the key problem that is reducing 3 4 transfusions. MS. DOMZALSKI: Well, according to what 5 our findings were, the current rate of anemia 6 7 detection is so low that it's not possible for that anemia to be corrected before surgery at all. 8 9 So that by increasing the timely preoperative 10 anemia assessment and correcting the anemia, 11 you're therefore reducing the chances of a 12 perioperative transfusion. 13 CO-CHAIR FLEISHER: Fred. 14 MEMBER GROVER: I'll pass. 15 **CO-CHAIR FLEISHER:** Pass. Barb. 16 MEMBER LEVY: Yes, I do think -- first 17 of all, I have an issue with the timing. What if 18 it's 36 days or 38 days? I had patients who were 19 coming in from out of town, other places. You're 20 going to have outpatient data. You have no idea 21 when you go and survey a hospital what I have in 22 my office from a month ago or two months ago. For

1 my patients in GYN surgery, I've got a problem 2 because I've got an open spigot. And so anything I do -- the surgery is going to stop the outflow. 3 4 Assessing her for anemia isn't really going to 5 I know she's anemic. help me. It's a question of what am I going to stop it? What am I going to do 6 7 to fix it and how can I optimize it?

So I have a problem with the 8 9 specification for the timing. I have a problem in 10 the sense that there's an awful lot of outpatient 11 or office or distant evaluation being done and how 12 are we going to capture that because why would I 13 repeat it if it were done by somebody else in an 14 outlying area and I'm being referred the patient? 15 So there are a whole bunch of issues I think with 16 this particular measure that have some 17 difficulties that I'm having problems with. 18 MEMBER PITZEN: Hi, I have a technical

19 question. I don't know where the right place to 20 ask it, but in your eMeasure then, were you 21 planning on accessing lab values from the 22 practices when you were looking at that 45 to 14-

day window?

2	MS. DARDIS: Yes, and thank you for
3	bringing that up to build on what Barbara raised.
4	When we went out to the hospitals, it was really
5	important to us to assess the feasibility of
6	collecting that data from the practices because,
7	of course that's the automatic next question,
8	right, how likely are we to get that data?
9	We saw facilities where it was more
10	likely to collect the data where they had
11	integrated EHRs between the practice setting and
12	the inpatient that was not everywhere, of course.
13	There's different EHRs between practice and
14	inpatient. You have referring providers who
15	aren't in your system. We saw that many hospitals
16	have data that could be captured in the time
17	frame, but it comes to the hospital as a document
18	rather than a structure and then coded data we can
19	capture in an eCQM.
20	We did score the feasibility of
21	collecting this data in this time frame and shared

that in our submission. Overall, the hospitals we

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visited which were demographically diverse, 1 2 financially diverse, some were academic, some were not, felt that there were ways to address the lack 3 4 of data, whether it would be abstraction, 5 improving their interfaces, other ways of getting the data into the inpatient EHR and this data 6 7 element was one of the key reasons we felt approval for trial use would give us the 8 9 opportunity to further flesh out the issues with 10 bringing in that practice data. 11 CO-CHAIR FLEISHER: Sal? 12 MEMBER SCALI: I just wanted to echo 13 just the timing element. It is, for someone like 14 me to, you know, in AAA as your index cases you 15 sort of describe for aortic abdominal aneurysm and 16 lower extremity bypass is a big part of most vascular surgeons' practices, for example. 17 18 So, you know, the timing -- that it 19 doesn't make a lot of sense with the supposition 20 that it will give you an opportunity to 21 potentially correct because, frankly, most anemia, 22 at least in the vascular patient populations, is

anemia of chronic disease.

2	It is true you can pick up iron
3	deficiency anemia for these elected patients but
4	then the unintended consequence, which I guess
5	we'll get to in a moment, you get this number that
6	you're supposed to react to.
7	So then you're doing a stool guaiac.
8	Now you're going to have to get additional lab
9	tests and a full iron study panel, probably an LFT
10	panel.
11	So now you're going to do an additional
12	work-up for the overwhelming majority of patients
13	that are it's going to make little impact in
14	terms of what the outcome to the surgery would be
15	for elective AAA patients unless the patient is
16	profoundly anemic.
17	So doing that screening at that time
18	point, 14 days pre-op or more, has little impact
19	and also operationalizing it as was already
20	described patients who get found, say, for a AAA
21	they get an ultrasound that's scheduled by their
22	provider, perhaps for screening, and then that may

be in some, you know, out of window time period
 when they've had some routine lab work that was
 done with their annual checkup.

4 They get referred to a surgeon and then 5 they get booked. And so you're not going to put the breaks on that. It's just not -- that 6 behavior will not change and it doesn't make sense 7 to change it because I have -- you know, the 8 9 anemia prevalence in vascular patients, for 10 example, is extremely high, like 30 percent or 11 more depending on because the anemia chronic 12 illness, the renal insufficiency patients that we 13 see, et cetera.

And so I would say at least from a vascular surgeon's perspective it doesn't make any sense to screen -- have that designation of the timing.

I do agree for major elective surgery
with risk of bleeding that having a hemoglobin
pre-op is critical. But the timing piece for me
just doesn't make a lot of sense. I don't see, at
least in our population, that there's any

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1 literature to support that. 2 CO-CHAIR FLEISHER: Thank you. Are there other comments? 3 I'm going to 4 allow -- because Aryeh asked to speak too. DR. WATERS: Aryeh does, yes. 5 Of 6 course. 7 CO-CHAIR FLEISHER: But sure, please. I just wanted to address 8 DR. WATERS: 9 that 14 to 45 day window. The 14 days, as was 10 previously mentioned, was a time that was chosen 11 so that we would have time to fix it. 12 The 45 days was an interval that we 13 chose in association with the length of time that 14 a type and cross match was good for and then we 15 also figured that something that was longer than 16 that was probably not clinically relevant. So 17 that was some of the rationale for those 18 particular time limits. 19 I just wanted to mention a case that I 20 took care of when I was at the Cleveland Clinic many years ago where we had a patient that came 21 22 for a total hip replacement and we did do

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preoperative anemia screening for the patient and she ended up having an occult anemia.

3 She also had a colorectal cancer that 4 was probably needing to be addressed more than she 5 needed her hip replaced. And so that was kind of 6 the initiation of this measure as something that 7 was important.

Thank you. 8 CO-CHAIR FLEISHER: I want 9 to be careful about anecdotes to be honest. What 10 I would -- so we will be voting on evidence. The 11 one question I would ask the Joint Commission, it 12 was pointed out that you have a blood conservation 13 center of excellence program because it mentions 14 -- certification.

15 Can you mention how these measures fit 16 into that? Because you started with the statement 17 that this was to eventually go into other 18 programs. But it appears from your documentation 19 that there is something sooner in mind.

20 MS. DOMZALSKI: The Blood Management 21 Certification program is a new program for the 22 Joint Commission and a joint -- a number of other

certification programs such as in perinatal care
 or acute heart failure and CHF management. And it
 does denote a center of excellence, as you've
 indicated.

5 This program just became effective in 6 the spring and currently, unlike other 7 certification programs, there is no requirement in 8 the blood program to have hospitals monitor and 9 report on the results of measures related to their 10 services.

However, should these measures be approved for trial use we would then have those measures available in the program and require hospitals to report on a certain number of them in order to maintain their certification.

16 CO-CHAIR FLEISHER: Thank you.
17 Any other comments about evidence? Can
18 we vote?
19 MEMBER KO: May I just ask a quick
20 question?
21 CO-CHAIR FLEISHER: Sure.

MEMBER KO: The last thing you

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mentioned -- so if these do not pass you're not 1 2 going to do that? MS. DOMZALSKI: Pardon me? 3 4 MEMBER KO: If these measures don't 5 pass you are not going to require it of the certified centers? 6 7 MS. DOMZALSKI: That determination has not been made yet. 8 9 MEMBER KO: But if they do pass you 10 will require it? 11 MS. DOMZALSKI: Yes. 12 MEMBER KO: Got it. Thank you. 13 CO-CHAIR FLEISHER: Okay. Evidence? 14 MS. QUINNONEZ: We are now voting on 15 Measure 3016. Voting is now open for evidence. 16 Option one, high, option two, moderate, option 17 three, low, and option four, insufficient. 18 All votes are in and voting is now 19 closed. For the evidence of Measure 3016, zero 20 percent voted high, 14 percent voted moderate, 48 21 percent voted low and 38 percent voted 22 insufficient.

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1 CO-CHAIR FLEISHER: Next steps. Aryeh, 2 if you're on the -- if you can please -- a brief comment, that would be great. 3 Thank you. DR. SHANDER: So, you know, you said no 4 5 anecdotes. But the discussion I'm hearing is mostly anecdotal, because the fact that there's no 6 7 evidence I don't think is the correct way to put this. 8 9 There is sufficient evidence on non-10 cardiac patients, now looking at more than a 11 million encounters, of patients where anemia is 12 found to be an independent risk factor for, again, 13 outcomes of surgical patients, whether they're 14 vascular or not. 15 In the cardiac world this has been 16 established already for quite some time that 17 anemia is an independent risk factor in terms of 18 both complications, as well as the major one is 19 transfusion, which is, again, another independent 20 risk factor. 21 To state that, you know, that this 22 won't have any difference or that it's more work,

anemia is a condition. Some of us will say 1 2 anemia is actually a disease, and we screen for other things which have less of a risk factor. 3 Anemia is an epidemic. There's more 4 5 than 2 billion people across the globe that suffer from this condition and the majority of these are 6 7 not being screened at all. So the argument that we're screening 8 9 for hemoglobin and not for anemia may be rational 10 in terms of the actual testing that we're doing, 11 but we are screening for low hemoglobin. And then 12 trying to, again, those patients, we selected out, 13 I think, in this particular measure, we're 14 selecting patients where we think we can reduce 15 the incidence of transfusion and therefore improve 16 their outcome. 17 So we're looking at patients who have 18 significant blood loss. And those patients, there 19 is data, both from Europe and now from the U.S., 20 that mitigating this risk, or adjusting their risk 21 in terms of treating their anemia, which requires

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some time prior to surgery. There's no question

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about that.

2	Rick's comment about oral iron, we know
3	that oral iron, actually there's data now that's
4	been published in Hematology, as in the journal,
5	showing that oral iron in the first two to three
6	weeks actually increases hepcidin level, and that
7	blocks the absorption of oral iron.
8	So therefore, again, in these
9	situations, these patients, just like chemotherapy
10	and antibiotics, get sent to an infusion center
11	and do get their iron replenished.
12	Now, whether it's cancer, whether it's
13	renal failure, where there's just iron deficiency,
14	the therapy itself, with iron and erythropoietin,
15	has been demonstrated to, again, correct anemia in
16	these patients.
17	The data that's completely not
18	completely missing at this point, because there is
19	some European data that's been published is
20	does that improve their outcome? There's one
21	thing that is unequivocal, and that is reduces
22	another independent risk factor, which is

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transfusion.

2	And therefore we come back and we're
3	doing two things number one, we're looking at
4	patients who are anemic and trying to rectify that
5	as a risk. And, two, there has been significant
6	data again, I think that both European, as well
7	as now Australian, as well as the Pacific Rim, as
8	well as U.S that it reduces the other risk,
9	which is transfusion.
10	So I just want to make the comment that
11	there is sufficient data even though the vote went
12	the different way. There are a lot of anecdotes
13	in terms of what to do with patients who have
14	cancer, and I will tell you that even those
15	patients can benefit from their anemia to be
16	treated. And there is now the EU is looking at
17	it, and there's a new publication that is right
18	now in review looking at the treatment of anemia
19	in patients who are going for surgical for who
20	have cancer and are going of surgery. That is,
21	cancer surgery.
22	So I just want to make those comments.

So I think it's an important measure that we get 1 2 this on the books, because everybody else around the world is starting to look at it in a different 3 4 -- in a different eye, and we're still lagging in 5 terms of implementation of any kind of anemia assessment in hospitalized patients in the U.S. 6 7 CO-CHAIR FLEISHER: Thank you, Aryeh. Thank you for the 8 DR. SHANDER: 9 opportunity. 10 CO-CHAIR FLEISHER: Thank you very 11 much. I will take a motion. Would anybody like 12 -- Allan, do you want to comment first? 13 MEMBER SIPERSTEIN: Yes, I just want to 14 make a comment back to the developers, and just 15 make it very clear, from my perspective, you know, 16 your enumerator is a very laudable goal, and your 17 denominator independently is a very laudable goal. 18 Expressing it as a ratio has no clinical meaning 19 So I think you should, you know, go back to me. 20 and rethink how you want to, you know, affect your 21 improvement. 22

CO-CHAIR FLEISHER: Fred?

MEMBER GROVER: I think virtually 1 2 everybody -- and you and Anastasia can correct me if I'm wrong -- that has a major operative 3 4 procedure gets a preoperative hemoglobin. And a 5 lot of this is the question of the timing, and to have everybody -- a lot of us practice in areas 6 7 where patients come from 500 miles -- you can get these things checked. But that isn't practical. 8 9 And patients like to -- a lot of time when a 10 decision is made for a major procedure, for 11 anxiety reasons they want to get it over with with 12 the family. 13 So what we do now, if we have somebody 14 that we're really concerned about, we pick that up 15 and we only have to delay their operation, we

aren't putting everybody else through that 17 inconvenience of waiting a certain period of time 18 or an extra clinic visit.

19 So, that's one of my issues. We are 20 getting preoperative hemoglobin. It's more a 21 question of timing and then breaking up the 22 efficiency of what the patients want. Our

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1 patients usually want to be treated rather 2 quickly. 3 CO-CHAIR FLEISHER: So, does anyone 4 want to reopen and revote on this after hearing

the comments from Dr. Shander, who is an expert in blood transfusion, anesthesiologist at Englewood Hospital, or the comments here? If anybody makes a motion, we will reopen.

Hearing none, we will go forward.

MS. DOMZALSKI: Measure two, the
preoperative hemoglobin level is Measure 3017.
The measure is designed to allow transfusion or
blood use review committees to identify patients
undergoing elective surgery with suboptimal
uncorrected hemoglobin levels that may have led to
a peri-op transfusion.

17 It assesses via stratification pre-op 18 hemoglobin levels immediately prior to the selected elective surgical procedure. Thank you. 19 20 CO-CHAIR FLEISHER: Thank you. 21 Larissa? Or Barbee, you want to go first? 22 So this MEMBER WHITAKER: Okay.

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measure is designed to identify patients who could 1 2 have benefitted from pre-surgical treatment to enhance their iron stores and to reverse anemia. 3 Identified in the measure are the 4 5 numbers of patients who are anemic, had hemoglobins lower than 12 grams per deciliter 6 prior to elective surgery, of the elective 7 surgical patients receiving a transfusion during 8 9 or within five days after transfusion. 10 Obviously, unnecessary blood 11 transfusions are undesirable and perioperative 12 optimization of anemia is preferred. But the data 13 is not clear on the true cut point of 12, and 14 there's some other areas of performance gap, if we 15 get to that. 16 Larissa, do you want to pick up from 17 there? 18 MEMBER TEMPLE: I'll just make the 19 comment that, you know, I look forward to seeing 20 that paper that's under review published about 21 showing how oncologic patients can be optimized 22 with iron preoperatively.

But I think it's a fairly large cohort 1 2 of patients who present with anemia that's either from chronic disease and/or from oncological cause 3 4 that is quite challenging to improve in the period 5 of time where the disease isn't progressing. And, clearly, there is certainly some concerns about 6 7 anything but iron in those patients. So I think that the issue, to me, is 8 9 the evidence gap and demonstrating, again, that 10 all patients can be optimized to a hemoglobin of 11 12 preoperatively. And I think it's a fairly big -- it's a substantial subgroup that cannot be 12 13 optimized, and that's -- maybe if they wanted to 14 rethink the new way or show us the new paper 15 that's about to be published. 16 MS. DOMZALSKI: The aim of the measure 17 is not to say that all patients should be 18 optimized. The aim of the measure is to profile

19 for blood use review committees and clinicians who 20 can review those who have not been optimized to 21 see if that was possible.

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Over time, there should be a reduction

in the number of preoperative anemic patients. 1 2 The idea is for hospitals to formulate educational interventions for practitioners who have not 3 4 optimized a patient who is optimizable, so that 5 the reduction in preoperative anemia will occur. MEMBER TEMPLE: Will there be -- I 6 would imagine, though, at some point these numbers 7 will be compared between hospitals, and obviously 8 9 the different case mixes, whether it's an 10 orthopedic hospital where you would think 11 optimization is possible versus other types of 12 facilities where there's a more blended mix. 13 So I worry that -- initially, it's just 14 a percentage, but I worry that that's not the 15 ultimate goal if we're looking at quality, because 16 we want to be not just intra-institutional but 17 also between. 18 CO-CHAIR FLEISHER: Barbara? 19 MEMBER LEVY: So, help me understand 20 why a blood utilization committee would need this measure when they have access to the chart, they 21 22 have access to these data already? So how is this

helping the blood utilization committee? 1 2 MS. DOMZALSKI: You're saying that they've asked for the data already? 3 MEMBER LEVY: I'm saying, when I sit on 4 5 a blood utilization committee I've got the chart and I'm looking clinically at the scenario to 6 7 assess why did we transfuse this patient, what was going on with this patient? 8 9 So I'm trying to understand why I need 10 a measure that holds everyone to a standard that 11 perhaps a subset of patients actually need -- and I may not know that. So, just help me understand 12 13 how the measure helps the blood utilization 14 committee. 15 MS. DOMZALSKI: I guess most simply, 16 not all blood transfusion committees operate the 17 same, and while that may be the procedure in your 18 facility that's certainly not the procedure in a 19 number of facilities. 20 So we would like to present for these 21 committees who are not looking at charts and who 22 are not taking clinical conditions into

consideration, a profile, if you will, of what 1 2 patients are going to surgery with what hemoglobins and they should be looking at those 3 4 prior to going with suboptimal hemoglobins, to 5 see, A, are these people optimizable; B, did they really have a preoperative assessment; and C, what 6 educational interventions -- is it an individual, 7 is it a department, is it a group of individuals, 8 9 what educational interventions will help in 10 raising those preoperative hemoglobin levels? 11 Because some hospitals just look at the number of 12 units they transfuse and call it a day or a month. 13 MEMBER LEVY: So, I appreciate that. 14 I guess I'm still seeing an unintended consequence 15 when you create a number that says 12, hemoglobin 16 of 12, that that sets a -- you know, if a hospital 17 is not sophisticated enough to look at who they're 18 transfusing, then to set a number that says 19 "hemoglobin of 12," my concern is that that's 20 setting a benchmark that says that that is an 21 optimal level. And I'm not sure we have the 22 evidence to support that.

You know, chronic anemia is different 1 2 than acute anemia. We have different thresholds for transfusion. The threshold for transfusion is 3 4 as important as the preoperative hemoglobin, in my 5 experience, to determine whether a transfusion occurs or doesn't. 6 CO-CHAIR FLEISHER: Okay. 7 Other comments, because Dr. Shander -- we're going to 8 9 consider him your developer, or part of the 10 development team. Is that an accurate 11 consideration? 12 DR. WATERS: Part of the team. 13 CO-CHAIR FLEISHER: So, Operator, if 14 you can open it up, and Aryeh, if you will have a 15 brief comment. 16 DR. SHANDER: Is it open? Is it open? 17 It is. CO-CHAIR FLEISHER: 18 OPERATOR: Your line is open. 19 DR. SHANDER: Oh, okay. Yes, it feels 20 muzzled. But anyway, I just wanted to make a 21 couple of points. In terms of the discussion that 22 just went on for this particular measure, which,

you know, again, I really don't know what I can add to the discussions going on, other than, again, there was some mention about optimizing patients preoperatively and that some patients are just going to have anemia and that's all we could do about that.

Well, I think we need to relook at this 7 because there is very good evidence that you don't 8 9 have to have all of the amount of time that you're 10 looking for to -- that is, all the 14 days to 49 11 days -- even a few days prior to, especially 12 oncologic patients where you want to minimize 13 transfusion, because, again, there has been risks 14 associated with that in terms of that particular 15 surgical population.

So even earlier intervention, if you can, and there now -- as I said already, there is data to suggest that even short intervals of therapy prior to surgery raise hemoglobin and reduce the chance of the patient being transfused. The review on 3017 I don't know what else I can add to the discussion back and forth on

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that. Thank you.

2 CO-CHAIR FLEISHER: Thank you. MEMBER WHITAKER: I think another one 3 of these measures gets to the point about trying 4 5 to optimize them, you know, the optimization issue. 6 But I do think that this issue is 7 actually better managed through guidelines and 8 9 standards than measures, because, as Barbara said, 10 if you're not in a sophisticated blood utilization 11 committee and you go in and you say, oh, well, 12 we've been transfusing too much at 9 or 10 and 13 just apply a blanket requirement to change, I 14 think you need to look at the clinical profile of

15 each patient.

16 So guidelines and standards can 17 describe and recommend how to implement a blood 18 utilization review committee that would have a 19 better impact, I believe.

20 MEMBER SIPERSTEIN: So, a question for 21 the developer. Explain to me the clinical meaning 22 of your result -- I mean, the numerator and the

denominator statement. So, explain to me how the 1 2 data would be presented. So, in a report, then you would have four different ratios, one for each 3 of the hemoglobin ranges, correct? 4 So you would see an 5 MS. DARDIS: So you would first see an overall 6 overall rate. 7 rate, what is the numerator rate of patients who received a transfusion. 8 9 Then you would see the strata and the strata would break out which cases were in a range 10 11 of eight to nine, nine to ten, and so on. And so 12 this would allow a committee to say, okay, here is 13 the patient populations that fell into this range 14 and this range and let's dig into the specific 15 cases. 16 MEMBER SIPERSTEIN: I mean, I 17 understand going through the granular data but I don't understand the clinical significance of the

18 don't understand the clinical significance of the 19 ratio, particularly, you know, as the numerator is 20 the number of patients and the denominator is that 21 subset that's transfused. So this ratio is going 22 to be greater than one.

And, again, the intent of 1 MS. DARDIS: 2 the measure was for the blood utilization or the blood management committee, not the ratio or rate. 3 The value is really which patients fell into which 4 5 strata and where do we want to focus our efforts based on what we know our challenges are? 6 7 MEMBER SIPERSTEIN: Right. Again, I understand that's a laudable goal, but the way the 8 9 measure is written, the key number that's coming 10 out, this ratio, like looking at mortality, I 11 understand what a mortality rate is. 12 When I look at this number, it doesn't 13 have any -- it doesn't have cleaning meaning or 14 significance. I understand how the bits and 15 pieces would be used, but as the measure is 16 written, again, I'd like you to try to explain or 17 justify that how -- why you're expressing the data 18 that way. 19 CO-CHAIR FLEISHER: Rick. 20 MEMBER DUTTON: So I'm a big fan of 21 internal quality improvement, understand how this 22 But NQF measures are intended for public can do.

reporting and there's going to be a real strong
 reluctance for anybody to report something that
 makes them look bad when it's not their fault.

So if I'm reporting this measure, I 4 5 transfused a hundred patients last month and 20 of them had a low hematocrit before the surgery. 6 So 7 an opportunity for improvement, perhaps. But that ratio is completely meaningless without an 8 9 understanding of the risk adjustment of that: how 10 many of them were oncologic patients, how many of them had renal failure, how many of them were just 11 12 post-trauma, whatever.

13 And I'm not going to want to see that 14 number publicly reported unless I am certain that 15 that assessment is a fair comparison of me to 16 other facilities.

Similarly, it's not useful for your
internal benchmark unless it can be a comparison
of apples to apples across multiple centers. So
what are your plans for the risk adjustment of
this model or the presentation of this data?
MS. DARDIS: So, currently, the measure

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does exclude a number of populations, including 1 2 traumatic injury, obstetric procedures and diagnoses, sickle cell disease and patients on 3 4 ECMO, because those were identified as populations 5 that had unique needs and that would obscure the numbers we received in the strata. 6 7 I don't know if you want to build on 8 that, Dr. Waters. 9 DR. WATERS: Well, I think the measure 10 was primarily developed to raise awareness of 11 anemia as something that we need to manage. 12 In my particular facility, from a 13 women's hospital where we do a large number of 14 hysterectomies, we take care of a large OB 15 population. And in those particular segments of 16 the population you have widespread iron deficiency 17 anemia, whereas if you're working in a different 18 kind of facility you might see a different patient 19 population with a different spread of hemoglobin 20 values. So it gives you an opportunity or an awareness of where you stand relative to different 21 22 hospitals.

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1	CO-CHAIR FLEISHER: Barbee, do you
2	still have comments?
3	MEMBER WHITAKER: The exclusions, it
4	seemed that there sorry, I can't talk about
5	this? Okay. Oh, he brought it up so or she
6	brought it up. Yes. So I was just going to say
7	that if you were going to include trauma you ought
8	to include other emergency surgeries where there
9	could be a lot of blood loss, for ruptured
10	aneurysm or things like that.
11	CO-CHAIR FLEISHER: So, Allan, did you
12	still have no? Collette.
13	MEMBER PITZEN: I just have a technical
14	suggestion based on what Allan was saying, and
15	being that it's an electronic measure that you're
16	pulling from a large population, perhaps your
17	denominator would be patients with selected
18	surgical procedures and taking into the feedback
19	that the surgeons have given. But the denominator
20	being surgical procedures and the numerator being
21	those that received transfusion. And then, of
22	course, you can stratify by pre-op hemoglobin.

Just a suggestion.

2 CO-CHAIR FLEISHER: Thank you. Any other comments before we vote on evidence? 3 4 MS. QUINNONEZ: We are now voting on 5 Measure 3017. Voting is now open for evidence. Option one, high, option two, moderate, option 6 7 three, low and option four, insufficient. All votes are in and voting is now 8 9 closed. For the evidence of Measure 3017, zero 10 percent voted high, 14 percent voted moderate, 57 11 percent voted low and 29 percent voted 12 insufficient. 13 CO-CHAIR FLEISHER: Thank you. So we 14 will not be going forward on this measure. 15 3019, Preoperative Blood Type Testing 16 and Antibody Screening. 17 MS. DOMZALSKI: The intent of this 18 measure is to assess the proportion of, again, 19 selected elective surgical adult patients who had 20 a type and cross match or a type and screen 21 completed prior to the procedure -- completed 22 prior to the procedure.
The denominator is adult elective 1 2 surgicals. The numerator is the number who had a type and cross or type and screen anytime within 3 the 45 days prior to the procedure to the start of 4 5 the procedure, and that type and screen or type and cross needs to be completed. 6 That's what 7 we're measuring here. There is some evidence that there is 8 9 occasional non-completion of those procedures 10 prior to performance of the procedure. 11 CO-CHAIR FLEISHER: Barbee, and then 12 Barry. 13 MEMBER WHITAKER: Okay. So there is 14 some evidence, although the evidence is fairly 15 low, with the gap. It was one percent of the time 16 that they weren't completed. And I question 17 whether the -- okay, so the measure follows from 18 clinical guidelines cited by the developer, that 19 in order to effectively utilize resources, pre-20 transfusion testing should be completed. However, 21 the desired outcome is that the patient get an 22 appropriate unit of blood if transfusion is

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required.

2	And I would like to ask whether you
3	considered using a numerator of elective surgery
4	patients receiving un-cross-matched blood, rather
5	than the possible unintended consequence of having
6	a lot of type and cross and type and screens that
7	were never required.
8	CO-CHAIR FLEISHER: Do you want to make
9	comments, Barry?
10	MEMBER MARKMAN: I get the eMeasures.
11	I think they're great, as I said before, and I
12	think this is your barrier. You know, in terms of
13	conservation, the numerator, those who had a type
14	and cross match, and the denominator are selected
15	elective surgical procedures.
16	I did not see the list of surgical
17	procedures, but from what I hear they're major
18	surgical procedures. Okay.
19	It was one percent. However, there are
20	other studies that say it's as high as 7 percent.
21	You have the longest measure I've ever seen.
22	However, one of the comments that you

make in this that stood out in my mind is that --1 2 is by the College of American Pathologists. It's 108 public and private participating institutions. 3 4 And of the type and screens for these major 5 elective procedures, 64 -- or 65 percent were collected prior to the day of surgery and then 6 7 there were a number, 23 percent after the start of surgery. And of those samples that were sent off 8 9 late or close to late, 79 percent were considered 10 clinically significant positive in their antibody 11 screens.

12 So here we have major surgery, the type 13 and screen is collected either the day of the 14 surgery or during the surgery, and I think, you 15 know, that the evidence is strong that there's a 16 quality issue with that, to go into major surgery 17 and send off the type and screen. And that's from 18 the American College of Pathologists. I think the 19 evidence is there that this is a quality measure.

20 CO-CHAIR FLEISHER: Okay. Well, I know 21 Aryeh wants to make comments, but anybody --22 DR. SHANDER: No, I just want to

support the argument. That argument is absolutely the reason for this measure, and you don't want somebody who can have a type and cross done where they're matched for a unit of blood receive un-4 cross-matched blood. That's for elective cases or any cases where you're planning significant blood loss.

You want to make sure that the type and 8 9 cross is performed, or type and screen is 10 performed, and concluded prior to surgery, because 11 if there are antibodies and you need more time, 12 surgery should not start.

13 That's the spirit behind this 14 particular, and I think that what you quoted from 15 the American College of Pathologists is clearly 16 the data that will support this being universal. 17 CO-CHAIR FLEISHER: Any comments? 18 Barbee? 19 I'd just like to MEMBER WHITAKER:

20 consider it as an outcome measure rather than a 21 process measure, because ultimately the goal is to 22 assess your patient carefully, determine whether

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they will need a type and cross or a type and 1 2 screen and then do it in the appropriate time. So a little tweaking to both the 3 numerator and the denominator would make this a 4 5 much better measure. In the 45 days. 6 MEMBER MARKMAN: Ι 7 mean, we'll go to suggestions, because that's what we were instructed to do. Forty-five days 8 9 sometimes is hard to, you know -- Yes, 45 days. 10 CO-CHAIR FLEISHER: Other comments from 11 around the room from the standing committee? 12 Barbara? 13 MEMBER LEVY: Yes, I just think -- I 14 really like reformatting this as an outcome 15 measure because the unintended consequence is 16 driving type and screen or type and cross match in 17 a large proportion of patients who don't need it 18 at all. And so we really want to capture those 19 patients who clearly did need it and it was done 20 inappropriately. That's really a good outcome 21 measure. 22 But the unintended consequence of

hospitals deciding that they're going to have to go back to doing type and screen or type and cross match for a large proportion of patients who really don't need them, that's expensive. It utilizes resources that need to be used in some other way, and it's really, I think, a problem.

There is something called 7 DR. WATERS: a MSBOS, or maximum surgical blood ordering 8 9 schedule, that basically does what you suggest, 10 which is to focus your resources on not 11 unnecessarily cross-matching or screening 12 patients. And I think the measure's surgical 13 procedures that we selected fall within generally 14 accepted procedures where there is greater than 25 15 percent of blood being needed.

We looked at this particular measure at the University of Pittsburgh and found that we had 11 patients in the course of one year that got to the operating room without appropriate preoperative testing. And these particular patients ended up having antibodies that made it difficult to get blood to them. And in two of the

11 patients, they dropped down below three grams 1 2 per deciliter of hemoglobin before appropriate blood was available for them. 3 So it's the severity of this particular 4 5 measure: what we're trying to prevent with this measure is fairly significant. 6 7 CO-CHAIR FLEISHER: A.J., you had a 8 comment now? 9 MEMBER YATES: I just had a question. 10 Good to see you. We're both from the same 11 institution. The MSBOS is something that came 12 about in the last two years, last year, 13 thereabout. 14 DR. WATERS: That's actually not 15 It's been around since 1971. correct. 16 MEMBER YATES: But the current one that 17 we're -- the updated one --18 DR. WATERS: Yes, we have a data-driven 19 MSBOS now, and previously it was an opinion 20 But we and several other facilities in quided. 21 the United States have moved towards a data-driven 22 MBOS.

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1	MEMBER YATES: And our data driven one,
2	I would actually argue that for a total knee
3	replacement I don't even need a type and screen.
4	DR. WATERS: Yes, absolutely.
5	MEMBER YATES: And so my question is
6	two questions. Where is the list of which
7	surgeries? Which list are you using, MSBOS, the
8	most data driven one, the most recent?
9	And the second question is, the
10	literature talking about the gap in this I know
11	we're not to gap yet but the literature on the
12	gap is limited to around 2004 in terms of time.
13	So is there any current literature or data showing
14	a gap using the new MSBOS?
15	MS. DOMZALSKI: I'll address the last
16	question first. Hospitals are not particularly
17	fond of publicizing their errors and their
18	difficulties and their failures. For example,
19	their need to transfuse un-cross-matched blood
20	because they didn't complete a procedure. So,
21	when doing the literature review we found all the
22	literature we possibly could.

As for the MSBOS, the list of 1 procedures that are covered are covered in a value 2 set here, and it resembles the selective elective 3 4 surgical procedure list, except that it is minus 5 certain maxillofacial procedures, certain gynecological procedures, and others that are not 6 7 likely to require blood replacement. And just out of 8 MEMBER YATES: 9 ignorance, which section is the value set listed? 10 Is it in one of the additional sets? 11 MS. DARDIS: It's a part of the 12 specifications. I'm not sure where NOF packaged 13 it in the package you received. 14 Okay. Well, I'll have MEMBER YATES: 15 to search for it. Thanks. 16 CO-CHAIR FLEISHER: Thank you. Rick? 17 MEMBER DUTTON: Amy found the list. 18 Knee replacement is on it. 19 CO-CHAIR FLEISHER: Thank you. So --20 MEMBER LEVY: So is LAVH, and the 21 current data show an average blood loss of 22 laparoscopically-assisted vaginal hysterectomy at

less than 100 cc's.

2 CO-CHAIR FLEISHER: So the issue is for evidence, unless anybody else has other comments, 3 4 that we vote on evidence as currently constructed. 5 So in the specs that we were given. And if we can call it. 6 7 MS. QUINNONEZ: We are now voting on Measure 2019. Voting is now open for evidence. 8 9 Option number two is moderate. Option number 10 three, low. Option number four, insufficient. Option number two, moderate. Option number three, 11 12 low. Option number four, insufficient. 13 All votes are in and voting is now 14 closed. For the evidence of Measure 3019, 24 15 percent voted moderate, 48 percent voted low and 16 29 percent voted insufficient. 17 CO-CHAIR FLEISHER: Okay. I was just 18 clarified, given this didn't meet on evidence, 19 although several people had suggestions for The 20 Joint Commission on other ways to assess this, we 21 will be moving forward to the next. 22 3020, Initial Transfusion Threshold.

1 MS. DOMZALSKI: Once again, this 2 measure has been constructed for transfusion committees to have a sense and see how their blood 3 transfusion administration is occurring. And as 4 5 you are probably all familiar with, a restrictive transfusion strategy is supported rather than 6 7 transfusing patients at a higher level of hemoglobin or hematocrit. 8 9 And so this measure gives those 10 transfusion committees a profile of blood usage in 11 their institution by showing them the hemoglobin 12 values of each patient immediately prior to the 13 first unit of a transfusion. 14 There are exclusions in the measure, 15 such things as emergency room patients, et cetera. 16 The denominator is all hospitalized adult patients 17 who get a red blood cell transfusion, and we're 18 looking at the first unit only. 19 The numerator is stratified by 20 hemoglobin values in one gram per dL increments in 21 a range from an aggregate of less than seven 22 through an aggregate of 10 or greater.

1 CO-CHAIR FLEISHER: Okay. Barbee? 2 MEMBER WHITAKER: Okay. This measure is to monitor proportions of patients transfused 3 at initial hemoglobin levels from less than seven 4 to greater than ten. The evidence, while 5 moderate, is sufficiently strong to introduce a 6 program of monitoring with the intent of having 7 more transfusions occur at the lower, more 8 9 restrictive end of the spectrum than at the 10 higher, liberal end. 11 The blood utilization committee or the 12 transfusion committee will have a metric from 13 which to investigate transfusion practice. Ι 14 think there's always a question of what you do 15 with the metric. We have evidence through a 16 survey that we conducted at AABB that indicates 17 that many hospitals, most hospitals, have policies 18 for transfusing between seven and eight and eight 19 and nine for different circumstances, but that 20 their actual transfusion values don't always meet 21 those policies to which they intend to adhere. 22 So this measure would allow measurement

of the adherence to that policy -- to their 1 2 internal policies, but I would say that for an investigational purpose, a self-monitoring 3 4 purpose. CO-CHAIR FLEISHER: 5 Great. And Lynn, you're the second. Any additional comments? 6 Just one small comment. 7 MEMBER REEDE: As far as evidence from STS and also from the 8 9 Society of Cardiovascular -- or Anesthesiologist 10 guidelines, they recommended, and the developer 11 noted this in their rationale, that also 12 underlying cardiac disease post-operative status 13 in clinical conditions might be considered because 14 there is not good evidence to support keeping 15 those patients at a seven hemoglobin. 16 So just that the exclusion did not 17 include, like in other ones we've had 18 contraindications, kind of a general decision 19 process for the clinician. 20 CO-CHAIR FLEISHER: Thanks. 21 Christopher? 22 I think that the MEMBER SAIGAL: Yes.

2 developing evidence was that they were using the EMR and there was specified fields and three types 3 4 of fields and it was more complicated to develop 5 evidence. This sounds like it's really a research 6 7 project to understand what the prevalence of transfusion rates are in the country or different 8 9 levels. 10 So as a quality measure, I don't see 11 how this would be implemented because it sounds 12 like there's different standards locally. There's 13 no agreement. 14 So I don't think this really fits the 15 idea of a quality measure. It fits the idea of a 16 research or survey project. 17 CO-CHAIR FLEISHER: Rick and then Liz. 18 MEMBER DUTTON: I've worked in a number 19 of hospitals that routinely look at all 20 transfusions to see what the hemoglobin level was 21 when we gave the blood for purposes of quality 22 improvement, and I've looked at a lot of

rationale behind using these measures for

exceptions as to why that might have happened. 1 2 I am very concerned about the unintended consequence in this measure of delaying 3 transfusion in a patient who needs it while you 4 5 wait for a hemoglobin value. If there's a hole in the aorta, I don't care what the hemoglobin is. 6 7 The patient should be transfused. MEMBER EREKSON: So I think this is 8 9 also --10 DR. SHANDER: I think that's excluded 11 already. 12 MEMBER EREKSON: In the exclusion 13 criteria, one of the things that I notice is 14 pregnancy is not an exclusion, although major 15 trauma is. And when you're having a patient who 16 is having a massive bleeding, hemorrhage 17 postpartum, that I would equate to some of the 18 trauma patients, and so that might be considered. 19 CO-CHAIR FLEISHER: So that --20 MS. DOMZALSKI: I'm sorry. In the 21 world of e-specifications it's very difficult to 22 find in a chart the items that would exclude or

necessarily explain why a patient had received a 1 2 transfusion outside the accepted parameters. For example, it's generally agreed in 3 4 the guidelines that heart failure or heart 5 difficulties are reason for transfusing the patient at a higher hemoglobin level. But in an 6 7 electronic record, you really cannot find that. It will be in the problem list, but it will be 8 9 So you don't know if that heart problem undated. 10 preceded the transfusion or followed the 11 transfusion. 12 In addition, there's an imprecise 13 definition of what heart failure is. Is that 14 heart failure 20 years ago or is it heart failure 15 There is no precise definition. yesterday? 16 Similarly, a patient with a hole in the 17 aorta may be described as having active bleeding. 18 But if you ask a number of clinicians what is 19 active bleeding, the interpretation of that is 20 going to vary. 21 Is it 4 ABD's in an hour or is it a 22 Hemovac full inside of 30 minutes? What is active

## bleeding?

2	So because of the imprecise
3	definitions, we did want transfusion committees to
4	look at the clinical record and make a clinical
5	determination rather than to subject the outcome
6	of a measure or a publicly reported item to what
7	is in an electronic record that may be imprecise.
8	CO-CHAIR FLEISHER: So, just as a
9	reminder, the evidence criteria is that a process
10	or intermediate outcome is based on a systematic
11	review in grading the body of empirical evidence
12	where the specific focus of the evidence matches
13	what is being measured.
14	There's a lot of concerns I had about
15	specification that I'm hearing from the committee,
16	which would be we could address after the
17	evidence, correct? Sal?
18	MEMBER SCALI: I guess just a
19	clarification. So, as a quality measure, one of
20	the points that was raised about sort of how there
21	are different thresholds, so how would this
22	number, if it ever were to be reported, because if

one center uses seven, another uses eight, is it just a relative percent of where you are with your threshold at your center? Or is there some agreed upon threshold that the centers are being held to in terms of how you're determining the numerator and denominator?

7 I guess that was my first question in 8 terms of clarification. Two, clarification of the 9 measure, is it for the entire episode of care or 10 only inter-op transfusion?

11 If it includes the entire episode of 12 care, you've got your open AAA repair and then on 13 post-op day four somebody pulled the trigger and 14 said give them a blood transfusion. But, oh wait, 15 the patient's having an MI and the hemoglobin was 16 eight and cardiology said to go ahead and 17 transfuse, but the institutional trigger is seven. 18 So how does that sort of get factored?

Three, for patients who undergo
contemporary aortic surgery actually there's
compelling evidence to suggest that restrictive
transfusion leads to higher rates of spinal cord

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ischemia. And so actually liberal transfusion is 1 2 now becoming the standard, many of the times, for patients who undergo open thoracical abdominal 3 4 aneurysm repair and if you're trying to do 5 preemptive protocols to prevent spinal ischemia risk. 6 7 Lastly, Jehovah's Witness, I didn't see that that was an exclusion for trigger. So if you 8 9 would address those. 10 MS. DOMZALSKI: Spinal surgery patients 11 12 MEMBER SCALI: Patients at risk of 13 spinal cord ischemia after open aortic surgery. 14 DR. SHANDER: No good data for that for 15 transfusion, by the way. 16 MEMBER SCALI: I disagree. 17 DR. SHANDER: You may, but you can 18 quote the data then, because I think that making 19 a statement like that for preemptive transfusion, 20 that would change, I think, the whole transfusion 21 world, in a sense, knowing that that was effective 22 in prevention.

I think that the data comes from 1 2 retrospective data in terms of prone patients and 3 4 CO-CHAIR FLEISHER: Let's -- let's --5 let's focus on the question at hand, which is evidence or whether or not the measure does what 6 7 its specification is. MEMBER GROVER: Well, I don't think 8 9 you're collecting enough data that we would 10 consider -- I don't know whether this is under 11 evidence or not -- but that we would consider it 12 important, or reliable data that we'd consider 13 important. 14 We have, personally, a cut-off of less 15 than seven hemoglobin in our cardiac surgery 16 patients, but we factor in the age. We factor in 17 if they have COPD. We factor in if it's an 18 incomplete revascularization, all of those things 19 where a hemoglobin, a higher hemoglobin might 20 alleviate the patient. 21 We also factor in whether the patient 22 is so tired they can't get up and walk and they

may be at risk for a pulmonary embolism if we
 don't give them a transfusion.

There are several things that come in 3 4 to -- which you, you know, when you receive the 5 patient at bedside, that affect your judgment. It's not gaming and it's trying -- I mean, we try 6 7 to really conserve and we've driven down our blood utilization. But you're at risk in this of not 8 9 capturing those types of things and penalizing or 10 misidentifying people that are abusing the blood 11 transfusions. 12 MS. DOMZALSKI: And that's why we 13 wanted the clinician to look at the record and 14 factor in all of those types of things that you 15 mentioned, rather than to make a cut-off judgment. 16 And to answer your previous question, 17 yes, this does cover the entire episode of care. 18 But, again, it's the first unit of any transfusion. It's only one unit per person. 19 20 And your first question -- I'm sorry --21 could you repeat that again? 22 MEMBER BILIMORIA: So we've been

looking at -- we've done this with about 45 1 2 hospitals and implemented a blood use measure. It's a registry measure, and then based 3 4 on the NSQIP data you can tell what -- sort of 5 whether they have CHF and whatnot and so you have some validated definitions to combine. 6 It's a 7 registry measure. It's extremely intensive, but we find a lot of the inappropriate blood use is 8 9 beyond the first transfusion as well and you can 10 set different thresholds but you can give people 11 a lot of information by setting one. 12 I was particularly interested in an 13 eMeasure for this because the extraction burden is 14 extremely high. It's the one that gets that most 15 complaints. So maybe there's some way to put 16 these two together in some fashion. 17 MS. DARDIS: I would like to thank you 18 for bringing that up. I think that one of the 19 unique advantages of an eMeasure for this kind of 20 thing and the reason we've structured this as a 21 tool for performance improvement rather than a 22 metric that is for comparison is the fact that

you're using that real-time clinical data and you can use the same data that you're using to present measures to the board to provide the clinician with decision support.

5 And so that maybe on a facility level 6 you're working with specific conditions and you 7 have specific thresholds for specific conditions 8 you can use common data elements for measurement 9 and for your specific modifications for your 10 facility and so I think it's an opportunity with 11 eMeasures that we need to explore further.

12 The other is the reduction of burden in 13 the data collection that you're using the EHR data 14 and we don't have 200 data points in this measure 15 to capture every single condition but we are able 16 to provide some information real-time to the 17 facility.

18 CO-CHAIR FLEISHER: Fred, did you have
19 another comment? No? Okay. So we are voting on
20 evidence.

DR. WATERS: Can I say one more thing? CO-CHAIR FLEISHER: Sure.

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DR. WATERS: This measure part of
the intent was to get people to give red cell
transfusions based on quantitative data rather
than guessing, which is kind of the current
standard is that guesswork if somebody has a
hemoglobin and it doesn't really matter what that
particular value is, dependent upon the
circumstance, but I mean it should be a
quantitative decision rather than guesswork.
CO-CHAIR FLEISHER: Thank you.
MS. QUINNONEZ: We are now voting on
measure 3020. Voting is now open for evidence.
Option one, high, option two, moderate, option
three, low, option four, insufficient.
(Voting.)
MS. QUINNONEZ: All votes are in and
voting is now closed. For the evidence of measure
3020, 5 percent voted high, 58 percent voted
moderate, 26 percent voted low and 11 percent
voted insufficient.
CO-CHAIR FLEISHER: Okay. We can move
on with the discussion. So it passed on evidence.

Performance gap -- do we discuss that? Okay.

3 MEMBER WHITAKER: Okay. So there's not 4 a lot of data for a performance gap but based on 5 our own experience with the AABB there is a gap with what people say they're going to do and what 6 So I think that it's definitely a 7 they do. measure that is worthy of monitoring. 8 9 CO-CHAIR FLEISHER: Lynn, any further 10 -- Barry? 11 MEMBER MARKMAN: Yes. There's also a bigger gap in terms of using an eMeasure and it's 12 13 not -- it's more in the macro sense of how you 14 capture this data in an eMeasure and subsequently 15 disperse it in a coordinated care center. 16 So, I mean, we could look at the 17 specific measure and say, you know, there's a gap or not, but there's a gap with this technology. 18 19 There really is a true gap with this technology 20 and it's in a bigger sense and it's for, you know, 21 for quality care of patients. I'm just going to 22 put that out as a -- as a general comment.

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Barbee?

1	CO-CHAIR FLEISHER: Amy?
2	MEMBER MOYER: I'm struggling a little
3	with the concept of gap as it relates to this
4	measure. I think what we'll find when the results
5	come back are there differences in transfusion
6	thresholds and where people are being transfused?
7	It sure sounds like it from around the room but I
8	think the bigger question is is there in
9	appropriate variation and that are, you know,
10	relevant to what.
11	Just saying, okay, there's variance
12	there that's one thing. But what's the gap and
13	what are we looking for?
14	CO-CHAIR FLEISHER: Comments?
15	DR. WATERS: I'd like to say that the
16	gap is huge. At the University of Pittsburgh
17	we've looked at a number of different surgical
18	procedures. Primarily or at least orthopedic
19	total joint replacements has been an area of focus
20	and for primary total hip replacement for
21	arthritis we saw a variability from one surgeon
22	who transfused 100 percent of his patients to a

different surgeon that transfused 1 percent. 1 2 So if you're using gap as a measure of -- as a word for variability, the variability is 3 Fortunately, we've made huge strides in 4 huge. 5 narrowing that gap where most of our surgeons are now down under 5 percent for transfusing total 6 hips, but there is a big opportunity here. 7 MS. DOMZALSKI: When we place these 8 9 measures out for public comment, we had about 140 10 hospitals respond and one of the questions was is 11 there a gap between what this measure asked you to 12 do and what you're currently doing. 13 Well, more than two-thirds of them 14 reported, yes, there is a difference between what 15 you're expecting and what we're doing and as we 16 were going around to test these at various 17 hospitals every hospital could put their finger 18 exactly on where the problem was in terms of 19 people being transfused over a hemoglobin of nine. 20 In one hospital it was an OB/Gyn who 21 did it. In another, it was a particular 22 orthopedic surgeon. So yes, there's a gap. It's

apparent at every hospital that we were at. 1 2 CO-CHAIR FLEISHER: A.J.? MEMBER YATES: My understanding is that 3 4 the tool is -- or the measure is made to help the 5 blood bank do its job better, correct? MS. DOMZALSKI: Not necessarily the 6 7 blood bank but the blood transfusion --MEMBER YATES: Well, the committee. 8 9 The blood --10 MS. DOMZALSKI: Yes. 11 MEMBER YATES: I stand corrected. The 12 blood transfusion committee. At least where we 13 practice, and again, the University of Pittsburgh 14 -- the act of ordering the blood requires the 15 insertion of the hemoglobin and hematocrit and the 16 indication, that being ongoing bleeding, et 17 cetera, such that that automatically goes to the 18 blood bank. 19 Is that not a common scenario or is --20 are we -- are we talking about much less 21 sophisticated electronic medical records 22 elsewhere?

MS. DARDIS: You are special. Yes. We looked up the literature that exists for clinical decision support and order sets for blood use. There are a few medical sites -- UPMC, University of Iowa where those order sets exist and you have to enter a condition.

7 There is not standardization around We did not see that everywhere we visited 8 that. 9 just among five hospitals I think one had that 10 built into their ordering. There's a lot of fear 11 in EHR implementation as an -- I guess this is 12 kind of an aside but there's a lot of fear about 13 what you put in front of the physician as a 14 requirement in ordering and I think this is an 15 area where we heard a lot of that.

And so we actually had some excitement in seeing this measure as a way to bring those things into their practice because they've heard about them but they haven't implemented them themselves.

21 MS. DOMZALSKI: At one of our test 22 hospitals they do have CPOE and they do have

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decision support tools and it was described to us
 that every time they have a new groups of
 residents their blood utilization goes up because
 the resident is bypassing all those decision
 support tools by giving in indication of other for
 the transfusion.

And so it takes a lot of intervening
with each of the residents to stop that other as
being an option for transfusion.

10 CO-CHAIR FLEISHER: Okay. Barbee, do 11 you want to make another comment?

12 MEMBER WHITAKER: I'd just like to 13 comment that there's no -- there's no category for 14 hemoglobin not measured before first unit 15 transfused and it might be valuable to kind of get 16 at the work-up not being complete prior to -- I 17 mean, not just the type and screen but the H&H, 18 anything that would not be complete prior to the 19 first transfusion or maybe that doesn't happen but 20 it seems like there could be circumstances where 21 you could push the practice to be making sure that 22 there is a hemoglobin on everyone before they do

1 get a transfusion. 2 MS. DOMZALSKI: Thank you. CO-CHAIR FLEISHER: Great. 3 So why 4 don't we vote on gap? 5 MS. QUINNONEZ: Voting is now open for a performance gap of measure 3020. Option one is 6 7 high, option two, moderate, option three, low and option four, insufficient. 8 9 (Voting.) 10 MS. QUINNONEZ: All votes are in and 11 voting is now closed. For performance gap of 12 measure 3020, 10 percent voted high, 65 percent 13 voted moderate, 0 percent voted low and 25 percent 14 voted insufficient. 15 CO-CHAIR FLEISHER: Great. So we will 16 continue. So next what do we have -- what else 17 are we -- okay. Now it's actually the 18 specifications -- a discussion. 19 MEMBER WHITAKER: So like the numerator 20 and the denominator? CO-CHAIR FLEISHER: Correct, and the 21 22 exclusions and the comment about, you know --

1 MEMBER WHITAKER: Okay. 2 CO-CHAIR FLEISHER: -- some of the comments I heard about, you know, 3 interoperatively, massive bleeding and how the 4 5 specifications --So thank you. 6 MEMBER WHITAKER: Okay. 7 Regarding the numerator, I would suggest adding the additional not captured categorization and 8 9 then --10 CO-CHAIR FLEISHER: So let me just get 11 some clarification, either Melinda or Elisa. When 12 we're voting, we're voting as it is but -- and 13 it's a -- and it's a must pass criteria. However, 14 if it doesn't pass and the Joint Commission is 15 willing to make changes that can occur in --16 during the call or no? 17 MS. MUNTHALI: It depends on how 18 significant those changes are and how quickly the 19 Joint Commission can turn those around. So we'd 20 have to get an agreement from you today to say 21 that you can make those changes by the post-22 comment call.

CO-CHAIR FLEISHER: We'll probably vote 1 2 as is or as is with modification might be something we can discuss if it doesn't pass. 3 But 4 we'll first -- but please, as is and things that 5 are -- they should do or must do from your perspective. 6 I'd like to 7 MEMBER WHITAKER: Okay. comment that patients under the age of 18 can 8 9 benefit from hemoglobin optimization so would like 10 to see it extended to pediatric patients. I don't 11 know if that's the standard of care -- for the 12 quality measures here but obviously that would be 13 optimal. 14 And then regarding exclusions, other 15 emergent surgeries which may have high blood loss, 16 if there's not time to get a hemoglobin in advance 17 might be an exclusion and then the emergency 18 department -- I question whether they should be 19 given an opt out categorically and whether they 20 could also wait or, you know, benefit from paying 21 attention to hemoglobin levels before they 22 transfuse.

1	MS. DARDIS: I'm sorry. Can I ask for
2	a clarification? Would you like to see emergency
3	department excluded from the measure or included?
4	MEMBER WHITAKER: Included.
5	MS. DARDIS: Okay. Thank you.
6	CO-CHAIR GUNNAR: Fred?
7	MEMBER GROVER: I'm concerned under
8	your specifications for who's included just as a
9	hemoglobin again and it doesn't included
10	hemorrhagic shock, bleeding, current active
11	bleeding some of those things we talked about
12	earlier which are obvious indications for a
13	transfusion regardless of the hemoglobin.
14	CO-CHAIR GUNNAR: Barry? Any other
15	comments? Amy?
16	MEMBER MOYER: I apologize for
17	timeliness. I'm just going to ask instead of
18	trying to look this up. So a denominator
19	exclusion is patients whose first unit of whole
20	blood was given while in an emergency department.
21	If these are elective surgeries shouldn't
22	admission source emergency department perhaps be

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excluded entirely?

2 MS. DARDIS: This measure is for all 3 patients, not elective surgicals.

4 CO-CHAIR FLEISHER: Lynn? Did Lynn
5 already go? Nothing? Anybody else have any
6 comments on the specifications?

MS. QUINNONEZ: Voting is now open for
eMeasure specifications for measure 3020. Option
one, high, option two, moderate, option three, low
and option four, insufficient.

(Voting.)

MS. QUINNONEZ: All votes are in and voting is now closed. For the eMeasure approval for trial use for measure specifications of measure 3020, 5 percent voted high, 37 percent voted moderate, 47 percent voted low and 11 percent voted insufficient.

18 CO-CHAIR FLEISHER: So this is
19 consensus not reached, which means we will
20 continue to evaluate the measure. One of the
21 questions is is the Joint Commission interested in
22 working with some of the things they heard today

to potentially change it during the phone call. 1 2 MS. DARDIS: I think from a time frame perspective, yes. I think it's unclear -- and 3 4 Ann, jump in -- but I think it's unclear which 5 changes that were suggested are the changes that are most of import to the group. I think any 6 7 changes we make we want to take back to our 8 advisory panel. 9 CO-CHAIR FLEISHER: Sure, Barbee, do 10 you have a -- or maybe in the next couple days we 11 can get some consensus on -- can you work with 12 staff to give some significant recommendations of 13 what is most concerning? 14 MS. WATT: I was going to say this is 15 Ann, you know that. I'm sort of confused actually 16 about what the ask is. 17 It was our understanding as you're 18 looking at the HQMF specifications you were actually looking at the construct of the eMeasure 19 20 as opposed -- the technical construct as opposed 21 to the content of the measure itself. 22 And so as I'm listening to the
conversation I'm understanding that you are asking 1 2 us to change the clinical content of the specifications irrespective of the HQMF 3 4 specification. Is that correct? 5 CO-CHAIR FLEISHER: Can you be specific? Can someone articulate? 6 Because I missed the --7 I felt like I heard a 8 MS. SKIPPER: 9 committee member ask for the measure to be 10 extended to the pediatric population and then also 11 \_ \_ 12 CO-CHAIR FLEISHER: That's not a 13 critical issue. That's a typical ask of this 14 committee. 15 Yes, I understand that. MS. WATT: 16 CO-CHAIR FLEISHER: So I think I'll 17 take chair prerogative in saying if that doesn't 18 happen that's -- we'd like it to be. Anything 19 else that was asked, Barbee? 20 CO-CHAIR GUNNAR: I think the -- Fred's 21 -- his --22 MEMBER GROVER: Yes, I mean, my concern

was that there's more than the hemoglobin that's 1 2 a trigger to transfusion and at least on some of the major ones, such as active bleeding 3 4 hemorrhagic shock, if you're just looking at 5 hemoglobin you're going to miss a fair amount of Even in the operating room, you can have 6 things. 7 things that you aren't expecting on elective cases So I think --8 that require them. 9 CO-CHAIR GUNNAR: How will the -- how 10 will the threshold reflect the clinical condition? 11 MEMBER GROVER: Yes. 12 CO-CHAIR GUNNAR: And is it reflective 13 of current variable practice across health care 14 facilities? 15 Right. MEMBER GROVER: There is 16 variation in what your hemoglobin level is but if 17 people are bleeding significantly and they're in 18 shock there's very little variation in that, I 19 would think. 20 MS. DOMZALSKI: The number in the 21 threshold by itself is insufficient to determine if a transfusion could have been avoided. 22 It does

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need to be evaluated by a clinician in 1 2 relationship to the clinical signs and symptoms, which is why this is being done for the 3 transfusion or blood usage committee to review. 4 5 As before, it's very difficult to specify what active bleeding is. Every clinician 6 7 has a different concept of what that is and that's why we'd like the committee to look at this when 8 9 it turns out that a transfusion was given above a 10 threshold whether it be seven in your facility or 11 eight or nine. And so that's why we'd like the 12 committee to look at it. We recognize that that 13 would be perhaps understandable. 14 I've got to say that DR. WATERS: 15 measuring a hemoglobin in the operating room takes 10 microliters in about 20 seconds. 16 So I don't 17 know how it would interfere with the process of 18 getting a patient blood. 19 MEMBER GROVER: Well, if you wait for 20 a hemoglobin change in somebody who's bleeding 21 rapidly, they could be dead. 22 CO-CHAIR GUNNAR: Exactly. Hemoglobin

will be normal when you're providing active 1 2 transfusions to an actively bleeding patient. CO-CHAIR FLEISHER: 3 Liz? MEMBER EREKSON: So I had said this 4 5 before but just to remind, in pregnant patients undergoing postpartum hemorrhage they may be 6 7 considered, like, traumatic injury and you may want to exclude them or consider them in a 8 9 different measure. 10 CO-CHAIR FLEISHER: So -- Allan? 11 MEMBER SIPERSTEIN: Yes. So again, the 12 ratio as expressed, as I've said before, doesn't 13 make clinical sense, but let me play devil's 14 advocate for a minute. 15 You bring all your patients to anemia 16 screening. Nobody ever goes to the operating room 17 with a crit, you know, less than -- or a 18 hemoglobin less than 10. Well, if you look at 19 your measure a couple years from now, all of your 20 transfusions will have been in patients who are 21 over 10 because they've had, has been nicely 22 expressed, unexpected bleeding in the operating

And so it's not really clear to me how 1 room. 2 you're going to use this number over time to monitor quality improvement. 3 Again, as I've said, each of the 4 5 numerator and denominator are laudable goals but the end result as expressed does not make clinical 6 7 sense to me. DR. SHANDER: Well, from your lips to 8 9 God's ear, as they say, but because I don't think 10 we're there yet. But I think that if that is the 11 consequence of anemia management is that 12 transfusions are -- you know, we're going to have 13 to relook at this measure at some point. I think the idea -- and I think was 14 15 already mentioned -- is this is basically just to 16 trigger a review. If there is justification for 17 a transfusion at high level of hemoglobin, meaning 18 that the patient is hemorrhaging, I don't think 19 there's going to be an argument and that's not the 20 intent. The intent is really to have a measure 21 for somebody to start in terms of a threshold for 22 the transfusion.

Once you've identified that hemoglobin is not the indication for a transfusion, as we all talked about was hemorrhage, then I don't think that there is an issue and to some extent I think that's -- there is some comments on the exclusion on that, if I recall.

7 CO-CHAIR FLEISHER: So let me throw out 8 something to the Joint Commission on what I'm 9 hearing. I actually think if you stratified this 10 by an intraoperative transfusion versus a post-11 operative transfusion, you might get some interest 12 -- it might have some more validity or some other 13 ways to get to some of the concerns.

I don't know whether others think about 14 15 that but that may be a way to -- because what I'm 16 hearing from the committee, and I actually -- I 17 don't want to have to worry about getting a 18 hemoglobin level and I'll say 10, that'll actually 19 it would be the hemoglobin level -- it'd be the 20 pre-op hemoglobin level and that will make it very 21 different to compare to, you know, a transfusion.

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But if I said intraoperatively, there 1 2 is a preoperative hemoglobin level and that's why we see some screwy data that doesn't make sense. 3 Post-operatively, I think, most of the time we 4 5 usually have time to get a hemoglobin level unless they're acutely bleeding. So I don't know if 6 7 that's something. I understand the concern 8 MS. DARDIS: 9 of the intra-op setting. One thing I'd like to 10 raise is that this is an all -- again, this is an 11 all patients measure. It's part of the set that 12 we brought to the surgical committee. This 13 specific measure is for all hospitalized patients, 14 not just surgical patients. 15 So the strata might have to look at 16 something different, but the intent was to improve 17 blood management for all patients with this 18 measure, not just the surgical. So I'm wondering 19 if another option -- I'm not the clinical expert 20 on this -- would be to exclude the intra-op 21 transfusion.

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CO-CHAIR FLEISHER: Is that of -- or

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stratified, which would be the other way to do it. 1 2 Barbee, did you have another comment? My other comment was 3 MEMBER WHITAKER: 4 just the value of having an eMeasure for this to 5 establish the infrastructure to be able to monitor and report internally. 6 7 I think that eMeasure process would be very valuable for everyone even if -- even if it's 8 9 not -- if we could keep it from being something 10 that you're -- something that you're looking at 11 but not something that you're held to. 12 CO-CHAIR FLEISHER: And thank you. 13 Comment? Rick? 14 MEMBER DUTTON: I think some of the 15 reaction of the committee is to the very arbitrary 16 nature of this: transfusion judged on a hemoglobin 17 level. The measures that have done better here, 18 just in the last two days, have been ones that are 19 measuring physician or practitioner judgment. 20 So if you could get at the underlying 21 physiology of this and, say, create an outcome 22 measure where, of the transfusions given, what

percent were indicated because of bleeding or 1 2 ischemia or a clinical indication for the transfusion. 3 4 Do I know how to e-specify that? No. 5 But that's where we would like to see a good 6 quality measure appear. 7 MS. DARDIS: Understood, that is not a eCQM. 8 9 MEMBER MOSS: I just want to ask if you 10 could help talk us through how this would sort of 11 play out in the real world. So you do these 12 thresholds. 13 A certain number of patients meet them. That will trigger a local review. Each case will 14 15 be looked at on an individual basis with a 16 clinical decision whether it was appropriate or 17 not. Then we come back next year and do these 18 thresholds again. 19 We don't know whether they should go up 20 or down or stay the same. How will be know if 21 this is working? 22 DR. WATERS: Well, getting back to the

University of Pittsburgh, what we've done for our 1 2 anesthesiology department is we've made this measure for -- it's a value measure for our 3 anesthesiologists and how they get paid. 4 What we found from hospital to hospital 5 is that one hospital will transfuse 95 percent of 6 their patients in the operating room with a 7 hemoglobin less than eight, whereas another 8 9 hospital in our system will transfuse their 10 patients only 45 percent of the time with a 11 hemoglobin less than eight. So there's huge 12 cultural variation from institution to 13 institution, or rather, hospital to hospital. 14 But the opportunity here is to decrease 15 that variability from hospital to hospital and I 16 think there's a large opportunity there. 17 CO-CHAIR FLEISHER: Okay. So we're worried about losing our quorum. 18 So Barry, 19 specifically --20 Yes, just one MEMBER MARKMAN: 21 question. Now, this is for a trial, right? 22 CO-CHAIR FLEISHER: Yes.

1	MEMBER MARKMAN: And then they'll come
2	back I mean, can they tweak or, you know
3	CO-CHAIR FLEISHER: So the answer is I
4	would hope that a few people over the next couple
5	days can send to Melinda if they have specific
6	questions for the Joint Commission to consider in
7	how they specify, correct?
8	And if the Joint Commission is
9	interested in addressing them then potentially we
10	could go from this gray area to get it back into
11	where it would be would pass the criteria. Am
12	I accurately at the time of the discussion,
13	yes.
14	MS. WATT: I'm sorry, and I think that
15	maybe, Jason, this is a question for you. It was
16	our understanding that this category had to do
17	with the appropriateness of the technical
18	specification of the measures, not the clinical
19	content of the specifications but the way that
20	they're represented for collection by an
21	electronic record.
22	What we are talking about has nothing

to do with that, and so I'm a little confused as to what -- we would be happy to look at making modifications to the clinical specifications but I'm not sure how that relates to this criterion for the HQMF specifications and we're hoping, Jason, that you can clarify.

7 MR. GOLDWATER: So Ann, you're correct 8 that this part of the feasibility really is 9 talking about being the electronic construction 10 the HQM on the format of the measure, the sources 11 the data collection could be implemented as not 12 referencing the clinical specifications. She's 13 correct.

MS. MURPHY: But the piece of the measure, Jason -- if you'd help us just a minute -- the piece of the measure that they're talking about and that they are -- they voted on are the specifications of the measure.

19MR. GOLDWATER: That was the path that20they just voted on. Correct.21CO-CHAIR FLEISHER: Right.

MS. MURPHY: Yes, that's what we're

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talking about.

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2 MR. GOLDWATER: Those were the clinical 3 specifications, right.

4 MS. MURPHY: Yes. 5 CO-CHAIR FLEISHER: Yes, we voted correctly from your perspective if we had concerns 6 7 about the clinical specifications or --MR. GOLDWATER: 8 That's correct. Right. 9 This -- this section, what we were just at, 10 feasibility is talking about the electronic

development of the measure.

MS. MURPHY: And the first part of the feasibility are the specifications. That's the one piece that we understood that the committee was to vote on were those specifications of the measure that in fact are listed in the feasibility section.

That's correct.

MR. GOLDWATER: That this -- the
electronic specifications of the measure lead to
the metric that matches the purpose and intent.
That's correct. The specifications that were
voted on before are clinical in nature.

MS. WATT: You're talking about the 1 2 evidence and the gap that we voted -- that were voted on previously -- the content of the measure. 3 4 MR. GOLDWATER: That's correct. That's 5 what you just voted on recently. CO-CHAIR FLEISHER: And then 6 7 specifications. 8 MR. GOLDWATER: That's passed, right. 9 The electronics that you were just on in the 10 feasibility part in specifications, is the 11 construction of the measure electronically, will 12 it lead to the metric that matches the intent of 13 the measure? 14 CO-CHAIR FLEISHER: So the concerns of 15 many of the committee is whether the clinical 16 specifications were valid to -- it's almost 17 validity if we were in a different measure. 18 Where do we put that in this construct? 19 Because what we were told is when you 20 come back, we don't vote on that again. So I 21 think what you're hearing is some confabulation. 22 MR. GOLDWATER: So, I mean, I think if

there's concerns about the clinical nature --1 2 clinical specifications of the measure then -- I don't know, that's kind of a -- you have to sort 3 4 of balance that, I guess. 5 If you've got concerns about the clinical specs and you're not sure about whether 6 or not it's conducive or not to, I guess, 7 improving overall quality based on the objective 8 9 and intent of the measure, then when you get to 10 this feasibility part all you're really looking at 11 there is, you know, electronically speaking was it 12 constructed in such a way that it matches the 13 overall intent? 14 So if you've got a problem with the 15 intent, subsequently, there may be an issue with 16 the way the measure is designed.

17 CO-CHAIR FLEISHER: I'm not sure if18 that helped you.

MS. WATT: Thanks. We'll look forward
to hearing what Melinda shares with us.
MS. MURPHY: So I think -- and Christy,
will help -- if they send the comments to surgery

1 2 MS. SKIPPER: Yes. Surgery@qualityforum.org. 3 Any comments or input and provided to the Joint Commission on this 4 5 measure. CO-CHAIR FLEISHER: Let me be specific. 6 7 What we want is comments, not to change the whole measure. If there are tweaks to the way 8 9 inclusion, exclusion -- and please correct me if 10 I'm overstating my interpretation. 11 It's clinical content. MS. SKIPPER: 12 CO-CHAIR FLEISHER: Clinical content 13 that they could take back to their TEP to see 14 whether or not they agree with us. That might 15 change how we vote on the November call. That's 16 what we're looking for over the next three to four 17 days. 18 MR. GOLDWATER: And then whatever 19 changes -- if there are recommended changes or 20 changes that are made, then subsequently, the 21 electronic specifications may also be changed as

22

well, potentially. Right.

1	CO-CHAIR FLEISHER: Fred?
2	MEMBER GROVER: I'm just a I think
3	we've got it backwards here because what we're
4	trying to do at least my thought was when we
5	got into this was to streamline this for you so
6	we could give you this advice up front because if
7	you go with what you've got now, I'll tell you,
8	when this comes back this doesn't meet, you know,
9	what we understand are the important variables.
10	There's a big disconnect there. You'd
11	be wasting your time and if you get it if we
12	tell you now what we think is important, then when
13	you go to the electronic thing you've hopefully
14	got it as close together so we don't come back a
15	year from now and say why did you do this and
16	start all over again.
17	CO-CHAIR FLEISHER: Thank you. Okay.
18	We should continue. Feasibility.
19	MEMBER WHITAKER: I don't have an
20	comments on feasibility.
21	CO-CHAIR FLEISHER: Okay.
22	MS. QUINNONEZ: Voting is now open for

1	the feasibility of measure 3020. Option one,
2	high, option two, moderate, option three, low and
3	option four, insufficient.
4	(Pause.)
5	MS. QUINNONEZ: Looking for one more
6	vote. If you could resubmit your votes please and
7	point them this way.
8	(Voting.)
9	MS. QUINNONEZ: Voting is now closed.
10	Feasibility for measure 3020 reads 18 percent
11	voted high, 35 percent voted moderate, 35 percent
12	voted low and 12 percent voted insufficient.
13	Consensus not reached.
14	Are there any further comments on use
15	and usability? We are now voting for use
16	usability and use of measure 3020. Option one,
17	high, option two, moderate, option three, low and
18	option four, insufficient information.
19	(Voting.)
20	MS. QUINNONEZ: All votes are in and
21	voting is now closed. For the usability and use
22	of measure 3020, 0 percent voted high, 29 percent

voted moderate, 35 percent voted low and 35 1 2 percent voted for insufficient information. 3 CO-CHAIR FLEISHER: Not a must pass. 4 So okay, so vote on that. So next. So we are 5 done with this measure? Right, and we can't vote on that, given -- right. 6 7 So since consensus is not reached we will not vote on this. We will be voting, going 8 9 through this again on the November call and 10 hopefully we'll be able to get those comments in 11 to make it -- that the committee is interested in 12 going forward. 13 So the last measure is 3021, blood 14 usage. 15 MS. DOMZALSKI: Measure 3021 looks at 16 blood usage in general in selected elective 17 surgical patients. It has a denominator of 18 patients who had the timely pre-op assessment that 19 is between 14 and 45 days prior to the procedure. 20 And by identifying which of these 21 patients had pre-op transfusions, which is the 22 numerator, there is an opportunity again for the

blood management review committee by review of the case to identify any other blood conservation methods that should have been undertaken in order to avoid that transfusion.

5 Whether those methods are preoperative 6 anemia correction, use of a Cell Saver or other 7 technologies or education in general to what 8 restrictive transfusion strategies encompass that 9 would be a matter of determination for each 10 hospital's committee to decide.

Again, it may confirm that no additional education efforts are needed. But it was for that particular month or that particular time frame a number of patients whose transfusions were unavoidable.

16But we do want the transfusion17committee to look at those patients who had18transfusions with an eye towards a more19restrictive strategy.20CO-CHAIR FLEISHER: Okay. Larissa?

21 Barbee, either one?

MEMBER WHITAKER: Thank you. So this

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1 measure is intended to assess the effectiveness of 2 the preoperative anemia screening by identifying 3 those patients who had been appropriately screened 4 but still required a perioperative blood 5 transfusion. So not as -- the effectiveness of 6 actual -- the actual screening but the treatment 7 after the screening.

8 I had a little trouble with this 9 because it seems like there's still a big gap in 10 the denominator whether there would be sufficient 11 14 to 45-day preoperative anemia screening because 12 we had the whole discussion about the 13 appropriateness of that.

14 So that's really my comment on this 15 particular measure. I do have some comments on 16 numerator and that I think nonautologous shouldn't 17 be mentioned at all.

18 CO-CHAIR FLEISHER: So I'm going to 19 actually ask staff to comment. Since we didn't 20 pass that first one, it makes it difficult to look 21 at the issue of in those who got transfused was it 22 appropriate. So what's the best way to address

It's a question, Barbee, for you too. 1 that? Yes, 2 Barry? Can I just take that 3 MEMBER MARKMAN: variable out and still proceed with the data 4 5 collection? 6 CO-CHAIR FLEISHER: So I quess that's 7 a question to the Joint Commission because I think what I'm -- one question is without that being 8 9 passed, how do people feel about the rest of the 10 measure? It's up to you whether you want us to 11 vote with or without that question. 12 MEMBER WHITAKER: You take that out. 13 MEMBER MARKMAN: It doesn't mean -- I 14 mean, in the measure itself, I mean, I don't know. 15 There's certain variables that you're looking at. 16 I mean, this is more of a data collection type of 17 measure. 18 CO-CHAIR FLEISHER: Other comments? 19 (Pause.) 20 CO-CHAIR FLEISHER: So I'm told that we 21 don't have a quorum. So we -- for this measure, 22 unfortunately, so we will not be voting. No, this

is not Chicago. So why don't we --1 2 MEMBER MARKMAN: Yes. Yes, can we call 3 them? 4 CO-CHAIR FLEISHER: How many do we 5 need? Call Rick? I don't know if I have Rick's cell. 6 7 MS. DOMZALSKI: I have his. CO-CHAIR FLEISHER: You have it? Can 8 9 you tell him to dial in? He's not on the phone. 10 I don't have Barbara's -- I don't think I have 11 Barbara's cell. Other comments regarding 12 evidence? 13 DR. SHANDER: Lee, I can't -- I can't 14 I would love to but I can't. vote. 15 CO-CHAIR FLEISHER: Any comments from 16 the committee on this measure? 17 MEMBER SIPERSTEIN: I mean, this 18 discussion parallels exactly 3016 and so we've 19 already been through this. There's the rub. 20 CO-CHAIR FLEISHER: So your suggestion, 21 Allan, is --22 MEMBER SIPERSTEIN: Well, if there's

not a quorum, we'd have to follow this with a 1 2 phone conversation but I think a good chunk of the discussion it would just be, you know, repetitive 3 4 to redo the discussion at this point. If we need 5 to vote, we can vote on the phone conference. 6 CO-CHAIR FLEISHER: Yes, we can and we 7 can do the evidence review. We can do the evidence on this, or just actually if you give it 8 9 to -- if Christy can take his vote over the -- the 10 hand. Okay. We have a quorum. Can you call the 11 vote? 12 MS. QUINNONEZ: I can. We are now 13 voting --14 CO-CHAIR FLEISHER: Wait one second. 15 (Pause.) 16 CO-CHAIR FLEISHER: So one important 17 thing is they actually don't say the fact -- it's 18 not fully linked, this measure, to 3016. They use 19 the term -- use the term timely preoperative 20 screening, nut it's -- is it defined in the 21 specifications as 3016? It does say that in the 22 specifications? Okay. So why don't we call the

1 vote? 2 MS. QUINNONEZ: We are now voting on 3 measure 3021. Voting is now open for evidence. 4 Option number one is -- actually there is no 5 option number one. Option number two is moderate. 6 Option number three is low and option number four is 7 insufficient. Option two, moderate. Option 8 9 three, low, and option four insufficient. 10 (Voting.) 11 MS. QUINNONEZ: All votes are in. 12 Voting is now closed. For the evidence of measure 13 3021, 25 percent voted moderate, 44 percent voted 14 low and 31 percent voted insufficient. 15 CO-CHAIR FLEISHER: So this measure 16 does not go forward. It would be great from my 17 perspective to get feedback on how people think 18 about this trial measure and then maybe, Jason, we 19 can continue the discussion with some input from 20 the --21 MR. GOLDWATER: Always welcome. 22 CO-CHAIR FLEISHER: Can we -- can we

1	open the phones for public comment?
2	OPERATOR: Thank you. At this time, if
3	you'd like to make a comment please press star
4	one. We'll pause for just a moment.
5	(Pause.)
6	OPERATOR: And there are no public
7	comments at this time.
8	MS. SKIPPER: Thank you, everyone. We
9	have successfully made a recommendation on almost
10	all of the measures but I'm glad that we were able
11	to get through this last one.
12	I just wanted to share that we do have
13	a post-meeting call next Thursday, August 25th,
14	from 2:00 to 4:00 p.m., and then the next call
15	that we would have as a group is our post-draft
16	comment call. So once we do put the report
17	together and put it out for comment, we'll bring
18	you all back to respond to the comments and vote
19	on any measures where consensus is not reached.
20	Finally, I want to say that for our new
21	committee members, to Karl, Barbee and I'm
22	drawing a blank Sal, yes, sorry about that

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we will be asking you to pull a number from our 1 2 magic bowl down here to select your committee 3 term. 4 New committee members may serve --5 well, you'll pick a number and either you'll be assigned a two-year term or a three-year term and 6 7 after your first term, you may elect to serve a second term. And for all remaining and continuing 8 9 committee members, I'll be in touch with 10 information on your next term. 11 So right now I'm going to go around and 12 have our new committee members select their term 13 and state that for the record. 14 CO-CHAIR FLEISHER: Before we all

15 leave, I'd like to say a thank you to the staff.16 Really appreciate it, Christy and the team.

(Applause.)

18 CO-CHAIR FLEISHER: For Melinda also
19 for leading us and appreciate Elisa, please send
20 our thanks to Marcia and Helen for coming in and
21 helping us out when we got into quandaries.

MEMBER SCALI: For the record it's two

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1	years Sal Scali.
2	MEMBER BILIMORIA: Karl Bilimoria
3	two years.
4	MEMBER WHITAKER: Barbee Whitaker
5	three years.
6	(Whereupon, the above-entitled matter
7	went off the record at 2:34 p.m.)
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Α A.J 2:20 45:14 46:3 67:3 77:17 95:4,8 113:16 148:4 179:11 184:4 196:21 212:10 255:12 295:7 316:2 A.J.'s 99:20 **a.m** 1:9 6:2 128:18,19 **AAA** 261:14 262:15,20 306:12 AABB 300:16 313:5 ABD's 304:21 abdominal 252:9 261:15 307:3 ability 106:3 131:8 176:21 219:4 232:10 ablation 109:19 able 73:18 86:19 88:2 95:22 106:2 171:12 182:17 203:16,22 204:4,5,6 205:5 210:8 218:22 222:6 229:3 236:1 239:4 254:7 311:15 332:5 343:10 350:10 above-entitled 128:17 244:22 352:6 absence 10:8 110:3 absolutely 84:16 152:3 157:17 158:9 178:20 211:14 213:14 221:16 292:1 296:4 absorption 270:7 abstaining 19:10 129:17 abstracted 216:20 **abstracter** 100:11,12 100:17 abstracters 100:13 abstraction 64:1 214:21 216:16 224:20 261:4 abusing 309:10 academic 79:19 261:2 ACC 34:9 accept 14:3 acceptability 97:15 98:1,6 126:7 220:20 231:18 245:11 acceptable 136:9 acceptance 214:8 222:19 accepted 17:13 223:2 294:14 304:2 access 168:1,15 277:21 277:22 accessible 217:10 accessing 259:21

ACCF/AHA 12:21 accommodation 9:2 accord 173:10 account 210:13 accountable 38:6 205:1 accrual 151:9 accrued 163:4 accuracy 10:1 accurate 76:19 123:17 134:19 280:10 accurately 176:11 335:12 achieve 139:7 acknowledging 202:13 202:15 acquisition 168:21 acronym 221:16 **ACS** 137:18 138:22 159:11 act 316:14 active 16:18 33:5 205:21 304:17,19,22 322:10 326:3 327:6 328:1 actively 64:9 328:2 actual 58:8 78:17 140:22 174:8 253:1 255:9 257:4 269:10 300:20 345:6,6 acute 266:2 280:2 acutely 191:13 331:6 ad 107:15 209:7 adamant 148:18 add 11:20 55:19 57:22 61:11 62:21 65:9 68:3 70:1 116:20 121:20 130:18 155:12,19 160:2 213:7 250:7 281:2,22 added 33:1,2,10 55:4 59:12 60:3 64:1 65:10 134:7 155:13 240:14 adding 55:9 320:7 addition 55:7,11,12 139:1 213:17 247:17 304:12 additional 7:19 18:9 55:5 59:13 138:5 194:12 236:10 262:8 262:11 297:10 301:6 320:8 344:12 additive 32:1 address 21:17 76:22 93:4 104:14 106:12 183:14 197:8 207:14 212:3,12 237:16 238:7 247:9 249:9 261:3 264:8 296:15

305:16 307:9 345:22 addressed 54:15 93:3 149:4 163:13 235:8 265:4 addresses 166:17 addressing 107:21 335:9 adeguate 248:20 adequately 219:1 220:3 228:14 234:19 adhere 300:21 adhered 15:20 adherence 301:1 Adjourn 5:22 adjust 82:18 114:8 180:4 203:12 228:14 adjusted 4:12,12,14 71:7,8 129:3,3 137:20 159:19 197:3,7 199:6 201:20 202:1,18 205:11 226:21 228:6 adjusting 80:15 105:10 269:20 adjustment 133:2,9 178:20 179:3 180:21 180:22 196:22 197:22 198:21 201:13 202:6 205:12 209:5,9 211:4 211:5 213:6 226:18 228:7 237:7 285:9,20 adjusts 105:5 administration 1:14 81:19 299:4 administrative 100:22 admission 322:22 admissions 152:19 admit 193:7 214:18 adoption 215:2 217:6 adult 4:8 10:15 11:3 29:8 71:1 72:15 194:17 288:19 289:1 299:16 advance 321:16 advanced 11:12 191:11 advances 11:11 135:14 advantage 32:5 44:20 advantages 106:8 310:19 adverse 16:16 106:3 110:21 153:16 advice 45:4 341:6 advise 247:22 advised 129:19 advisory 246:7 247:17 247:19 324:8 advocate 328:14 advocating 253:20 Aetna 2:6

affect 135:16 177:3 238:12 272:20 309:5 afford 55:13 aforementioned 121:3 afternoon 214:3 215:22 245:21 age 135:20 136:1,1,4,6 136:8 165:22 178:22 191:5,10,14 308:16 321:8 aged 12:4 agenda 202:11 204:8 204:15 aggregate 147:5,8,10 147:11 148:2 149:20 159:20 189:11 299:21 299:22 ago 20:12 23:11 33:8 223:15 251:9 258:22 258:22 264:21 304:14 agree 7:20 16:6 39:20 45:8 67:16 76:14 77:12 87:14 93:18 119:16 158:9 161:19 165:10,12 166:13 178:17 204:17 243:8 250:9 263:18 340:14 agreed 198:10 304:3 306:3 agreement 190:20 302:13 320:20 AHA 34:10 163:9 ahead 38:17 66:14 84:9 98:19 117:5 125:10 155:12,21 161:22 164:1 169:3,18 241:9 306:16 Ahn 3:9 171:2,3 181:17 182:5,22 185:18 187:20 191:5 193:17 195:7 200:14 203:13 205:19 206:2 207:16 210:14 213:15 aim 276:16.18 Alban 246:4 aligned 196:17 Allan 2:17 25:15 45:14 104:10 166:19 255:13 272:12 287:11,14 328:10 347:21 alleviate 308:20 Alliance 2:10 allow 103:4 151:3 200:1 227:5 264:4 274:12 283:12 300:22 allowed 84:10 239:6 allowing 225:21 allows 39:4 78:18 107:9

353

226:7 already-approved 135:7 altering 172:12 alternative 87:14 amazing 188:3 amend 252:13 American 1:21 2:2,3,5 2:14,19 3:11,14 4:13 4:14 6:13 129:4,11 135:12,12 180:9 204:1 291:2,18 292:15 **AMI** 4:4 amount 15:16 75:5 168:6 193:21 217:3 250:20 281:9 326:5 Amy 2:9 17:18 22:17 102:18 153:13 208:14 210:2 228:20 249:4 250:14 297:17 314:1 322:15 analogy 40:8 analyses 92:16 93:12 analysis 75:2 77:22 181:5 Analyst 3:6 analysts 247:20 analytic 94:10 analyze 223:5 analyzed 79:12 121:8 Anastasia 273:2 and/or 109:12 160:20 276:3 Anderson 194:1 anecdotal 268:6 anecdotes 265:9 268:5 271:12 anemia 4:19 245:19 248:7,9,12,15,17,21 248:21 249:7,15 250:2 256:11,14,15 256:22 257:8,16 258:6,8,10,10 259:4 261:21 262:1,3 263:9 263:11 265:1,2 268:11,17 269:1,2,4,9 269:21 270:15 271:15 271:18 272:5 275:3 275:12 276:2 277:5 280:1,2 281:5 286:11 286:17 328:15 329:11 344:6 345:2,11 anemic 253:15 259:5 262:16 271:4 275:5 277:1 anesthesia 1:17 2:8 23:18 81:22 250:21

anesthesiologist 77:13 79:4 274:6 301:9 anesthesiologists 1:13 2:14 61:6 79:3 334:4 anesthesiology 1:12 334:2 aneurysm 261:15 287:10 307:4 aneurysms 252:9 ankle 173:14 Ann 3:18 229:15 235:21 246:4 324:4,15 336:7 annual 107:8 209:16 263:3 annually 131:21 134:15 143:6,8 answer 20:7 42:15 50:20 64:3 88:19 118:9 148:1,3 149:11 174:1 218:10 229:19 309:16 335:3 answered 222:16 236:18 anterior 12:18 13:10 antibiosis 177:4 antibiotic 23:11 24:1 46:6 47:21 antibiotics 199:13 270:10 antibodies 292:11 294:21 antibody 5:8 288:16 291:10 anticipated 128:5 anticipation 181:3 anxiety 273:11 anybody 6:22 15:7 27:15 35:14 49:4 52:1 52:13,22 56:3 62:3 70:2 116:22 202:1 252:18 272:11 274:7 285:2 291:21 298:3 323:5 anymore 81:15 96:8 192:1 anytime 289:3 anyway 61:21 280:20 aorta 303:6 304:17 aortic 71:3 252:9 261:15 306:20 307:13 apologize 322:16 apparent 316:1 apparently 103:12 appear 35:18 135:2 146:8 333:6 **appeared** 202:16 appearing 145:13 appears 195:9 265:18

**applaud** 186:21 applauded 180:5 **Applause** 351:17 **apples** 285:19,19 applicable 75:3 application 143:14 211:10 213:19 234:21 applied 176:9 234:8,10 234:14 applies 164:13 192:2 **apply** 57:10 99:19 123:13 125:6 150:12 150:12 176:12 192:1 255:8 282:13 applying 75:11 appreciate 17:20 22:16 103:3 128:16 194:10 215:15 279:13 351:16 351:19 approach 77:10 90:9 approaches 11:13 91:15 approaching 13:12 appropriate 140:3 168:13 289:22 293:2 294:19 295:2 314:9 333:16 345:22 appropriately 201:6 248:3 345:3 appropriateness 175:20 335:17 345:13 approval 180:11 206:6 219:7,10,17 220:10 220:12,18 221:4 224:13 228:12 230:4 234:9 235:10 236:20 236:21 240:17 242:14 247:6 261:8 323:13 approve 228:7 236:12 **approved** 122:20 135:11 146:7 227:2,2 266:12 approving 219:11 approximately 186:1 190:19 252:6 approximates 13:17 arbitrary 149:14 332:15 area 7:21 21:15 45:20 66:8 135:17 259:14 314:19 317:15 335:10 areas 9:21 93:16 96:2 233:3 236:10 242:18 243:4 273:6 275:14 arena 29:9 argue 46:13,17 81:10 256:21 296:2 **argument** 42:4,20 269:8 292:1,1 329:19

Arkansas 2:11 arrest 157:16 **arrive** 151:16 arriving 110:15 121:16 arteries 13:6 15:17 artery 4:3,4,10 12:2,6,8 12:11,14,19,19,21 13:4,7,10 17:11 19:2 19:2 22:22 arthritis 172:17 314:21 **article** 139:4 articles 54:22 articulate 325:6 articulated 57:18 235:1 235:12 236:6,9 242:12 articulating 235:22 **Aryeh** 3:16 264:4,5 268:1 272:7 280:14 291:21 as- 111:10 **ASA** 133:3 ASD 109:19 aside 153:8 221:13 317:12 asked 77:1 82:15 185:18 221:13 227:16 229:18 251:4 264:4 278:3 315:11 325:19 asking 50:6 157:20 185:19 209:11 239:10 239:11 256:18 325:1 351:1 asks 221:15 asleep 128:4 aspect 39:2 150:15 156:14 209:13 aspects 71:18 131:12 132:17,20 149:20 assess 248:3,20 250:12 260:5 278:7 288:18 292:22 298:20 345:1 assessed 154:21 246:19.22 assesses 248:7 274:17 Assessing 259:4 assessment 61:5 142:5 248:9,12,16 254:3,18 255:11 258:10 272:6 279:6 285:15 343:18 assessments 137:3,5 assigned 351:6 assist 247:1 Assistant 2:15 Associate 2:20 associated 112:8 193:10 197:17 246:16 281:14

association 2:14.20 3:10 4:17 6:14 171:5 175:7 181:20 186:22 264:13 assume 120:11 assuming 155:2 assure 71:19 assures 63:20 asymptomatic 148:12 149:22 atrial 32:12,12 54:19 attached 134:1 attacks 32:6 attempting 141:15 attend 171:14 attention 321:21 attribution 104:19 audible 15:9 18:16 23:16 28:16 29:14 30:22 36:3,5 49:3,7 52:3,5,12,15,21 53:2 56:4,14 63:6 66:13 70:4,7 74:6 89:17 90:18 97:3 audience 54:14 183:3 audit 10:5.7 131:19 143:6 audited 143:8,10 auditing 28:8,8 132:7 audits 10:8 91:13 August 1:6 350:13 Australian 271:7 authors 138:22 160:14 automate 64:19 automated 64:20 65:14 automatic 260:7 automatically 316:17 automobiles 8:4 availability 96:18 available 94:21 99:11 165:5 215:11 217:9 219:3 225:3 229:10 239:2 244:5 266:13 295:3 avenue 206:22 209:9 avenues 65:15 average 18:10 44:13 46:14 53:22 297:21 averages 100:16 aversion 104:21 105:14 106:6,13 avoid 105:11,17,19 344:4 avoided 84:17 326:22 avoiding 198:19 AVR 71:4 72:6,7 **AVR/CABG** 109:13 aware 25:9 43:14,14

awareness 286:10,21 **awesome** 104:8 awful 259:10 В **B** 32:11 279:5 B12 256:16 back 16:1 20:6 22:8 25:11 31:11 41:22 42:10 45:6 47:10 54:5 56:9 81:2 103:12,18 106:14,22 107:3,15 107:20 119:10,13 128:21 132:8 153:4 153:12 155:5 157:6 157:11 176:22 178:16 180:12 183:13 200:6 205:8 209:10,15,18 214:19 219:21 223:7 223:21 224:3 226:12 226:15 229:2 232:19 233:2,5,11 234:1 235:16,19 236:11,14 237:6 238:4,6 240:14 243:2 244:13 245:4 271:2 272:14,19 281:22 294:2 314:5 324:7 333:17,22 335:2.10 338:20 340:13 341:8,14 350:18 background 171:17 174:16 backing 148:17 backwards 47:7 341:3 bacteria 199:9,13,18 bad 81:13 105:18 181:4 202:2 218:7 250:10 285:3 Badhwar 3:10 9:1,2 11:6 22:15 51:13 70:20 73:2,7 76:12 77:6 78:6,9,12,15 79:15 80:5,11 82:14 82:20 83:19 84:2 88:4 88:15 93:5 102:14 104:20 109:5,11 113:3 114:6,16,19 115:3 120:15,18 121:2 128:14 balance 144:20 339:4 Baltimore 193:9 bang 136:3 bank 316:5,7,18 Banks 2:20 6:14 Barb 258:15 Barbara 2:4 7:6 24:15

229:13

37:19 73:13 74:5 77:19 95:3 240:12 241:2 243:7 260:3 277:18 282:9 293:12 Barbara's 347:10,11 Barbee 2:19 6:13 237:14 250:5 252:13 274:21 287:1 289:11 292:18 300:1 313:2 318:10 324:9 325:19 332:2 344:21 346:1 350:21 352:4 Barei 187:21 barrier 290:12 Barry 2:6 87:10 88:11 234:4 236:22 289:12 290:9 313:10 322:14 334:18 346:2 base 182:9 231:3,15 based 9:15 61:4 132:21 147:12,20 149:12 155:2 164:21 185:12 190:17 194:4 197:20 206:18 210:7 284:6 287:14 305:10 310:3 312:3 313:4 339:8 baseline 239:3 basically 40:9 134:11 195:14 224:11 294:9 329:15 **basis** 61:12 187:12 205:21 210:7 235:22 256:7 333:15 Bayesian 71:21 133:9 bearing 172:14 **beat** 128:4 beating 230:7 becoming 307:2 bedside 309:5 beginning 208:10 behalf 171:5 behavior 22:9 105:12 263:7 believe 10:19 33:4 82:14 119:1 185:22 203:17 204:3 232:8 243:20 282:19 believing 55:11 benchmark 279:20 285:18 benefit 17:16 55:1,12 65:3 99:6 271:15 321:9,20 benefits 13:9 55:10 59:6 benefitted 275:2 Berian 3:11 129:12 141:10,12

best 69:20 79:2.2.3 85:7 91:18 131:17 184:6 185:21 199:5 239:4 244:12 345:22 beta 4:5,6 31:21 32:10 32:20 34:13 39:5,18 40:3,7,11,17 44:17,19 47:5 49:20,21 50:2 51:17 54:10,19 55:1,5 55:11 58:2,5,13,18 59:6,9 60:9,17 61:14 65:11 beta-blocker 51:5 better 36:17 74:18 106:1,5 136:19 158:7 167:20 192:22 193:1 203:22 230:16 257:1 282:8,19 293:5 316:5 332:17 beyond 77:15 85:18 310:9 bias 130:16 137:8 145:15,22 187:6 biased 137:5 bicondylar 4:16 170:21 171:7 172:1,5 173:18 176:1 178:4 183:2.7 big 95:15 96:8 173:21 187:13 211:3 255:5 261:16 276:11 284:20 315:7 341:10 345:9 bigger 313:12,20 314:8 biggest 226:18 248:22 **Bilimoria** 1:15 73:14 74:15 75:15 83:2,11 89:14,18,20 90:1,4 91:9 92:10 93:18 94:22 97:14 98:14 100:20 102:2,9 119:16 137:7 206:12 309:22 352:2,2 Bill 171:10 203:15 207:17 208:1 billed 151:21 Billings 95:13 **billion** 100:5 269:5 **biology** 133:6,15 **biopsies** 210:16 **bit** 15:1,14 21:7 31:13 32:22 33:11 38:8 45:19 56:10 63:21 75:18 112:16 134:5 141:6 171:17 200:13 200:15 210:12 241:4 **bits** 284:14 **BJC** 129:10 black 253:21 blank 350:22

blanket 282:13 blanking 231:1 bleeding 71:13 263:19 303:16 304:17,19 305:1 316:16 320:4 322:10,11 326:3,17 327:6,20 328:2,22 331:6 333:1 blended 277:12 **Blockade** 4:5,6 blocker 50:2 58:3,5,19 59:9 60:9 blockers 31:21 32:10 32:20 34:13 39:5,18 40:3,7,12,17 44:17,19 47:5 49:20,21 51:17 54:10,20 55:1,5,11 58:13 59:6 60:17 61:14 65:11 blocks 270:7 **blood** 2:20 5:7,14 6:14 50:19 246:9,10 247:3 247:21 248:2 252:10 265:12,20 266:8 269:18 274:6,13 275:10 276:19 277:20 278:1,5,13,16 282:10 282:17 284:2,3 287:9 288:15 289:22 290:4 292:4,5,6 294:8,15,22 295:3 296:19 297:7 297:21 299:3,10,17 300:11 302:21 306:14 309:7,10 310:2,8 316:5,7,7,9,12,14,18 317:3 318:3 321:15 322:20 327:4,18 331:17 343:13,16 344:1,2 345:4 board 77:9 84:10 204:14 237:12 311:3 **body** 137:22 305:11 bone 175:5 Bonnie 221:11,15,20,21 232:1 238:22 239:3,9 239:22 240:17 244:1 244:7 **bony** 186:1 book 254:12 **booked** 263:5 books 272:2 borders 187:7 bothers 199:20 **bowl** 351:2 box 58:10 60:18 61:3 65:11 bradycardia 40:9 bradycardic 61:1

brain 234:9 brand 180:7 216:10 217:8,22 break 128:12,12 283:10 breaking 273:21 breaks 263:6 brief 22:15 51:13 76:12 129:20 159:15 221:13 268:2 280:15 briefly 9:21 77:9 121:1 121:2 247:9 bring 21:18 39:2,13 80:22 95:2 178:16 179:4 209:18 219:21 241:7 243:2 317:17 328:15 350:17 bringing 37:8 209:1 260:3 261:10 310:18 broad 256:12 broadening 46:1 brought 7:13 42:10 196:21,21 199:1 212:4 226:12 231:10 287:5,6 331:12 Bruce 3:14 128:13 129:8 160:17 **BS** 3:13 **BSN** 2:12 **buck** 136:4 build 65:7 260:3 286:7 **built** 63:22 193:18 227:5 228:6 317:10 bullet 243:17 **bunch** 146:14 202:8 257:20 259:15 burden 33:2 37:9,12 65:10 66:9 101:6 134:1,6 145:1 174:22 175:2 310:13 311:12 burdened 186:15 burdensome 174:4 BURSTIN 3:2 business 167:21 bye-bye 244:14 bypass 4:4,10 11:16 12:3,18,19,21 13:4,7 13:10 14:11 16:4 17:12 19:2 32:9 61:13 71:3 121:21 261:16 bypassable 12:13 bypassing 318:4 С

C 279:6 c- 121:14 c-statistic 110:8 140:22 198:12 CABG 4:4 10:22 12:5

Neal R. Gross and Co., Inc.

12:17 34:9 35:5 71:4 71:6 72:6,7,8 99:12 121:4 144:2 **CABG/AVR** 109:13 calculate 222:9 calculated 153:19 calculates 221:9 calculating 222:3 call 8:19 18:17 48:2 142:13 146:7 216:12 216:18 220:22 226:6 279:12 298:6 320:16 320:22 324:1 340:15 343:9 347:2,5 348:10 348:22 350:13,14,16 called 80:13 214:20 294:7 calling 101:1 calls 144:2 166:13 **Canadians** 192:21 cancer 2:19 253:16,22 265:3 270:12 271:14 271:20,21 Candidate 4:3,19 5:1 capture 33:2 113:1 141:21 144:16 149:22 149:22 191:15 248:4 259:12 260:19 293:18 311:15 313:14 captured 47:14 140:7 144:15 151:7 162:19 168:7 192:13 217:17 260:16 320:8 captures 12:3 98:15 capturing 24:6 37:7 144:21 309:9 cardiac 4:8 9:10 10:15 11:2,3 12:8 15:19 17:10,15 29:8 31:22 47:1 50:18 71:1,13 72:16 76:4,14 81:16 81:22 85:10 95:18 96:4,20 99:1,3 104:3 150:8 157:16 268:10 268:15 301:12 308:15 cardiologist 95:17 96:7 cardiologists 50:17 79:3 cardiology 306:16 cardiothoracic 1:19 168:5 Cardiovascular 301:9 care 2:2 21:18 79:2 106:2,5 131:7,8 135:14 144:6 158:6 175:1 192:8,11,16 194:11,17 198:18 200:20 201:5 204:21

208:2 226:2 264:20 266:1 286:14 303:6 306:9,12 309:17 313:15,21 321:11 326:13 cared 194:20 careful 100:21 106:7 265:9 carefully 292:22 carries 54:21 carry 52:7 212:16 carrying 125:12 185:4 189:1 cascade 153:18 case 4:12 68:8 99:12 100:18 110:13 114:21 115:10,11 119:14,18 129:3 142:8,16 143:4 154:1,2 157:8,11 163:9 218:20 222:15 234:20 235:16 264:19 277:9 333:14 344:2 cases 12:22 72:10 78:4 80:9 91:17 100:12,16 110:14 115:11 121:7 121:16 124:9 139:10 162:17,17,19 163:3 163:12 210:11 261:14 283:10,15 292:5,6 326:7 categorically 321:19 categories 119:5 135:4 categorization 320:8 category 73:16 129:21 131:4,10 150:22 318:13 335:16 cath 95:17,17 96:7 catheter-based 11:13 caught 140:9 202:10 cause 16:16 43:21 248:16 276:3 caution 66:3 cautious 51:17 cc's 298:1 CDC 174:10 175:19 189:20 191:19,20 195:3,10 196:17 199:7,9 200:1,20 201:8 231:21 CDP 232:22 233:3 cell 256:14 286:3 299:17 312:2 344:6 347:6,11 center 1:15,18 2:19,22 3:17 47:12 95:20 180:1 181:19 185:13 186:6 187:22 188:6 193:8 205:2 265:13

266:3 270:10 306:1,3 313:15 centers 47:1,2 173:8,20 180:17 181:21 199:2 199:4 267:6 285:19 306:4 central 16:3 certain 21:17 38:6,12 44:21 199:2 233:2 249:16,17 266:14 273:17 285:14 297:5 297:5 333:13 346:15 certainly 23:13 40:19 60:12 166:13 204:14 205:12 207:22 210:16 215:17 225:1 247:5 253:20 276:6 278:18 certification 265:14,21 266:1,7,15 certified 197:10 267:6 cetera 71:14 157:16 263:13 299:15 316:17 chain 71:21 chair 1:11,15 9:4 11:3,7 34:15 37:14 325:17 **Chairman** 2:17.21 chairperson 246:7 challenge 165:11 challenges 284:6 challenging 276:4 chance 80:20 180:15 181:15 281:20 chances 258:11 change 31:12 42:11 64:13 92:17 107:12 107:13,19 131:5 149:6,11 209:17 236:12 263:7,8 282:13 307:20 324:1 325:2 327:20 340:7 340:15 changed 22:10 64:14 340:21 changes 53:15,17 107:10,11,11,13 160:18 172:15 225:10 236:5 320:15,18,21 324:5,5,7 340:19,19 340:20 changing 64:15 characteristic 114:14 characteristics 28:9 238:17 253:1 chart 40:21 114:1 115:5 140:10 214:21 216:16 216:20 224:20 277:21 278:5 303:22 chart-abstracted

216:14 charts 278:21 chastised 96:22 **check** 58:9 119:13 254:20 checked 72:18 99:2 273:8 checking 65:10 checklist 46:12 checkup 263:3 cheering 102:21 chemotherapy 270:9 chest 1:22 95:16 96:14 148:14 CHF 266:2 310:5 Chicago 132:1 347:1 Chief 1:17 3:2 11:1 child 99:13.15 children 166:8,21 189:8 194:11,14,17,19 221:19 Children's 2:9 choice 239:15 choose 87:17 219:19 choosing 203:6 chopper 151:17 chose 264:13 chosen 230:2 264:10 **Chris** 205:8 207:9 Christopher 2:15 301:21 Christy 3:6 8:7 18:15 129:1 339:21 348:9 351:16 chronic 262:1 263:11 276:3 280:1 **chunk** 168:9 348:2 Cima 6:17 circumstance 312:8 circumstances 300:19 318:20 cite 138:1 197:2 cited 185:7 289:18 claim-based 207:6 claims 76:17 155:17 claims-based 216:13 clarification 41:19 305:19 306:8,8 320:11 322:2 clarified 233:18 298:18 clarify 142:17 143:18 157:22 160:17 207:15 336:6 Clarissa 160:7 clarity 200:13 class 12:20 13:2 22:5 22:12 32:11 133:4 classic 199:18

classical 7:9 classification 194:1 **clean** 235:19 **cleaning** 284:13 clear 80:6 88:6 94:22 102:17 161:16 162:14 198:8 231:12 236:19 249:13 272:15 275:13 329:1 clear-cut 28:10 clearly 40:6 54:22 57:18 73:16 74:19 90:7 92:11 106:21 128:3 160:12 165:6 184:5 215:6 226:3 236:9,17 237:12 242:2,9 276:6 292:15 293:19 Cleveland 2:17 264:20 **Cliff** 41:5 128:2 200:7 201:10 205:8 208:15 211:1 213:9 234:4 CLIFFORD 2:1 clinic 2:17 264:20 273:18 clinical 2:12 9:12 40:9 65:22 66:1 76:3.19 95:7 166:1 178:5 189:22 211:12 215:10 216:2 247:17,20 248:19 272:18 278:22 282:14,21 283:18 289:18 301:13 305:4 305:4 311:1 317:2 325:2 326:10 327:2 328:13 329:6 331:19 333:2,16 335:18 336:3,12 337:2,7,22 338:15 339:1,2,6 340:11,12 clinically 40:6 213:17 264:16 278:6 291:10 clinician 301:19 309:13 311:3 327:1.6 clinicians 276:19 304:18 **clock** 6:5 close 213:3 248:15 291:9 341:14 closed 26:7 27:8 29:2 29:21 30:13 31:7 48:10 53:11 57:2 62:16 66:21 70:15 74:12 89:10 91:3 92:6 97:10 98:11 101:20 108:9,21 111:7 112:3 113:13 115:22 116:17 117:12 118:2 120:5

120:11 122:10 123:8 124:4 125:2,22 126:14 127:3,14 138:13 139:19 154:13 156:6 158:19 159:7 162:7 164:8 167:11 169:10 170:3,14 185:1 188:19 196:9 212:21 267:19 288:9 298:14 312:17 319:11 323:13 342:9,21 349:12 closely 64:4 closure 109:20 120:12 191:8,9 **CMS** 9:13 10:4 23:13,19 43:8,9,19 187:18 214:19 215:7 216:15 224:19 Co-Chair 1:11,13 6:3,15 6:21 7:2,8 8:7,13 13:20 14:1,6,16,21 15:6,10 16:5,11 17:18 18:8,14,17,21 19:12 23:8 24:8,10,15 25:8 25:15 26:1,4,11,14 27:1,12 28:2,12,14,17 29:6,13 30:3,5,20 31:1,10,16 33:15,20 33:22 34:15,18,21 35:3,7,11,14 36:1,4,8 37:1,14,19 38:17,18 38:21 39:11 41:5,20 43:9,13,18 45:2 46:3 47:15 48:14.17.22 49:2,4,8,12,15 50:5 51:22 52:4,6,11,13,16 52:20,22 53:3,14 55:17,21 56:2,5,12,15 57:6,12 60:14 62:3,8 62:20,22 63:7,10,13 65:12 66:11,14 67:3 68:5,6 69:5,15,18 70:2,5,8,18 72:17 73:4,8 74:4,21 76:1 77:4,8 80:6 81:2,9 82:3,6 83:8,14,22 84:4,8,12 85:21 86:16 87:10 88:5,20 89:8,13 89:19,22 90:3,16,19 91:7,20 95:3,8 97:1 98:3,20 99:20,22 101:4 102:7,12,16,18 104:10 106:9 107:2,6 107:17 108:13 109:2 109:6,10 110:17,22 111:9,17 113:4,16 114:12,17,22 115:6

115:13,20 116:10,22	314:1,14 316:2	335:20 336:11 346:5	14:17 16:7 22:15 23:8
117:4 118:6,16,18,19	318:10 319:3,15,21	346:16	23:9 36:9,10 37:2
118:20 119:20 120:8	320:2,10 321:1 322:6	collectors 131:16,17	38:15 44:12 53:18
120:17,21 121:22	322:14 323:4,18	collects 220:1	55:18 73:6 74:22 76:3
122:4,13,22 123:19	324:9 325:5,12,16,20	college 1:22 2:2,3,5,11	76:4,13,14 79:16 84:7
124:11,15 125:8,20	326:9,12 327:22	3:11,14 4:13,14 129:4	88:10 93:3,11 98:22
126:3 127:7,18 128:2	328:3,10 330:7	129:11 132:8 135:12	99:4 104:20 119:1
128:11,15,20 135:5	331:22 332:12 334:17	180:9 204:1 208:14	130:19 136:22 141:6
136:11,15 137:13	334:22 335:3 336:21	213:9,12 291:2,18	141:10,12 146:13,22
138:5,17 139:12	337:5 338:6,14	292:15	154:20 158:3 162:15
140:1 141:4 143:21	339:17 340:6,12	Collette 2:12 36:8 38:8	162:21 163:1 164:18
143:22 145:4,16,18	341:1,17,21 343:3	57:6 60:16 62:5 63:10	165:6 166:11,16
145:19,20,21 146:3,5	344:20 345:18 346:6	98:20 101:9 141:4	167:20 168:13 185:17
146:6,11 148:4 153:8	346:18,20 347:4,8,15	157:3 186:19 200:5	187:2 201:11 206:13
154:7,17 155:15,20	347:20 348:6,14,16	208:16 228:20 230:10	207:11 228:21 241:22
156:10 157:3,21	349:15,22 351:14,18	238:9 240:11 287:12	252:15,18 268:3
158:11 159:1,10	<b>Co-Chairs</b> 1:9 42:21	<b>colon</b> 4:14 159:12,21	270:2 271:10 272:12
160:5,10 161:17,21	<b>co-lead</b> 246:1,2	160:13 162:17 166:8	272:14 275:19 280:15
162:11 163:22 164:12	<b>code</b> 133:4 151:1,4	253:16	295:8 301:7 311:19
167:3,14,18 169:2,14	152:3 189:17 192:13	Colorado 1:20	313:22 315:9 318:11
169:17 170:7,19	193:20 194:4,4	colorectal 2:18 265:3	318:13 319:22 320:22
177:14,19,22 179:8	249:17 251:10 255:18	combination 147:18	321:8 332:2,3,13
179:11 183:8,19	255:22	174:6	345:14,19 350:1,3,16
184:3,11,16 185:4,15	coded 99:11,15 151:21	combine 310:6	350:17
186:19 187:4 188:11	183:1 260:18	combined 32:2 123:16	commentary 54:14
189:1 193:6 194:9	codes 130:13 159:21	137:4 158:7	comments 7:20 18:15
195:2,20 196:1,13	176:2 187:17 251:13	combining 112:14	28:6,12,15 29:13
198:7 200:5 201:10	255:22	113:2 150:7	30:20 33:22 36:4,20
201:12 203:9 205:7	coding 107:11 252:6	<b>come</b> 14:7,9 20:6 22:6	38:22 42:1 45:3 49:2
206:11,21 207:9	acofficiente 165,15	00.0 07.47 45.0 04.40	
-	coefficients 165:15	22:8 27:17 45:6 61:13	49:16 52:11 53:16
208:14 210:2,22	cognitive 136:6	84:9,13 102:16 107:2	55:22 56:13 57:7,10
208:14 210:2,22 212:15 213:3,8,22	<b>cognitive</b> 136:6 <b>Cohen</b> 129:16	84:9,13 102:16 107:2 107:9,15,20 151:15	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17	<b>cognitive</b> 136:6 <b>Cohen</b> 129:16 <b>cohort</b> 253:19 276:1 <b>coincided</b> 195:16 <b>colectomies</b> 163:8	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7 127:18 138:6 139:12
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7 127:18 138:6 139:12 153:13 155:20 158:11
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7 127:18 138:6 139:12 153:13 155:20 158:11 160:3 161:21 163:22
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7 127:18 138:6 139:12 153:13 155:20 158:11 160:3 161:21 163:22 165:10 167:3,16,18
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7 127:18 138:6 139:12 153:13 155:20 158:11 160:3 161:21 163:22 165:10 167:3,16,18 169:2,15 185:15
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7 127:18 138:6 139:12 153:13 155:20 158:11 160:3 161:21 163:22 165:10 167:3,16,18 169:2,15 185:15 186:21 194:11,12
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7 127:18 138:6 139:12 153:13 155:20 158:11 160:3 161:21 163:22 165:10 167:3,16,18 169:2,15 185:15 186:21 194:11,12 195:21 208:10 210:22
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19 232:20 233:2,5 234:1	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7 127:18 138:6 139:12 153:13 155:20 158:11 160:3 161:21 163:22 165:10 167:3,16,18 169:2,15 185:15 186:21 194:11,12 195:21 208:10 210:22 212:15 213:7 244:16
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19	55:22 56:13 57:7,10 69:22 72:5 74:4 75:22 76:1 84:16 90:17 97:2 98:3 101:11 106:17 108:15 111:17 113:3 115:13 116:10 118:15 122:22 123:13,19 125:5,8 126:4 127:7 127:18 138:6 139:12 153:13 155:20 158:11 160:3 161:21 163:22 165:10 167:3,16,18 169:2,15 185:15 186:21 194:11,12 195:21 208:10 210:22
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19 232:20 233:2,5 234:1 234:16 236:11 238:4	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ \end{array}$
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1 272:7,10,22 274:3,20	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7 162:20 198:13 199:1	$\begin{array}{c} 84:9,13\ 102:16\ 107:2\\ 107:9,15,20\ 151:15\\ 151:16\ 175:21\ 180:12\\ 180:21\ 183:13\ 203:3\\ 207:19\ 209:15\ 216:8\\ 218:9\ 223:6\ 227:8\\ 229:2\ 233:11\ 235:16\\ 235:19\ 237:6\ 238:6\\ 238:16\ 241:17\ 244:18\\ 271:2\ 273:7\ 309:3\\ 314:5\ 333:17\ 335:1\\ 338:20\ 341:14\\ \textbf{comes}\ 57:13\ 59:8\\ 106:14\ 148:15\ 191:19\\ 223:21\ 224:3\ 232:19\\ 232:20\ 233:2,5\ 234:1\\ 234:16\ 236:11\ 238:4\\ 239:1\ 260:17\ 308:1\\ \end{array}$	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ 271:22\ 274:5,7\ 280:8\\ \end{array}$
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1 272:7,10,22 274:3,20 277:18 280:7,13,17 282:2 284:19 287:1 287:11 288:2,13	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7 162:20 198:13 199:1 211:9 220:7 223:5 226:10,13 228:15 291:6,13	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19 232:20 233:2,5 234:1 234:16 236:11 238:4 239:1 260:17 308:1 341:8 <b>comfortable</b> 13:21 86:4 87:7 200:9 203:1	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ 271:22\ 274:5,7\ 280:8\\ 287:2\ 288:3\ 290:9,22\\ 291:21\ 292:17\ 293:10\\ 298:3\ 301:6\ 314:14\\ \end{array}$
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1 272:7,10,22 274:3,20 277:18 280:7,13,17 282:2 284:19 287:1 287:11 288:2,13 289:11 290:8 291:20	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7 162:20 198:13 199:1 211:9 220:7 223:5 226:10,13 228:15 291:6,13 collecting 99:6 187:16	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19 232:20 233:2,5 234:1 234:16 236:11 238:4 239:1 260:17 308:1 341:8 <b>comfortable</b> 13:21 86:4 87:7 200:9 203:1 <b>coming</b> 6:6 8:5 106:22	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ 271:22\ 274:5,7\ 280:8\\ 287:2\ 288:3\ 290:9,22\\ 291:21\ 292:17\ 293:10\\ 298:3\ 301:6\ 314:14\\ 320:3\ 322:15\ 323:6\\ \end{array}$
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1 272:7,10,22 274:3,20 277:18 280:7,13,17 282:2 284:19 287:1 287:11 288:2,13 289:11 290:8 291:20 292:17 293:10 295:7	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7 162:20 198:13 199:1 211:9 220:7 223:5 226:10,13 228:15 291:6,13 collecting 99:6 187:16 193:1 204:16 206:8	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19 232:20 233:2,5 234:1 234:16 236:11 238:4 239:1 260:17 308:1 341:8 <b>comfortable</b> 13:21 86:4 87:7 200:9 203:1 <b>coming</b> 6:6 8:5 106:22 128:21 135:8 145:10	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ 271:22\ 274:5,7\ 280:8\\ 287:2\ 288:3\ 290:9,22\\ 291:21\ 292:17\ 293:10\\ 298:3\ 301:6\ 314:14\\ 320:3\ 322:15\ 323:6\\ 330:5\ 339:22\ 340:3,7\\ \end{array}$
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1 272:7,10,22 274:3,20 277:18 280:7,13,17 282:2 284:19 287:1 287:11 288:2,13 289:11 290:8 291:20 292:17 293:10 295:7 297:16,19 298:2,17	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7 162:20 198:13 199:1 211:9 220:7 223:5 226:10,13 228:15 291:6,13 collecting 99:6 187:16 193:1 204:16 206:8 219:6 235:13 260:6	$\begin{array}{r} 84:9,13\ 102:16\ 107:2\\ 107:9,15,20\ 151:15\\ 151:16\ 175:21\ 180:12\\ 180:21\ 183:13\ 203:3\\ 207:19\ 209:15\ 216:8\\ 218:9\ 223:6\ 227:8\\ 229:2\ 233:11\ 235:16\\ 235:19\ 237:6\ 238:6\\ 238:16\ 241:17\ 244:18\\ 271:2\ 273:7\ 309:3\\ 314:5\ 333:17\ 335:1\\ 338:20\ 341:14\\ \textbf{comes}\ 57:13\ 59:8\\ 106:14\ 148:15\ 191:19\\ 223:21\ 224:3\ 232:19\\ 232:20\ 233:2,5\ 234:1\\ 234:16\ 236:11\ 238:4\\ 239:1\ 260:17\ 308:1\\ 341:8\\ \textbf{comfortable}\ 13:21\ 86:4\\ 87:7\ 200:9\ 203:1\\ \textbf{coming}\ 6:6\ 8:5\ 106:22\\ 128:21\ 135:8\ 145:10\\ 153:4\ 229:2\ 237:3\\ \end{array}$	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ 271:22\ 274:5,7\ 280:8\\ 287:2\ 288:3\ 290:9,22\\ 291:21\ 292:17\ 293:10\\ 298:3\ 301:6\ 314:14\\ 320:3\ 322:15\ 323:6\\ 330:5\ 339:22\ 340:3,7\\ 341:20\ 342:14\ 343:10\\ \end{array}$
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1 272:7,10,22 274:3,20 277:18 280:7,13,17 282:2 284:19 287:1 287:11 288:2,13 289:11 290:8 291:20 292:17 293:10 295:7 297:16,19 298:2,17 300:1 301:5,20	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7 162:20 198:13 199:1 211:9 220:7 223:5 226:10,13 228:15 291:6,13 collecting 99:6 187:16 193:1 204:16 206:8 219:6 235:13 260:6 260:21 308:9	$\begin{array}{r} 84:9,13\ 102:16\ 107:2\\ 107:9,15,20\ 151:15\\ 151:16\ 175:21\ 180:12\\ 180:21\ 183:13\ 203:3\\ 207:19\ 209:15\ 216:8\\ 218:9\ 223:6\ 227:8\\ 229:2\ 233:11\ 235:16\\ 235:19\ 237:6\ 238:6\\ 238:16\ 241:17\ 244:18\\ 271:2\ 273:7\ 309:3\\ 314:5\ 333:17\ 335:1\\ 338:20\ 341:14\\ \textbf{comes}\ 57:13\ 59:8\\ 106:14\ 148:15\ 191:19\\ 223:21\ 224:3\ 232:19\\ 232:20\ 233:2,5\ 234:1\\ 234:16\ 236:11\ 238:4\\ 239:1\ 260:17\ 308:1\\ 341:8\\ \textbf{comfortable}\ 13:21\ 86:4\\ 87:7\ 200:9\ 203:1\\ \textbf{coming}\ 6:6\ 8:5\ 106:22\\ 128:21\ 135:8\ 145:10\\ 153:4\ 229:2\ 237:3\\ 258:19\ 284:9\ 351:20\\ \end{array}$	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ 271:22\ 274:5,7\ 280:8\\ 287:2\ 288:3\ 290:9,22\\ 291:21\ 292:17\ 293:10\\ 298:3\ 301:6\ 314:14\\ 320:3\ 322:15\ 323:6\\ 330:5\ 339:22\ 340:3,7\\ 341:20\ 342:14\ 343:10\\ 345:15\ 346:18\ 347:11\\ \end{array}$
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1 277:18 280:7,13,17 282:2 284:19 287:1 287:11 288:2,13 289:11 290:8 291:20 292:17 293:10 295:7 297:16,19 298:2,17 300:1 301:5,20 302:17 303:19 305:8	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7 162:20 198:13 199:1 211:9 220:7 223:5 226:10,13 228:15 291:6,13 collecting 99:6 187:16 193:1 204:16 206:8 219:6 235:13 260:6 260:21 308:9 collection 36:19 45:1	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19 232:20 233:2,5 234:1 234:16 236:11 238:4 239:1 260:17 308:1 341:8 <b>comfortable</b> 13:21 86:4 87:7 200:9 203:1 <b>coming</b> 6:6 8:5 106:22 128:21 135:8 145:10 153:4 229:2 237:3 258:19 284:9 351:20 <b>commence</b> 102:14	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ 271:22\ 274:5,7\ 280:8\\ 287:2\ 288:3\ 290:9,22\\ 291:21\ 292:17\ 293:10\\ 298:3\ 301:6\ 314:14\\ 320:3\ 322:15\ 323:6\\ 330:5\ 339:22\ 340:3,7\\ 341:20\ 342:14\ 343:10\\ 345:15\ 346:18\ 347:11\\ 347:15\ 350:7,18\\ \end{array}$
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1 272:7,10,22 274:3,20 277:18 280:7,13,17 282:2 284:19 287:1 287:11 288:2,13 289:11 290:8 291:20 292:17 293:10 295:7 297:16,19 298:2,17 300:1 301:5,20 302:17 303:19 305:8 308:4 311:18,22	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7 162:20 198:13 199:1 211:9 220:7 223:5 226:10,13 228:15 291:6,13 collecting 99:6 187:16 193:1 204:16 206:8 219:6 235:13 260:6 260:21 308:9 collection 36:19 45:1 55:4 65:3 66:9 80:9	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19 232:20 233:2,5 234:1 234:16 236:11 238:4 239:1 260:17 308:1 341:8 <b>comfortable</b> 13:21 86:4 87:7 200:9 203:1 <b>coming</b> 6:6 8:5 106:22 128:21 135:8 145:10 153:4 229:2 237:3 258:19 284:9 351:20 <b>commence</b> 102:14 <b>commend</b> 237:3	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ 271:22\ 274:5,7\ 280:8\\ 287:2\ 288:3\ 290:9,22\\ 291:21\ 292:17\ 293:10\\ 298:3\ 301:6\ 314:14\\ 320:3\ 322:15\ 323:6\\ 330:5\ 339:22\ 340:3,7\\ 341:20\ 342:14\ 343:10\\ 345:15\ 346:18\ 347:11\\ 347:15\ 350:7,18\\ \end{tabular}$
208:14 210:2,22 212:15 213:3,8,22 223:13 225:6 226:15 226:20 227:19,22 228:4,16 230:10,17 232:18,21 233:9,14 233:17 234:3 236:7 236:16 237:11 238:3 240:11 241:2,21 242:16,20 243:7,12 244:11,15 245:3 249:3 250:5,8 251:17 252:11,17 253:3,7 254:5,11 255:12,16 258:13,15 261:11 264:2,7 265:8 266:16 266:21 267:13 268:1 277:18 280:7,13,17 282:2 284:19 287:1 287:11 288:2,13 289:11 290:8 291:20 292:17 293:10 295:7 297:16,19 298:2,17 300:1 301:5,20 302:17 303:19 305:8	cognitive 136:6 Cohen 129:16 cohort 253:19 276:1 coincided 195:16 colectomies 163:8 collaborative 103:15 171:9 colleague 207:4 colleagues 7:17 17:8 42:8 204:10 244:17 collect 141:15 180:11 181:2,5,9 187:3 198:9 204:4,6 205:10 213:5 228:13 229:4 231:8 235:22 241:12 260:10 collected 52:9 63:20 98:17,18 141:7 162:20 198:13 199:1 211:9 220:7 223:5 226:10,13 228:15 291:6,13 collecting 99:6 187:16 193:1 204:16 206:8 219:6 235:13 260:6 260:21 308:9 collection 36:19 45:1	84:9,13 102:16 107:2 107:9,15,20 151:15 151:16 175:21 180:12 180:21 183:13 203:3 207:19 209:15 216:8 218:9 223:6 227:8 229:2 233:11 235:16 235:19 237:6 238:6 238:16 241:17 244:18 271:2 273:7 309:3 314:5 333:17 335:1 338:20 341:14 <b>comes</b> 57:13 59:8 106:14 148:15 191:19 223:21 224:3 232:19 232:20 233:2,5 234:1 234:16 236:11 238:4 239:1 260:17 308:1 341:8 <b>comfortable</b> 13:21 86:4 87:7 200:9 203:1 <b>coming</b> 6:6 8:5 106:22 128:21 135:8 145:10 153:4 229:2 237:3 258:19 284:9 351:20 <b>commence</b> 102:14	$\begin{array}{c} 55:22\ 56:13\ 57:7,10\\ 69:22\ 72:5\ 74:4\ 75:22\\ 76:1\ 84:16\ 90:17\ 97:2\\ 98:3\ 101:11\ 106:17\\ 108:15\ 111:17\ 113:3\\ 115:13\ 116:10\ 118:15\\ 122:22\ 123:13,19\\ 125:5,8\ 126:4\ 127:7\\ 127:18\ 138:6\ 139:12\\ 153:13\ 155:20\ 158:11\\ 160:3\ 161:21\ 163:22\\ 165:10\ 167:3,16,18\\ 169:2,15\ 185:15\\ 186:21\ 194:11,12\\ 195:21\ 208:10\ 210:22\\ 212:15\ 213:7\ 244:16\\ 250:5\ 264:3\ 266:17\\ 271:22\ 274:5,7\ 280:8\\ 287:2\ 288:3\ 290:9,22\\ 291:21\ 292:17\ 293:10\\ 298:3\ 301:6\ 314:14\\ 320:3\ 322:15\ 323:6\\ 330:5\ 339:22\ 340:3,7\\ 341:20\ 342:14\ 343:10\\ 345:15\ 346:18\ 347:11\\ 347:15\ 350:7,18\\ \end{array}$

227:11 229:16 230:1 238:7 243:2 244:17 246:1,4,9 247:14 265:11,22 298:20 320:14,19 323:21 330:8 335:6,8 340:4 346:7 committee 1:3,8 6:22 7:11 21:13 34:16 42:5 73:9 77:15 86:17 101:7 107:16,20 118:21 129:8 153:9 172:8 182:9 203:13 209:19 214:9,9 216:8 220:11 223:7 233:1,6 236:17 245:4,14 247:19 252:19,20 277:20 278:1,5,14 282:11,18 283:12 284:3 293:11 300:11 300:12 305:15 316:8 316:12 325:9,14 327:4,8,12 330:16 331:12 332:15 337:14 338:15 343:11 344:1 344:10,17 347:16 350:21 351:2.4.9.12 committee's 166:7 183:9 committees 42:17 43:3 171:10 230:19 274:13 276:19 278:16,21 299:3,10 305:3 **common** 11:18 109:15 121:5 146:21 173:1.1 174:4 186:14,15 311:8 316:19 **commonly** 246:11 communicating 153:5 communication 105:9 community 2:12 131:16 131:21 173:2,3 188:8 215:8 225:1 companies 24:4 companion 49:19 company 202:13 207:12,15 compare 88:2 156:21 330:21 compared 10:4 13:16 180:9 277:8 comparing 36:16 203:10 comparison 202:5 285:15,18 310:22 compelling 194:16 306:21 competing 30:18,19

complaints 310:15 **complete** 229:10 296:20 318:16,18 completed 135:21 223:22 224:2 240:18 288:21,21 289:6,16 289:20 completely 16:6 153:15 255:3 270:17,18 285:8 completeness 10:1 complex 66:5 144:11 complexity 100:17 134:6 194:14 205:2 252:5 compliance 45:22 182:17 complicate 191:10 complicated 302:4 complication 46:14 71:10 73:20 161:11 161:12 176:13 186:16 191:20,21 complications 71:17 93:6 142:19 198:19 246:16 268:18 component 12:17 33:3 75:1,7,13 192:15 234:18 components 74:2 102:11 104:15 **composite** 4:7,9,11 11:1 12:17 16:9 17:1 17:5 33:3 45:1 70:19 70:20,22 71:1,10,19 72:2,15 73:19 75:20 82:18 89:21,22 90:2,9 90:15,21 91:4,21 97:15 98:2,6 99:8 109:13 110:2,20 112:6 113:7,13 121:12,13 122:3 123:21 124:4 126:7 126:15 146:14,15,17 146:20 147:6,7,17 153:15,20 157:14 comprehensive 90:5 232:1 comprises 71:6 computer 37:11 **con** 103:2 concept 104:21 314:3 327:7 concern 38:9 95:9,11 228:17 232:22 250:18 279:19 325:22 331:8 **concerned** 107:19 201:13,17 250:22

273:14 303:2 322:7 concerning 33:12 203:19 324:13 concerns 42:6 57:19 77:19 107:21 201:13 209:14 228:19,19 236:16 237:13 238:5 238:7 239:13,18 243:2 245:14 248:6 276:6 305:14 330:13 337:6 338:14 339:1,5 concluded 292:10 concludes 110:16 condition 209:20 269:1 269:6 311:15 317:6 326:10 conditional 183:9,20 conditions 210:1 278:22 301:13 311:6 311:7 conducive 339:7 conducted 300:16 conduits 13:7 condyles 183:5 confabulation 338:21 confer 55:12 conference 1:8 8:19 348:5 confidence 85:20 161:6 163:17 confidentially 86:9 **confirm** 344:11 **confirmed** 189:19 conflict 35:12 conforms 217:20 **confused** 252:22 324:15 336:1 confusion 192:10 200:16 congenital 10:18 Congratulations 118:16 consensus 181:1,8 198:9 323:19 324:11 342:13 343:7 350:19 consequence 51:12 60:5,12 104:12 144:4 242:12 250:19 262:4 279:14 290:5 293:15 293:22 303:3 329:11 consequences 43:5 50:6,9 80:14 144:9 174:16 237:18 241:4 242:6 conservation 265:12 290:13 344:2 conserve 309:7 conserved 246:17

consider 16:8 20:4 47:17,19 57:16 142:14 143:4 147:6 192:18 220:8,11 221:1 228:11 243:17 280:9 292:20 308:10 308:11,12 328:8 335:6 consideration 4:3.19 5:1 12:7 75:7 81:1 104:22 170:18 195:1 226:14 227:7,18 236:13 279:1 280:11 considerations 101:9 considered 32:14 94:11 109:20 116:9 201:5 216:5 219:15,15 221:3 222:12 223:7 223:22 227:10,16 290:3 291:9 301:13 303:18 328:7 considering 177:9 215:22 232:15 consistency 206:7 consistent 71:8 116:6 220:21 231:19 245:12 249:18 consistently 197:17 consists 72:2 Consortium 171:13 constantly 132:2 **constitutes** 46:2 185:22 constitutional 190:1 **construct** 26:19 89:15 90:15,21 112:7,12 119:4 123:13,18 126:3,15 161:8 324:19,20 338:18 constructed 298:4 299:2 339:12 construction 336:9 338:11 constructs 90:2 consumerism 77:10 88:6 Cont'd 4:19 5:1 contains 252:6 contemporary 306:20 **content** 324:21 325:2 335:19 338:3 340:11 340:12 context 234:13 239:20 245:13 251:18 continue 11:11 25:12 35:15 45:21 49:9 51:6 59:22 91:8 125:13 131:6,8 213:5 219:10 242:17 319:16 323:20

341:18 349:19 **continued** 4:3 14:13 47:14 58:6 continues 11:18 215:6 continuing 65:19 351:8 continuous 132:8 continuously 21:9 131:17 contract 67:21 contracted 69:1 229:8 229:22 contraindicated 39:6,8 39:10,15,22 40:18,22 41:2 58:10 61:2 contraindication 61:15 contraindications 40:6 44:17 301:18 contribute 205:20 contributed 23:12 contributing 16:16 control 85:18 177:2 201:7 controversy 39:19 54:6 59:1 conversation 68:3 325:1 348:2 conversations 203:14 231:20 convert 161:6 cooked 151:20 coordinated 313:15 COPD 308:17 cord 306:22 307:13 **core** 81:4 coronary 4:4,10 11:16 12:3,19,19,21 13:6 14:11 16:3 17:10 19:2 61:13 71:2,13 121:21 correct 26:12 39:12 60:6 77:5 78:12 80:11 84:16 95:7 114:15,16 114:19 115:1,3 119:14 156:17 176:12 183:17 224:6 227:5 236:15 248:20 256:19 256:20 261:21 268:7 270:15 273:2 283:4 295:15 305:17 316:5 319:21 325:4 335:7 336:7,13,20 337:8,11 337:21 338:4 340:9 corrected 258:8 316:11 correcting 258:10 correction 248:17 254:4 344:6 correctly 86:22 93:8 221:10 222:3,7 337:6 correlates 47:11 181:4

correlating 113:21 correlation 92:18 119:5 correlations 97:16 cost 67:8,8,19,21,21 68:21 99:5 100:3,6 101:6 103:13 134:8 134:15,18 135:1 168:17 241:11,12,13 cost- 65:2 costs 103:20 count 80:4 148:10 154:2,6 200:1,11 counted 200:2 counter-argument 47:20 countries 192:22 country 93:16 98:16 133:21 134:5 137:19 143:7 156:18 160:16 161:10 163:7 180:17 188:5 302:8 couple 15:13 20:12 23:10 45:3 153:10 186:21 223:14 280:21 324:10 328:19 335:4 course 104:21 192:3 260:7,12 264:6 287:22 294:18 cover 309:17 covered 91:15 133:14 181:19 182:1 237:18 297:2.2 covers 73:15 110:21 134:16 **CPHQ** 2:12 **CPOE** 317:22 **CPT** 130:13 133:4 159:21 176:2 189:16 192:13 create 147:9 193:4 204:1 205:5 221:21 222:4 279:15 332:21 created 217:8 231:18 creating 25:14 201:14 217:22 creativity 218:9 crit 328:17 criteria 20:11 39:9,16 58:11 78:3 131:11 174:10 175:19 176:10 176:12 199:8,9 201:7 219:1 220:4,11,14,18 220:22 222:7,21 225:18 226:9 227:14 230:12 235:6,7 239:8 239:19 240:1,14,20 303:13 305:9 320:13 335:11

criterion 20:2,6 209:22 336:4 **critical** 167:22 168:14 178:20 263:20 325:13 criticisms 59:4 criticize 15:1 100:21 criticizing 101:1 critiques 85:3 **CRNA** 2:13 cross 264:14 288:20 289:3,6 290:6,14 292:3,9 293:1,16 294:2 cross-cutting 7:5 cross-matched 292:5 cross-matching 294:11 crossed 67:13 **CRP** 199:22 CSAC 7:14 41:22 47:17 57:14,16 237:12 **CT** 137:10 151:19 cultural 334:12 culture 189:20 199:16 199:19 200:4 curious 39:14,16,22 213:8 224:8 current 168:17 231:3 236:12 242:17 258:6 295:16 296:13 297:21 312:4 322:10 326:13 currently 10:15 76:15 85:21 137:16 156:15 176:8 247:4 248:14 266:6 285:22 298:4 315:12 curves 144:17 cut 115:10 257:18 275:13 cut-off 308:14 309:15 cutoff 136:5 144:20 166:12 **cutting** 144:4 cycle 21:12 214:8 D **D** 4:1 **D.C** 1:9 dangerous 35:6 50:2 Dardis 3:12 246:2 247:8 257:4 260:2 283:5 284:1 285:22 297:11 310:17 317:1 322:1,5 323:2 324:2 331:8 333:7 dare 148:9 Dartmouth 1:18 data 9:12 21:10,21 25:21 31:20 35:20,21

36:19 37:8.11.12 40:12 44:18 45:1 52:10 55:4,4,5,9,12 56:7 58:8 59:11,12 62:2 63:19 64:4,13,16 64:21 65:3,20,22 66:4 66:8 67:14 68:7 72:8 76:17,18 79:16 84:21 85:7,14 86:19 87:8 88:14 92:15,16,17,19 94:16 98:17 99:1,3,6 100:22 102:13 103:5 103:13 104:4,6 110:6 115:9 121:6 124:8 131:13,15,17,20 132:1,9,15,20 134:2 136:5 138:21,21 141:1,7 142:18 143:5 149:5 155:3,18,18 157:7 158:1 162:18 162:21 168:11 180:12 180:22 187:3 189:11 189:12 190:8,15 193:2 194:16 197:9 198:1 204:4,7,16,21 205:5,10,11 206:8 208:20 209:6 210:5,8 210:11,16,17 211:7,8 211:9,21 212:2,14 213:5 214:13 217:9 217:16,17 218:4,22 219:3,6 220:1,2,6,15 221:7,9 223:4 225:3 226:5,10,12,17 227:14 228:8.9.13.15 229:4,10 230:15 231:8 234:11,19 235:5,13,22 237:8 239:5,22 243:6,9,19 244:5,6 248:4 258:20 260:6,8,10,16,18,21 261:4,6,6,10 269:19 270:3,17,19 271:6,11 275:12 277:22 278:3 281:18 283:2,17 284:17 285:21 292:16 296:1,8,13 297:21 307:14,18 308:1,2,9 308:12 310:4 311:1,2 311:8,13,13,14 312:3 313:4,14 331:3 336:11 346:4,16 data-driven 295:18,21 database 9:8,11,12 10:3,14 24:21 26:18 26:21 27:14 28:7,9 29:11 44:15 54:8 58:8 60:2 76:19 99:1,4
106:15 157:5 163:9 168:7 182:10 205:18 205:20 databases 187:19 date 198:6 223:1 David 3:16 55:21 65:12 68:11 84:8 dawn 214:11 day 4:2 8:2,10 34:14 58:6,16 144:5 145:5,9 155:17 201:3 219:9 220:13 234:6 260:1 264:9 279:12 291:6 291:13 306:13 days 144:4,15 159:20 195:3 199:19 214:20 230:7 248:12 249:22 254:12 256:8.18 258:18,18 262:18 264:9,12 275:9 281:10,11,11 289:4 293:6,8,9 324:10 332:18 335:5 340:17 343:19 **de** 181:7 216:10 dead 327:21 deal 54:21 85:20 dealing 104:18 133:12 **Dean** 2:11 death 130:5,5 147:19 150:7 152:14 157:16 159:19 deaths 164:20 debate 73:10 77:9,15 155:17 171:19 **debride** 192:8.12 **debrided** 192:10 debridement 189:18,19 192:13 194:3,6 debridements 174:21 debulking 253:15 decade 10:6 142:10 decades 11:17 decay 144:12,13 decays 144:16 decide 60:19 76:9 211:20 344:10 decided 43:8 144:19 195:15 226:6 decides 201:4 deciding 40:17 294:1 decile 35:19 deciliter 275:6 295:2 decision 43:1 137:6 203:20 230:14 243:10 273:10 301:18 311:4 312:9 317:3 318:1,4 333:16

deck 221:22 222:4 232:1 decrease 334:14 decreased 11:16 246:15 decreasing 73:17 dedicated 145:8 deep 71:11 142:20 174:10 175:18 189:21 192:6 193:16 200:11 200:21 201:3,8 deep-space 189:21 defer 182:19 252:12 deficiency 262:3 270:13 286:16 define 37:16 45:17 55:10 72:22 107:18 225:7 defined 55:1 65:22 73:11 93:9 106:7 130:7 136:19 159:21 232:21 348:20 defines 37:15 defining 37:17 45:9 106:18 definitely 41:10 182:7 313:7 definition 20:14 22:16 24:17 46:2 191:19,20 192:1 195:10 196:17 200:21 201:8 304:13 304:15 definitions 20:10 25:9 66:5 131:15 191:2 239:14 305:3 310:6 definitive 244:16 degenerative 172:16 degrees 38:19 delay 203:8 242:14 254:7 273:15 delaying 303:3 delineating 150:18 **delirium** 140:8,10 141:17 **Delphi** 148:10 delve 78:17 93:9 demographically 261:1 demographics 178:18 demonstrate 94:18 131:6,8 160:19 210:9 demonstrated 31:22 98:17 116:5 119:2,9 198:6 270:15 demonstrating 142:2 276:9 denies 211:11 denominator 130:12 149:2 162:14 190:5

238:13,19 239:14 248:10 257:13 272:17 283:1,20 287:17,19 289:1 290:14 293:4 299:16 306:6 319:20 322:18 329:5 343:17 345:10 denominators 252:1 denote 266:3 department 2:2,7,18,21 279:8 321:18 322:3 322:20,22 334:2 depend 251:6 dependent 27:22 312:7 depending 100:17 186:2 191:9 263:11 depends 148:22 151:15 320:17 descending 12:18 13:10 describe 58:2 130:15 133:17 230:18 261:15 282:17 described 40:5 90:10 90:12 168:2 262:20 304:17 318:1 describes 40:13 description 33:10 137:17 189:15 249:10 deserves 183:16 designated 10:12 designation 181:21 263:16 designed 274:12 275:1 339:16 desire 19:20 63:5 desired 289:21 **Desmirra** 3:6 18:19 53:5 despite 53:21 detail 130:15 133:17 193:21 details 157:12 detect 131:9 detection 258:7 determination 16:21 267:7 305:5 344:9 determine 153:6 221:3 221:9 223:6 226:13 235:13 242:13 280:5 292:22 326:21 determining 237:19 306:5 devastating 172:11 198:18 develop 103:20 205:14 215:9 229:8 230:2 302:4

developed 85:17 221:12 246:22 286:10 developer 68:1 104:12 138:22 189:5 197:8 207:13 209:15 219:19 220:2 221:18 227:9 231:18 235:21 280:9 282:21 289:18 301:10 developers 7:22 63:16 76:8 100:9 107:9 119:3 129:5 138:1 146:13 165:21 170:22 234:11 239:3 251:4 272:14 developers' 239:13 developing 84:15 86:7 182:10 302:2 development 2:12 166:4,10,14 227:13 280:10 337:11 device 208:8 devices 202:19 devil's 328:13 diagnoses 286:3 diagnosis 150:21 152:4 diagnostic 149:1 151:1 151:4 diagrams 200:17 dial 347:9 didactic 213:22 dies 152:11 difference 17:6 46:13 46:18 52:20 54:12 59:5 75:11 94:19 197:6 225:8.13 268:22 315:14 differences 18:2 33:14 40:15 48:18 54:16,18 65:20 75:19 92:12 160:13,14 197:17 198:2 314:5 different 15:13 18:1 24:20 25:4 35:4 39:1 43:15 45:11 46:16 54:5 60:20,21 61:4,9 79:20 91:21 93:16 124:12 141:14 144:13 144:17,17 150:4,5,8 153:21 154:1 163:14 164:19 165:2 175:4 186:10 194:6 199:3,8 217:15 223:16 227:3 228:9 257:9 260:13 271:12 272:3,4 277:9 280:1,2 283:3 286:17 286:18,19,21 300:19 302:8,12 305:21 310:10 314:17 315:1

327:7 328:9 330:21 331:16 338:17 differentiates 130:10 134:4 differently 16:17 36:22 38:1.8 difficult 7:5 12:11 16:4 44:10 66:5 180:4 189:14 204:18 210:20 218:3 294:22 303:21 327:5 345:20 difficulties 225:2 259:17 296:18 304:5 difficulty 226:3 dig 283:14 digits 173:16 dire 148:11,14 direct 63:17 67:15 208:20 direction 88:3 209:11 directions 158:8 directive 224:21 directly 79:17 153:5 director 1:13,15 2:1,6 2:13,19 3:4,5,5 214:5 directors 246:5 disagree 152:1 307:16 disassociated 183:6 discard 16:4 discharge 4:5 32:10,19 44:19 51:6,17 58:3,9 246:16 discharged 44:16 disclose 35:7 102:21 disclosure 6:10 disclosures 6:9.12 disconnect 341:10 discrepancies 160:16 discrepancy 173:22 discriminate 161:4 193:13 discuss 10:12 12:1 15:5 32:21 35:16 49:13 175:19 179:15 192:4 240:2 241:15 245:13 313:1 321:3 discussant 109:9 179:7 249:4 discussants 73:12 160:5 177:14 discussed 53:22 100:10 121:3 159:17 197:21 203:13 240:5 discussing 103:9 131:3 238:16 242:6 discussion 7:22 25:4,5 25:10 42:5 44:10 63:1 63:2,3 75:5,8 109:21

125:9.11 129:17 167:17 169:17 170:20 184:13 188:11 191:18 200:7,10 222:14 237:21 238:2,14,16 239:13 241:17 242:22 243:13 244:9 245:7 268:5 280:21 281:22 312:22 319:18 335:12 345:12 347:18 348:3 348:4 349:19 discussions 239:17 281:2 disease 11:14 12:14 40:10,11 180:3 187:11 262:1 269:2 276:3,5 286:3 301:12 disease-specific 162:20 disfunction 71:14 disparities 95:11 160:20 disparity 96:12 113:18 113:22 disperse 313:15 disruption 142:20 distances 95:20 distant 259:11 distinction 198:3 distinguish 18:6 distinguishable 193:20 dive 157:11 diverse 261:1,2 divide 42:17 43:2 Division 2:1 dL 299:20 **DNP** 2:13 document 61:18 127:4 127:15 260:17 documentation 41:1 61:20 265:18 documents 119:19 doing 80:14 81:16 87:22 156:22 162:20 163:12 168:4,6 179:21 190:5 194:2 199:3 212:3 217:1 220:13 229:19 237:4 237:10 257:14,15,20 262:7,17 269:10 271:3 294:2 296:21 315:12,15 domain 71:7,8 110:2 121:11 165:8 domains 71:9 85:12 Domzalski 3:13 245:21 245:22 248:6 252:3 254:2,9,14 255:7

256:19 257:3 258:5 265:20 267:3,7,11 274:10 276:16 278:2 278:15 288:17 296:15 299:1 303:20 307:10 309:12 315:8 316:6 316:10 317:21 319:2 326:20 343:15 347:7 door 230:7 dose 51:18,20 58:6,20 59:9,15 61:7,16,18,22 dose- 51:14 dotted 67:12 double 99:2 111:13 122:18 Dr 6:17 9:1 11:1,5,6 13:22 14:5,8 17:2 18:10 22:15 31:15,18 37:4 38:15 40:5 42:3 44:11 50:8,15 51:2,13 53:17 54:13 56:1 58:12,21 60:10 61:11 64:3 65:8,13 68:10,13 68:14,15,17 69:2 70:20 73:2,7 76:12 77:6 78:6.9.12.15 79:4.15 80:5.11 82:14 82:20 83:19 84:2,6,14 86:1 87:9 88:4,15 93:5 94:1 99:9 100:4 100:15 102:14.15 103:22 104:9,20 105:13 109:5,11 113:3 114:6,16,19 115:3 118:22 120:15 120:18 121:2 128:14 129:7,7,8,12,16,16,19 129:19 135:5 136:12 136:15,22 141:9,10 141:12,20 143:3,16 143:20 144:10 145:7 146:1,8,9 147:4 149:19 150:20 151:14 152:6,13,20 153:1,9 153:21 155:3,10 156:17 157:8,17,19 158:9 159:13,15 160:21 161:17 162:12 162:22 163:4.19.21 165:9 166:11 167:4 168:12 170:17 171:2 171:10 177:14,15,15 177:16,21 178:2,6 179:2,6,8,9,9 181:10 181:17 182:5,20,22 185:5,6,18 187:4,20 189:3,7 190:6,18 191:5 193:6,17 194:9

195:7,20,22 196:1,15 198:7 200:14 203:13 205:19 206:2,13 207:10,16 208:9 210:14 211:1,2 213:11,15 246:6 264:5,8 268:4 272:8 274:5 280:8,12,16,19 286:8,9 291:22 294:7 295:14,18 296:4 303:10 307:14,17 311:21 312:1 314:15 327:14 329:8 333:22 347:13 draft 211:15 drafts 211:16 drag 114:10 dragging 81:11 draining 199:21 dramatically 144:16 drawing 350:22 dress 177:3 drew 176:19 drill 157:7,14 158:1 drive 83:4,5 96:18 147:16 184:7 203:2 203:11.12 driven 97:18 296:1,8 309:7 driving 142:12 146:17 146:20 204:11 236:4 293:16 drop 61:7 dropped 295:1 drove 97:17 Drs 160:5 drug 51:9 dual- 94:13 due 220:15 duplicative 72:5 Dutton 1:17 23:9,17 24:9 43:20 60:15 82:9 82:15 100:7 136:15 136:16 178:15 179:5 193:6,7 250:9 284:20 297:17 302:18 332:14 **DVT** 136:18 137:2,12 dying 145:5,9 Ε E 4:1 e-specifications 303:21 e-specify 333:4 ear 329:9 earlier 110:5 164:16 200:7 256:3 281:16

Neal R. Gross and Co., Inc. Washington DC 322:12

early 22:7 204:3

easier 20:17 103:6 236:2 257:2 easiest 61:21 204:9,10 easily 176:1 193:20 217:10 easy 26:18 42:15 149:16 190:5 echo 261:12 ECMO 286:4 economic 44:1 economics 46:8 eCQM 260:19 333:8 eCQMs 247:14 editorialized 208:10 education 88:12 344:7 344:12 educational 277:2 279:7,9 effect 32:1 43:21 61:9 133:8 150:3 248:18 effective 7:19 35:2 266:5 307:21 effectively 289:19 effectiveness 345:1,5 effects 50:3 80:1 136:8 efficiency 273:22 efficient 8:11 effort 71:19 171:9 247:15 efforts 36:19 65:18 247:3,4 284:5 344:12 egregious 10:8 **EHR** 60:19 63:22 65:16 215:2 217:12,13,15 217:17 248:4 261:6 311:13 317:11 EHRs 65:21 66:4 260:11,13 eight 142:6 208:22 283:11 300:18,18 306:1,16 327:11 334:8,11 either 13:1 28:10 37:13 57:16 100:6 153:4 183:10,12,14 190:13 242:1 276:2 291:13 320:11 344:21 351:5 elderly 4:12 129:3 130:3 elect 351:7 elected 262:3 elective 5:15 248:8,10 252:1,1,4 262:15 263:18 274:14,19 275:7,7 288:19 289:1 290:3,15 291:5 292:5 297:3 322:21 323:3 326:7 343:16

electively 24:22 electronic 63:18 64:7 214:12,16,22 215:5,9 215:14 216:2,16,22 217:5 227:4 287:15 304:7 305:7 316:21 335:21 336:9 337:10 337:19 340:21 341:13 electronically 215:10 216:11 218:13 338:11 339:11 electronics 338:9 element 10:14 138:21 142:18 143:5 155:4 261:7,13 elements 21:17 63:19 99:2,3,10,13 165:14 175:4 217:19,19 227:4 311:8 elephant 44:4 elevated 199:22 eligible 17:1 44:8 94:14 151:9 eliminate 31:19 Elisa 3:2 19:17 21:1 42:10 219:8 320:11 351:19 ELISABETH 1:18 elongated 215:13 embolism 309:1 embrace 225:2 eMeasure 214:7 224:10 225:16 227:1,20,21 228:2,5 240:15 259:20 310:13,19 313:12,14 323:8,13 324:19 332:4,7 eMeasures 4:18 207:2 214:1,11 215:20,21 216:4,7 217:3 224:18 224:21 225:5,10 290:10 311:11 emergency 287:8 299:15 321:17 322:2 322:20,22 emergent 12:12 321:15 emphasis 215:7 218:15 224:19 emphasize 22:17 23:1 23:3 57:15 69:12 134:2 171:8 222:16 232:15 empirical 305:11 empirically 97:21 EMR 67:15 302:3 enable 59:22 158:10 encompass 344:8 encompasses 85:9

encounters 268:11 ended 144:3 265:2 294:21 Endocrine 2:17 endogenous 133:6 endorse 54:3 72:20,21 183:20,21 202:17 234:1.7 endorsed 12:16 14:13 16:22 17:7 20:21,22 21:3 23:4 34:7 38:10 42:9 59:22 71:16,17 74:3 75:13 148:7 183:10,13 219:15 232:17 endorsement 16:18 21:1 22:19 23:4 24:11 26:15 30:21 31:3,8 33:5,10 42:9 53:4,7 53:12 54:3 70:11,16 73:1 75:6 108:14,14 108:17,22 119:21 120:1,5 127:22 128:9 159:1,3,8 170:10,15 180:13,13 183:10,16 183:20 201:17.19 206:15 210:1 218:13 218:16 219:10,13,22 220:8 222:18,19 223:8 224:14 225:15 226:4,14 232:16 233:11,21 234:14 endorsement-87:2 endorsements 231:9 endorsing 232:13 enforce 210:20 enforcing 210:15 Englewood 3:16 274:6 enhance 275:3 ensure 248:19 enter 182:18 317:6 entertain 176:19 177:12 entire 8:2 21:2 83:11 105:1 157:8.9 306:9 306:11 309:17 entirely 323:1 entities 84:20 entry 162:21 enumerator 272:16 envelope 177:10 enviable 26:21 environment 79:9,13 96:10,21 105:16,22 199:12 **Epic** 64:6 100:5 **epidemic** 269:4 episode 306:9,11 309:17

equally 147:11,22 equate 303:17 equation 137:1,2 225:11 Erekson 1:18 112:13 135:5,6 136:13,14 137:16 138:19 140:2 146:12 155:16 156:12 234:5 303:8,12 328:4 errors 296:17 erythropoietin 270:14 especially 137:9 192:21 281:11 essence 219:5 essential 235:7 essentially 10:9 32:8 32:15 50:5 94:15 118:13 172:14 181:18 226:10 245:3 establish 332:5 established 9:8 38:5 75:17 181:1,7 235:6 268:16 establishing 181:3 estimate 67:19 185:21 186:2 et 71:14 157:16 263:13 299:15 316:16 etcetera 256:16 ethnicity 114:4 160:14 etiologies 199:17 EU 271:16 Europe 269:19 European 270:19 271:6 evaluate 209:19 220:6 223:17 225:10 236:4 323:20 evaluated 163:12 226:8 327:1 evaluating 225:17 232:9 evaluation 81:5 216:4 259:11 event 16:16 47:18 137:2 154:2 174:2 176:21 178:19 185:20 186:17 204:2 events 47:22 146:22 147:16 153:17,19,22 186:8 eventually 265:17 everybody 29:10 36:15 57:13 221:14 251:2 272:2 273:2,6,16 evidence 13:7,21 14:3 14:4 15:4,8,11 16:3 17:12 19:3 21:21 31:12 34:1,2,5 35:15

51:7 53:16.18 55:20 56:3 71:22 73:16 74:1 74:5,8,12 76:4 105:21 110:6,18 111:1,4,7 121:10 122:7,11 131:6 133:1 135:9,10 135:15 136:9,12 137:14 142:15 160:9 160:11 178:1,1,13 182:9 184:3,10,19 185:1 206:6 220:16 220:21 223:19,20 226:1 231:3,12,15,20 235:2 241:6,7,16 245:9,12 249:14,15 249:18,20,22 250:19 251:18,19,20 253:4,4 253:18 254:1 256:9 256:10 265:10 266:17 267:13,15,19 268:7,9 276:9 279:22 281:8 288:3,5,9 289:8,14,14 291:15,19 298:3,4,8 298:14,18 300:5,15 301:8,14 302:2,5 305:9.11.12.17 306:21 308:6.11 311:20 312:12,17,22 338:2 347:12 348:7,8 349:3.12 evidence-based 247:1 evidenced 10:14 evoked 209:7 evolve 199:5 ex-surgical 120:12 exact 68:11 84:18 231:2 exactly 38:16 41:13 115:3 121:12 241:15 251:6 315:18 327:22 347:18 examine 93:21 examined 92:22,22 131:16 137:9 example 7:14 94:2,14 104:2 119:4 209:3 250:16 251:9 261:17 263:10 296:18 304:3 examples 84:22 excellence 67:17 265:13 266:3 excellent 14:5 106:18 exceptions 303:1 excess 13:15 exchanging 120:22 131:17 excitement 317:16 exclude 12:6 149:11 166:20 286:1 303:22

328:8 331:20 excluded 151:1,6,7,8 152:5 165:22 166:22 303:10 322:3 323:1 excluding 175:20 exclusion 78:3 149:12 166:5 222:7 239:8,15 239:19 301:16 303:12 303:14 307:8 321:17 322:19 330:5 340:9 exclusions 40:14 287:3 299:14 319:22 321:14 excuse 78:13 154:19 exhaustive 13:11 exist 150:18 160:20 242:8 317:5 exists 22:19 96:1 317:2 expanded 69:3 expect 68:1 expected 74:18 111:11 111:13 122:15,17,19 180:18 expecting 315:15 326:7 expensive 294:4 experience 60:13 112:11 147:12 208:17 280:5 313:5 expert 90:11 92:13 97:22 132:13,18 142:5 274:5 331:19 expertise 80:19 experts 142:6 explain 282:21 283:1 284:16 304:1 explanation 113:19 explore 311:11 explored 65:15 exposed 171:22 expressed 182:7 328:12,22 329:6 expressing 272:18 284:17 extend 226:16 extended 321:10 325:10 extent 235:8 239:1,5 330:4 external 210:15 extra 37:12 273:18 extract 66:4 239:5 extracted 68:8 151:17 extraction 65:14 310:13 extractor 99:21 157:22 extrapolated 243:21 244:8 extremely 263:10 310:7 310:14 extremity 261:16

eye 272:4 344:18 F fabulous 7:11 143:13 FACC 3:10 face 110:19 118:8 119:1 119:7 132:12 142:13 176:14 198:14 facetious 256:7 facilitate 224:11 facilities 178:19 260:9 277:12 278:19 285:16 295:20 326:14 facility 82:12,12,16,17 278:18 286:12,18 311:5,10,17 327:10 **FACOG** 2:4 **FACS** 2:1,4 3:10,14 fact 14:8,10 21:1 43:22 54:18 69:12 84:19 142:8 147:9 150:17 151:6 153:1 174:2 176:20 179:17 182:7 187:13 191:21 194:2 198:13,16 268:6 310:22 337:16 348:17 factor 78:22 103:17 114:5 268:12,17,20 269:3 270:22 308:16 308:16.17.21 309:14 factored 306:18 factors 92:21 93:1,11 94:5,12,18 95:7 130:19 133:3 152:11 160:2 176:21 181:2,8 181:11 197:4,16,16 198:10,17 200:18 failed 226:16 fails 221:14 failure 32:7 71:12 266:2 270:13 285:11 304:4 304:13,14,14 failures 296:18 fair 44:15 75:4 168:6 179:5 236:18 285:15 326:5 fairly 40:8 44:18 93:8 116:5 150:2 231:22 255:5 276:1,11 289:14 295:6 fall 151:4 224:9 294:13 falls 140:11 familiar 217:11 299:5 family 153:6 273:12 fan 284:20 fantastic 8:22 far 11:21 54:4 60:7 65:18 66:10 69:10

91:18 156:12 197:14 197:21 247:11 301:8 farm 96:15 farther 69:4 fashion 98:18 207:20 250:13 310:16 faster 120:18 fault 285:3 FCCM 2:10 3:16 FCCP 2:10 3:16 fear 317:10,12 feasibility 29:8,16,21 52:9 63:8,15 66:16,21 98:15 101:5,13,20 116:21 117:7,12 126:21 127:4 133:19 154:18 155:15 156:1 156:6 167:15 169:3,5 169:10 190:14 212:1 212:3,7 221:2 225:19 229:4 232:2 241:10 243:18,20 245:15 247:22 260:5,20 336:8 337:10,13,16 338:10 339:10 341:18 341:20 342:1.10 feasible 29:12 133:22 168:16 235:14 244:2 fed 132:7 federal 44:6 federally-funded 171:13 fee 134:10 feedback 9:18 79:11 88:16 131:22 132:19 213:15 287:18 349:17 feel 14:12 17:15 131:4,5 132:13 137:5,14 176:5 186:15 209:12 209:22 210:17 230:2 230:4 233:3 242:7 346:9 feeling 96:22 feels 25:6 36:21 168:9 220:2 280:19 fell 283:13 284:4 felt 174:5 175:3 182:16 261:3,7 325:8 femoral 177:8 fever 190:1 fevers 148:18 fewer 99:13 fibrillation 32:12,13 54:19 field 99:14 110:7 214:17 219:5,17,20 220:1 222:9 223:3 225:22 226:10 235:11

243:21 fields 65:21,22 68:7 99:14,15,18 100:10 131:13,20 132:2,9,15	6:21 7:2,8 8:13 13:20 14:1,6,16,21 15:6,10	258:13,15 261:11	Ford 11:2
fields 65:21,22 68:7 99:14,15,18 100:10			Ford 11:2
99:14,15,18 100:10	14.1 6 16 21 15 6 10		
		264:2,7 265:8 266:16	forefront 44:22
131:13,20 132:2,9,15	16:5,11 17:18 18:8,14	266:21 267:13 268:1	foremost 205:4
	18:17,21 19:12 23:8	272:7,10,22 274:3,20	foresee 235:20
132:20 141:21,22	24:8,10,15 25:8,15	277:18 280:7,13,17	foreshadowing 87:4
142:3 143:9 150:5	26:1,4,11,14 27:1,12	282:2 284:19 287:1	form 76:20 143:4
168:21 302:3,4	28:2,14,17 29:6,13	287:11 288:2,13	199:12 214:22 231:22
<b>Fifty</b> 170:4	30:3,5,20 31:1,10,16	289:11 290:8 291:20	235:1
figure 197:5	33:15,20,22 34:15,18	292:17 293:10 295:7	formal 91:14
figured 264:15	34:21 35:3,7,11,14	297:16,19 298:2,17	formally 103:14
figures 67:10	36:1,4,8 37:1,19	300:1 301:5,20	format 336:10
fill 218:1 227:14	38:17 39:11 41:5,20	302:17 303:19 305:8	former 221:18
filling 225:22 235:12	43:9,13,18 45:2 46:3	308:4 311:18,22	forms 155:5,14 164:15
final 120:9 176:18	47:15 48:14,17,22	312:10,21 313:9	formulate 277:2
211:17 236:20	49:2,4,8,12,15 50:5	314:1,14 316:2	formulation 82:21
finally 10:11 12:13	51:22 52:4,6,11,13,16	318:10 319:3,15,21	forth 37:8 82:1 249:22
350:20	52:20,22 53:3,14	320:2,10 321:1 323:4	281:22
financially 261:2	55:17,21 56:2,5,12,15	323:18 324:9 325:5	fortunate 69:6
find 24:1 44:3 61:20	57:6,12 60:14 62:8,20	325:12,16 328:3,10	Fortunately 315:4
137:4 140:10 218:3	62:22 63:7,10,13	330:7 331:22 332:12	fortune 209:1
226:20 227:13 255:19	65:12 66:11,14 67:3	334:17,22 335:3	Forty-five 293:8
303:22 304:7 310:8	68:5 69:5,15,18 70:2	336:21 337:5 338:6	Forty-nine 83:19,22
314:4	70:5,8,18 72:17 73:4	338:14 339:17 340:6	forum 1:1,8 237:3
findings 258:6	73:8 74:4,21 76:1	340:12 341:1,17,21	forward 8:11 22:1 25:16
fine 34:2 178:17	77:4,8 79:5 81:9 82:3	343:3 344:20 345:18	26:15 36:15 47:16
finger 315:17	82:6 84:8,12 86:16	346:6,18,20 347:4,8	55:14 77:2 112:8
fingertips 182:2	87:10 88:5,20 89:8,13	347:15,20 348:6,14	125:13 172:9 189:1
finish 8:2 26:4	89:19,22 90:3,16,19	348:16 349:15,22	203:21 209:1 215:3
first 8:20 12:1 22:4,11	91:7,20 95:3,8 97:1	351:14,18	247:6 274:9 275:19
39:7 40:19 51:8 58:20	98:3,20 99:22 101:4	Fleisher's 207:11	288:14 298:21 339:19
69:20 102:20 130:1	102:7,18 104:10	flesh 261:9	343:12 349:16
135:2,6,8,11 140:18	106:9 107:2,6,17	Fletcher 129:8	found 173:18 176:10
141:11 149:20 168:14	108:13 109:2,6,10	Floor 1:8	262:20 268:12 294:17
178:17 181:10 189:6	110:17 111:9,17	Florida- 2:16	296:21 297:17 334:5
198:21 211:15 213:21	113:4,16 114:12,17	flows 248:2	four 80:8,15 216:9
216:9 222:14 229:2	114:22 115:6,13,20	focus 31:12,16 55:15 73:18 93:5 105:9	267:17 283:3 288:7
258:16 270:5 272:12 274:21 283:6 296:16	116:10,22 117:4		298:10,12 306:13
	118:6,18,20 119:20	183:15 284:5 294:10	312:14 319:8 323:10
299:13,18 306:7	120:8,17,21 121:22	305:12 308:5 314:19	340:16 342:3,18
309:18,20 310:9	122:4,13,22 123:19	focused 105:10 132:17	349:7,9 fourth 217:1
318:14,19 321:4 322:19 337:12 345:20	124:11,15 125:8 126:3 127:7,18 128:2	133:12,14 151:10 202:13	fraction 134:11 193:19
351:7	128:11,15 129:19	focuses 130:11	fracture 4:16 151:3,18
<b>fit</b> 103:5 178:16 241:15	143:22 145:4,18,20	focusing 258:3	172:2,12,21 173:14
265:15	146:3,6 183:8,19	follow 50:15 80:12	174:19 175:13,22
fits 302:14,15	201:12 203:9 213:8	189:11 207:10 232:4	176:1,3 183:7 186:7,9
five 71:2,10,17 85:11,11	201.12 203.9 213.8	254:5 258:2 348:1	188:7 189:9 190:7
131:1 165:3 216:4	226:20 227:19,22	follow-up 195:4	194:5
222:11,13 227:12	228:4,16 230:10,17	followed 50:16 152:22	fractured 183:5
246:9 247:1,9 248:1	232:18,21 233:9,14	304:10	fractures 151:15 171:7
251:8 275:9 317:9	233:17 234:3 236:7	following 145:1 201:15	172:13 173:18 177:8
fix 259:7 264:11	236:16 237:11 238:3	257:16	178:4 186:1,3 199:16
fixation 189:10	240:11 241:2,21	follows 289:17	204:22
flagged 34:14	242:16,20 243:7,12	fond 221:18 296:17	frame 58:7 72:4 120:10
flash 215:3	244:11,15 245:3	food 244:19,20	195:19 236:8 248:20
flawed 84:21 85:4	249:3 250:5,8 251:17	foray 171:16	249:21 251:17 260:17
fledgling 182:13	252:11,17 253:3,7	force 11:3,7 35:8 182:8	260:21 324:2 344:14
Fleisher 1:9,11 6:3,15	254:5,11 255:12,16	forces 85:18	frames 116:6,8

u .			366
frankly 15:4 59:11	160:10 161:16,20	<b>globe</b> 269:5	250.12 262.0 11 12
-		0	259:12 262:8,11,13
85:16 94:13 261:21	162:2,7 166:9 179:18	glycocalyxes 199:12	263:5 264:3 267:2,5
Fred 205:7 213:11	185:4,7,10,12 188:12	<b>go</b> 8:18 19:14,21 21:11	271:19,20 278:8
228:21 258:13 272:22	188:14,19 218:2	23:5 28:2 31:11 34:3	279:2,4 280:8 281:2,5
311:18 322:6 341:1	220:16 223:18 226:2	38:17 41:22 44:2	283:17,21 285:1,13
Fred's 325:20	230:13 231:3,12	48:21 54:4 66:14	287:6,7 288:14 294:1
FREDERICK 1:19	232:6,7,11 233:20	68:20 84:9 98:19	304:20 313:6,21
free 103:19	235:2,12 245:10	99:15 113:22 114:2	315:16 322:17 324:14
front 21:19 73:5 130:2	275:14 276:9 289:15	117:4 119:10,13	326:5 329:2,12,19
131:2 134:19,20	296:10,11,12,14	121:1 125:10 137:15	343:8,12 345:18
181:16 209:18 222:13	313:1,4,5,12,17,18,19	140:21 153:17 155:5	351:11
317:13 341:6	314:3,12,16 315:2,5	155:12,21 161:22	<b>gold</b> 101:2
FTE 134:12 168:17	315:11,22 319:4,6,11	164:1 169:3,18	Goldwater 3:4 207:5
fulfill 219:1	338:2 345:9	172:17 174:17 175:14	214:3,4 224:1,6,16
fulfilled 233:4	gaps 19:4,5 26:8 48:5	201:4 203:7 205:7,15	225:12 226:19 227:6
full 22:19 26:15 137:18	89:1,10 179:16	218:7 219:11,17	227:20 228:1,11
220:11 223:8 243:13	223:20	226:7 231:9 235:6	229:6 230:20 232:14
255:18 262:9 304:22	gauge 179:22	241:8 242:2 243:16	232:20 233:8,22
fulled 207:8	general 2:8 36:10,11	245:4 252:12,13	234:15 236:15 237:9
fully 207:2 209:13	76:2 98:21 99:5	253:11 255:19 258:21	238:1,21 239:10,21
218:15 224:13 348:18	104:20 195:12 301:18	265:17 272:19 274:9	240:16,22 242:5,19
function 32:8 144:13,13	313:22 343:16 344:7	274:21 282:11 291:16	243:5,16 244:14
246:15	generally 40:7 60:22	293:7 294:2 306:16	336:7,19 337:2,8,18
functional 112:20 133:5	221:15 227:8 294:13	323:5 333:19 335:10	338:4,8,22 340:18
140:14 141:18 209:4	304:3	341:7,13 349:16	349:21
fundamental 184:12	generate 144:21	351:11	<b>good</b> 6:3 8:9 11:5 15:12
further 8:5 55:9 60:1	geocoding 94:20	goal 183:15 272:16,17	25:1,10 34:2 48:20
109:21 125:8 135:4	geographic 95:11,19	277:15 284:8 292:21	51:14 58:21 66:10
157:7 166:6 174:22	96:13	goals 329:5	67:17 69:8 73:15
175:13 177:11 178:14	geography 96:9	<b>God's</b> 329:9	75:20 80:16,18 84:22
219:18 226:14 261:9	geriatric 132:16 135:13	goes 17:12 20:20 21:2	102:5 110:18 123:18
311:11 313:9 342:14	140:6,17,20 141:13	50:4 57:14 81:2 87:15	135:15 136:5 137:20
future 65:6 112:21	getting 16:1 51:11	107:4 114:6 150:2	141:1 142:15 144:22
143:14 168:18 172:16	226:15 235:9 261:5	174:11 226:9 235:18	145:13,18 149:7,13
237:2	273:20 327:18 330:17	245:18 316:17 318:3	168:5,8 171:2 174:6
G	333:22	328:16	175:8 177:21 184:17
<b>G</b> 4:1	<b>give</b> 60:19 61:2,6,15,21 171:17 174:15 193:22	<b>going</b> 6:5 10:12 11:4 18:19 22:9 26:15	190:20 195:19 198:4 201:21 202:2,18
<b>GAETANO</b> 3:15	212:10 243:1 245:20	31:19 34:12 39:2 47:7	203:11 206:17 214:3
gain 207:12	261:8,20 306:14	48:15 55:14 60:19	229:17 244:19 245:21
Gainesville 2:16	309:2 310:10 312:2	74:22 76:17 80:20,21	250:19 264:14 281:8
game 87:7	324:12 341:6 348:8	80:22 81:14,21 86:8	293:20 295:10 301:14
gamed 257:19	given 21:21 34:13	86:11 94:19 103:20	307:14 333:5 348:2
gaming 309:6	49:22 58:6,18 59:9,18	105:7 106:5 134:13	gotten 22:11
gap 14:2,17 15:1,5,5,12	59:18 60:3 97:20	136:3 148:20 173:6	grade 199:17
15:22 16:12,19 18:5,7	125:11 162:17,18	176:5,6 177:8 178:20	grading 305:11
19:13,20 21:4 24:18	166:7 186:6 198:13	181:2,8,19 184:14	graft 4:4,11 12:6,22
24:21 31:13 32:14,17	217:2 224:22 249:21	192:5,17 194:7	13:14 19:2 22:22
32:22 33:19 35:16,17	287:19 298:5,18	196:17 200:6 207:4	71:14
35:21 36:11 39:2,3,14	321:19 322:20 327:9	210:19 211:19 212:10	grafting 71:3
45:7,17 46:2 47:19	332:22 343:6	215:12,18 221:5	grafts 13:6
48:10 50:1 53:16,19	gives 90:5 112:9 123:16	222:5,12,14 225:9	gram 299:20
54:2 55:20 56:5,19	230:5 286:20 299:9	230:12 232:12,16	grams 275:6 295:1
57:10 74:16 75:21	giving 39:20 40:3	235:19 240:22 242:7	granted 36:15 243:19
88:21 111:9,10,14,20	102:13 112:15 180:10	242:8 243:18 244:4,5	granular 251:12 283:17
112:3 114:1 122:14	219:16 318:5	244:14 245:7 250:17	granularity 94:16
122:21 123:3,8	glad 350:10	251:5,7,15 256:13,14	gray 335:10
137:15 138:4,6,9,13	global 123:15	258:2,20 259:3,4,6,6	great 6:15,21 7:2,18
			<b>,</b> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
1			

17:21 41:20 42:6 54:21 58:22 64:17 65:4,7 67:3,18 72:17 73:14 85:19 88:9 113:4 149:19 177:16 201:14 210:14 212:8 214:2 224:19 229:20 238:8 243:7 268:3 290:11 301:5 319:3 319:15 349:16 greater 55:6 57:17 91:16 214:15 215:7 283:22 294:14 299:22 300:5 grew 182:8 gritty 175:16 grossly 84:21 85:3 group 34:9 68:7 75:2,9 75:9 76:11 77:5 84:1 119:15 132:18 145:12 145:12 206:20 224:14 279:8 324:6 350:15 **grouped** 158:4 groups 15:21 18:3 318:2 **GROVER** 1:19 19:9 184:14 205:9.22 206:3 228:22 258:14 273:1 308:8 322:7 325:22 326:11.15 327:19 341:2 Grover's 206:13 growing 214:13 growth 194:13 guaiac 262:7 guess 11:8 45:11 50:7 50:13 60:10 63:15 64:22 171:20 200:12 205:16 206:12 209:11 218:21 253:9,17 262:4 278:15 279:14 305:18 306:7 317:11 339:4,7 346:6 guessing 203:7 312:4 guesswork 312:5,9 guidance 213:10 guide 168:21 quided 295:20 Guideline 34:16 guidelines 12:21 34:5,8 34:10,13 35:8 245:6 282:8,16 289:18 301:10 304:4 Gunnar 1:9,13 8:7 28:12 37:14 38:18,21 62:3 68:6 80:6 81:2 83:8,14,22 84:4 85:21 99:20 102:12,16

110:22 118:16.19 125:20 128:20 129:7 135:5 136:11,15 137:13 138:5,17 139:12 140:1 141:4 143:21 145:16,19,21 146:5,9,11 148:4 153:8 154:7,17 155:15,20 156:10 157:3,21 158:11 159:1,10 160:5,10 161:17,21 162:11 163:22 164:12 167:3 167:14,18 169:2,14 169:17 170:7,19 177:14,19,22 178:6 179:8,11 184:3,11,16 185:4,15 186:19 187:4 188:11 189:1 193:6 194:9 195:2,20 196:1,13 198:7 200:5 201:10 205:7 206:11 206:21 207:9 208:14 210:2,22 212:15 213:3 322:6,14 325:20 326:9.12 327:22 Gunner 129:19 Gustilo- 193:22 **quys** 23:15 65:4 69:19 112:22 155:8 GYN 259:1 gynecological 297:6 Gynecologists 2:5 н H 3:17 **H&H** 256:18 318:17 habit 63:1 habits 28:8 half 51:8 111:16 122:20 220:14 234:6 Hall 3:14 129:7,9 136:22 141:9,20 143:3,16,20 144:10 145:7 146:1,8 147:4

149:19 150:20 151:14

152:6,13,20 153:1,21 155:3,10 156:17

157:8,17,19 158:9

159:14,15 160:21

162:22 163:19,21

hand 83:15 308:5

handbook 183:22

HANDY 1:21 14:22

170:17

348:10

165:9 166:11 168:12

23:7 26:17 28:6 29:7 30:4,17 109:8 110:18 111:10 112:6 115:8 116:4,20 117:2,16 121:19 122:2,14 123:12 124:7,13,17 125:5 126:4,18 hang 222:14 happen 20:3 96:14 105:16 109:21 318:19 325:18 happened 24:6 43:16 153:2 157:6 303:1 happening 66:9 249:11 249:12 happens 50:3 happy 129:20 130:19 135:3 213:13 336:2 harbored 199:9 hard 36:13 80:17 115:5 168:3 191:15 198:18 199:16 230:14 293:9 harder 22:21 hardware 174:18.21 191:22 192:7 199:8 200:22 Harvard 187:22 harvest 12:10 hate 96:17 238:17 hazards 246:14 HCFA 214:20 he'll 80:21 head 27:21 87:1 health 1:14 2:5 46:8 64:7 214:12 215:5 217:5 326:13 Healthcare 103:15 129:10 hear 42:4,5 43:5 69:19 107:22 168:1 207:4 251:13 290:17 heard 20:20 30:5 42:8 101:9 103:12.14 150:7 196:16 236:17 317:15,18 320:3 323:22 325:8 hearing 38:9 106:10 137:15 158:12 215:15 229:17 233:1 255:1,2 268:5 274:4,9 305:15 330:9,16 338:21 339:20 heart 11:14 32:6,6,7 50:18 266:2 304:4,4,9 304:13,14,14 held 205:1 306:4 332:11

15:12 21:5 22:2.14

Helen 3:2 244:12 351:20 help 19:18 21:22 41:8 43:5 45:9 202:1 213:13 255:15 259:5 277:19 278:12 279:9 316:4 333:10 336:15 339:22 helped 339:18 helpful 18:14 22:16 42:2 100:9 161:15 232:12 helping 18:20 278:1 351:21 helps 43:3,4 278:13 hematocrit 285:6 299:8 316:15 hematologist 257:9 Hematology 270:4 hemoglobin 5:3 246:21 253:8 254:20 255:9 256:10 257:1,6 263:19 269:9,11 273:4,20 274:11,15 274:18 276:10 279:10 279:15.19 280:4 281:19 283:4 286:19 287:22 295:2 299:8 299:11,20 300:4 301:15 302:20 303:5 303:6 304:6 306:15 308:15,19,19 312:6 315:19 316:15 318:14 318:22 321:9,16,21 322:9,13 326:1,5,16 327:15,20,22 328:18 329:17 330:1,18,19 330:20 331:2,5 332:16 334:8,11 hemoglobins 253:12 253:19 275:6 279:3,4 hemolysis 231:1,8 hemorrhage 303:16 328:6 330:3 hemorrhagic 322:10 326:4 hemorrhaging 329:18 Hemovac 304:22 Henry 11:2 hepcidin 270:6 hernia 252:8 hi 214:6 259:18 hierarchical 82:11 133:8 high 15:15,19 18:11 19:6 26:3,9,22 27:4,9 28:19 29:3,17,22 30:4 30:9,14 45:22 48:5,11

53:21 56:20 57:3 62:11,17 66:17,22 73:20 85:14 89:2,11 90:22 91:5 92:1,7 97:5,11 98:7,12 101:14,21 108:5,10 111:20 112:4,11 113:7,14 115:8,16 116:1,12,18 117:7,13 117:20 118:3,9,12,13 123:3,9,21 124:5,19 125:3,17,22 126:8,16 126:18,19,21 127:5 127:10,15 131:14 138:9,14 139:16,21 156:1,7 158:15,20 161:16,20 162:3,8 164:3,9 166:7 169:5 169:11,21 170:4 173:13 174:3 175:2 176:6,11,20 177:5 180:3 181:3 184:6 187:1,11 188:14,20 196:4,10 198:15 204:2 240:19 246:20 249:19 263:10 267:16 267:20 288:6.10 290:20 310:14 312:13 312:18 319:7,12 321:15 323:9,15 329:17 342:2,11,17 342:22 high-outlier 138:2 high-risk 105:11 high/moderate 125:14 higher 56:10 111:15 122:19 136:1 173:21 178:11 299:7 300:10 304:6 306:22 308:19 higher-risk 106:4 highest 10:20 72:11 105:6 161:4 highly 11:21 29:11 65:21,21 173:12,19 hinder 219:2 hip 172:12 186:7,8 264:22 265:5 314:20 hips 315:7 hire 100:14 historically 84:17 206:21 history 10:7 11:22 21:6 23:10 39:19 215:13 hit 47:10 157:14 Hitchcock 1:18 hoc 107:15 209:7 hold 167:17 199:20 holding 38:5 209:10

holds 278:10 hole 96:8 303:5 304:16 home 50:4 152:12,14 homeopathic 61:7 homework 181:15 honest 265:9 honestly 61:6 68:10 207:17 honor 11:6 hope 205:4 335:4 hoped 215:1 hopefully 59:13 102:20 341:13 343:10 hopelessly 105:20 hoping 230:8 336:5 horizon 130:9 134:3 hospital 2:8,9 3:17,17 46:10 59:8 61:13 67:20 69:7,13 95:19 133:8 139:7 140:11 145:6 148:16,18 152:9,11 153:4 156:21 188:8 202:2,2 247:20 258:21 260:17 274:7 277:10 279:16 286:13 315:17.20 316:1 334:5,5,6,9,13 334:13,15,15 hospital's 344:10 hospitalization 153:3 hospitalized 272:6 299:16 331:13 hospitals 24:3 63:21 133:20 137:17 138:2 138:2 139:11 141:15 156:15,16,22 157:1 163:7,11 168:1,9,15 168:20 173:2,4,7 202:5 203:10 215:4 217:6 218:18,21 246:11 247:1,4,6,21 248:1,14 254:15 260:4,15,22 266:8,14 277:2,8 279:11 286:22 294:1 296:16 300:17,17 302:19 310:2 315:10,17 317:9,22 hour 120:15 128:6 304:21 hours 7:16 55:8 58:3,14 61:19 177:6 HQM 336:10 HQMF 324:18 325:3 336:5 huge 44:1,7 93:17 250:20 314:16 315:4 315:4 334:11

humbled 9:4 hundred 122:10 285:5 hundreds 147:13,21 hyperbole 256:13 hypotensive 61:1 hysterectomies 286:14 hysterectomy 297:22 L **i's** 67:12 ICD-10 176:2 252:5 255:21 ICD-9 176:4 187:17 **ICU** 81:22 ID 79:17 idea 37:6 77:20 86:18 86:21 87:4 206:17 221:16 244:19 258:20 277:2 302:15,15 329:14 ideally 88:2 148:6 identification 224:12 identified 163:8 176:2,4 179:16 275:4 286:4 330:1 identify 6:8 8:20 176:13 232:10 274:13 275:1 344:2 identifying 247:2 343:20 345:2 ignorance 297:9 **ill** 105:20 **illness** 263:12 **IMA** 12:15,18 13:9 28:11 imagine 103:19 277:7 **IMAs** 32:18 immediately 274:18 299:12 immensely 68:19 impact 16:9 44:2,7 93:17 94:15 136:6 137:3,4,6,11 182:15 244:4 262:13,18 282:19 implant 195:8,17 208:7 implants 174:11 191:12 implement 100:5 236:2 282:17 implementation 163:1 163:3 168:19 214:12 242:9 272:5 317:11 implementations 217:15 implemented 10:5 165:16 208:19 218:17 218:18,19,21 231:6 231:14 235:9 242:10

302:11 310:2 317:19 336:11 implications 45:12 175:9 176:15 177:11 implicit 72:14 implies 254:19 implore 192:18 imply 256:17 **import** 148:9 324:6 importance 16:14 33:7 93:15 131:5 150:4 220:16 223:18,20 225:18 231:15 235:3 237:5 240:13,20 241:1,6,16 245:8,9 important 7:4 10:10,13 14:11 16:10 17:9,14 19:16 22:20 37:2 38:12 44:22 45:20 47:19 65:14 72:18 79:11 88:18 90:8 105:3 114:21 147:16 166:3 172:19 177:7,7 177:9 178:5 202:15 204:13,15 211:12,14 211:18.19 213:17 224:14 230:3 237:2 237:19 241:8 249:16 260:5 265:7 272:1 280:4 308:12,13 341:9,12 348:16 importantly 13:18 130:8 131:21 impossible 12:11 248:17 imprecise 304:12 305:2 305:7 impressed 213:18 improve 21:17 46:9 81:21 96:20 235:4 247:2 269:15 270:20 276:4 331:16 improved 231:14 257:22 improvement 9:20 20:1 24:5 25:20 36:12 40:3 45:11,12,18 56:11 81:6 82:2 83:5,6 88:17 132:8,22 142:3 142:12 144:22 158:5 160:19 203:12 215:8 272:21 284:21 285:7 302:22 310:21 329:3 improvements 22:9 improving 46:11 175:13 253:18 261:5 339:8 imputed 92:19

Neal R. Gross and Co., Inc.

Washington DC

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in-hospital 186:9 inadequate 94:18 inappropriate 310:8 inappropriately 293:20 inappropriateness 246:20 incentive 230:9 incidence 54:18 178:19 180:3 185:19 269:15 incidental 148:13 186:4 incipient 205:19 incisional 142:20 include 12:7 82:11 93:19 140:8 143:15 151:11,12 237:8,21 238:1 256:2,6 287:7,8 301:17 included 9:20 92:14 133:17 139:4 152:15 155:1 197:18 322:3,4 322:8,9 includes 32:8 71:2,15 131:15 132:3 140:11 141:14 216:4 306:11 including 94:11 141:2,2 141:17 152:8 199:11 237:17 251:11 286:1 inclusion 141:3 189:9 222:7 231:10 239:8 239:15,18 340:9 inclusion/exclusion 240:1.3 inclusive 135:19 incomplete 234:17 308:18 inconvenience 273:17 incorporated 140:12 175:4 incorporating 140:14 incorrect 238:20 increase 182:16 194:13 214:15 increased 246:12,15 increases 60:2 270:6 increasing 258:9 Incredibly 7:3 increments 299:20 independent 268:12,17 268:19 270:22 independently 272:17 index 261:14 indicate 39:5,9 243:19 indicated 13:4 60:18 163:5 191:13 227:9 266:4 333:1 indicates 40:4 145:14 151:5 300:16 **indicating** 231:12,13

indication 42:12 316:16 318:5 330:2 333:2 indications 322:12 indicators 10:10 individual 4:7 25:18 27:22 70:22 75:4 76:7 76:9,10 77:7,11,21 82:10 87:17,18,21 90:6 104:15,19 279:7 333:15 individually 86:2 individuals 144:5 210:4 210:9 279:8 inequality 46:9 infected 193:12 infection 4:16 71:11 142:20 148:13 170:20 171:6 173:12,15,19 174:9,10,16 175:1,6 175:18 176:16 177:1 177:3 178:3 184:6 186:11 187:1,10 188:8 190:3 192:7 193:16 194:7,8,15 195:9.13 196:19 198:16 200:2,3,12,21 201:4,8 208:5 246:14 infections 147:15,15 148:22 199:15 inferior 193:8 **influence** 93:13.22 178:8 243:10 influencing 93:11 inform 255:15 informal 210:6 informally 173:9 informaticist 246:3 247:13 informaticists 247:20 information 18:9 30:10 30:16 54:5 59:13 64:2 108:6,12 112:16 113:18 117:21 118:5 127:11,17 154:22 155:6 156:19 157:2 158:16,22 164:16 169:22 170:6 182:1 207:3 209:8 234:22 310:11 311:16 342:18 343:2 351:10 informational 84:14 infrastructure 332:5 infusion 270:10 inherent 132:11 initial 5:11 99:18 298:22 300:4 initially 23:20 174:5 225:17 249:6 277:13

initiating 69:21 initiation 265:6 initiative 105:2 173:10 Initiatives 11:8 injured 194:19 injuries 176:13,17 177:5 194:20 injury 171:21 172:7,11 172:19 174:3 179:21 179:22 185:20 193:11 197:16 198:14,16,18 286:2 328:7 innovation 218:8 innovative 218:13 inpatient 145:5 260:12 260:14 261:6 input 340:3 349:19 **inguired** 229:14 insert 164:16 insertion 316:15 inside 156:19 172:5 304:22 insightful 76:13 79:15 144:11 163:1 **insights** 41:22 149:20 insignificant 18:12 67:9 insist 200:2 instance 149:21 182:16 institute 64:9 instituted 64:6 institution 64:5,7 68:22 78:20,21 80:21 81:6 81:11,14,15,20 87:16 156:20 157:10,15 190:19 201:16 210:20 295:11 299:11 334:12 334:13 institutional 83:4 306:17 institutions 63:17 79:1 79:19,20 80:2,3,8,10 80:16 132:6 163:16 194:18 291:3 instructed 293:8 insufficiency 263:12 insufficient 19:7 20:4 26:10 27:5,11 28:21 29:5,18 30:2,10,16 48:7,13 56:21 57:5 62:13,19 66:18 67:2 89:3,12 91:1,6 92:3,9 97:7,13 98:8,13 101:15 102:1 108:6 108:11 111:22 112:5 113:9,15 115:18 116:3,14 117:9,15,21 118:4 123:5,11 124:1 124:6,21 125:4,19

126:2,10,17 127:1,6 127:11,17 138:10,16 139:17,22 154:11,16 154:22 156:3,9 158:16,22 162:4,10 164:5,11 167:8,13 169:7,13,22 170:6 188:16,22 196:6,12 212:19 213:2 267:17 267:22 288:7,12 298:10,12,16 312:14 312:20 319:8,14 323:10,17 326:21 342:3,12,18 343:2 349:8,9,14 insurance 24:4 114:13 114:13 integral 17:1 integrated 260:11 intend 300:21 intended 67:4 86:18 284:22 345:1 intensely 55:14 intensity 149:1 intensive 79:2 310:7 Intensivist 77:14 intent 165:18 248:19 284:1 288:17 300:7 312:2 329:20,20 331:16 337:20 338:12 339:9.13.15 intention 198:9 intentionally 73:2 intently 129:14 inter-op 306:10 inter-rater 132:7 143:11 interest 182:7,10 330:11 interested 14:2 65:18 175:12 230:3 310:12 323:21 335:9 343:11 interesting 45:5 66:8 82:22 83:16 99:22 202:12 interfaces 261:5 interfere 327:17 intermediate 305:10 internal 4:3 12:2,5 13:3 13:5 15:17 17:11 19:1 24:4 132:6 189:10 284:21 285:18 301:2 internally 75:5 163:11 332:6 internists 50:17 interoperatively 320:4 interpret 204:19 interpretation 304:19 340:10

interpreting 114:11 interval 71:22 264:12 intervals 163:17 281:18 intervening 318:7 intervention 241:14 250:14 281:16 interventions 277:3 279:7.9 intra-institutional 277:16 **intra-op** 331:9,20 intraoperative 330:10 intraoperatively 331:1 introduce 8:17 214:2 245:19 247:12 300:6 investigate 300:13 investigated 130:18 133:16 160:1 investigational 301:3 **invited** 54:14 involve 133:9 involved 85:3 102:22 174:19,19 185:14 191:22 involvement 207:14 involves 109:11 121:6 133:3 174:11 192:7 208:5 involving 72:10 110:14 **lowa** 317:5 **iPhone** 6:4 iron 256:16 262:2,9 270:2,3,5,7,11,13,14 275:3,22 276:7 286:16 irrespective 325:3 irrigation 189:17,19 ischemia 307:1,5,13 333:2 ischemic 11:14 isolated 71:2,3,4 72:6,7 80:19 96:2 109:14 142:13 151:3,15,18 isolation 95:12 96:13 issue 40:11 60:1 106:13 125:14 178:5 191:5 191:10 196:20 198:1 217:7 240:3 242:6 258:17 276:8 282:6.7 291:16 298:2 325:13 330:4 339:15 345:21 **issues** 7:5,10,12,13 54:15 64:11 91:19 93:6 189:4 191:4 194:13 217:16 238:11 245:13 253:17 259:15 261:9 273:19 it'd 330:19

item 305:6 items 93:10 110:4 114:8 197:2 303:22 iteration 55:3 J Jaimo 3:9 171:3 **JAMA** 146:5 January 145:19 **Jason** 3:4 207:4 214:4 225:7 242:1 244:13 335:15 336:6,15 349:18 **JD** 1:13 Jehovah's 307:7 **job** 7:11,18 25:1 106:19 106:20 213:20 316:5 John 1:21 14:19,21 26:16 30:3 109:4 110:17 JohnMarc 246:4 **JOHNSON** 3:5 154:19 155:12 164:14 joined 6:7 joint 3:12,13,18 4:20 5:4,9,12,15 135:11 175:5,10 177:10 199:15 227:11 229:15 230:1 238:6 243:1 244:17 246:1.3.9 247:14 256:2 265:11 265:22,22 298:20 314:19 320:14,19 323:21 330:8 335:6,8 340:4 346:7 joints 46:15 joke 221:14 Jonathan 3:17 246:6 journal 54:13 270:4 judged 332:16 judgment 309:5,15 332:19 Julia 3:11 129:12 July 72:9,9 109:16 121:7 jump 238:10 255:14 324:4 jumped 126:19 June 72:9 109:16 121:7 justice 179:21 justification 329:16 justify 284:17 Κ Karen 3:5 164:13 Karl 1:15 73:12.13 91:7 101:10 146:11 205:7

KATHRYN 3:7 Kathy 3:13 245:22 247:12 Katie 20:16 keep 43:22 48:15 87:11 188:3 194:22 212:10 221:5 332:9 keeping 301:14 Keith 2:10 179:8 Kelsey 2:7 33:16 36:1 37:20 38:21 55:17 56:5 57:21 62:20 kept 136:21 Kettering 2:19 key 258:3 261:7 284:9 kibosh 218:8 kick 11:4 kind 27:21 39:19 46:1.2 141:16 161:7 168:11 207:11 210:5 211:22 212:1 224:9,15 234:12 253:19 257:12 258:1 265:5 272:5 286:18 301:18 310:19 312:4 317:12 318:15 339:3 kinds 133:1 knee 172:3,6,18 251:8 296:2 297:18 know 8:3 9:16 17:13,21 20:11 21:9 23:12 25:8 27:15 33:7 36:12,21 49:18 59:5 61:19 64:20 83:8 93:1 100:15 103:19 104:14 112:21 120:17 128:22 130:22 133:22 134:8 144:6,14 146:19 149:13,17 153:10 168:16 174:1 177:7 178:15,18 181:14 200:10 201:22 206:2 209:8 211:6,7,8 213:11 214:19 217:11 222:8 234:13 249:20 253:18 257:7 259:5 259:19 261:14,18 263:1,8 268:4,21 270:2 272:15,19,20 275:19 278:12 279:16 280:1 281:1,1,21 282:5 283:19 284:6 286:7 290:12 291:15 291:20 293:9 296:10 304:9 308:10 309:4 313:17,20 314:9 319:22 320:3 321:11 321:20 324:15 327:17

328:17 329:12 330:14 330:21 331:6 333:4 333:19,20 335:2 339:3,11 341:8 346:14 347:5 348:3 knowing 307:21 known 51:16 54:20 187:1 knows 68:11 87:18 161:7 Ko 2:1 20:9 41:6 129:16 177:15,15,16,21 178:2 179:2,6,9 181:10 182:20 185:5 185:6 189:3 195:20 195:22 196:15 208:9 211:1,2 213:11 266:19,22 267:4,9,12 L lab 95:18 96:7 199:19 259:21 262:8 263:2 labeled 253:21 lack 225:3 249:9 261:3 LAD 12:14 13:4,14 17:12 lagging 272:4 language 66:6 laparoscopically-ass... 297:22 large 40:16 41:4 54:8 248:14 276:1 286:13 286:14 287:16 293:17 294:3 334:16 largely 133:14 141:22 190:16 215:1 larger 40:2 163:10 176:9 Larissa 2:18 223:13 238:9 253:8 274:21 275:16 344:20 Larissa's 254:6 Larry 8:19 14:18 16:5 28:12 45:13,13 87:10 165:20 166:15 Lastly 307:7 late 291:9,9 laudable 272:16,17 284:8 329:5 Laughter 69:14 79:6 84:11 107:7 120:14 120:20 146:10 177:18 LAVH 297:20 LAWRENCE 2:8 lay 187:18 layperson 34:22 lead 112:18 249:4 337:19 338:12

Neal R. Gross and Co., Inc. Washington DC

206:11 350:21 352:2

leader 11:2 leading 231:5 351:19 leads 247:21 306:22 leaning 208:6 learn 152:13 175:9 199:2 215:8 leave 87:12 96:6 136:10 351:15 leaves 152:9 leaving 96:21 led 214:14 274:15 Lee 1:9,11 100:7 143:21 201:10 250:21 347:13 **left** 12:18 13:1,9,10 15:17 17:11 120:13 legacy 216:18 length 203:14 246:15 264:13 lengthier 254:17 lens 225:20 lessened 33:7 lesser 106:3 let's 20:3 26:4 28:17 63:7 88:20 90:19 91:21 98:4 108:15 111:17 146:19 173:14 175:1 204:9 226:21 251:2,17 283:14 308:4.4.5 level 5:4 32:10,11 42:14 75:3,4,9 76:9,10,11 77:5,21 82:17,22 84:3 84:5 96:19 118:12 143:5 151:3 161:2,5,6 173:8 181:18 210:21 270:6 274:11 279:21 299:7 302:20 304:6 311:5 326:16 329:17 330:18,19,20 331:2,5 332:17 levels 53:21 256:16 274:15,18 279:10 300:4 302:9 321:21 leverage 230:5 LEVY 2:4 24:16 25:13 37:21 43:4,12,16 76:2 78:4 95:5 241:3 243:8 258:16 277:19 278:4 279:13 293:13 297:20 LFT 262:9 liberal 300:10 307:1 license 103:13 life 172:12,15 life-saving 246:13 light 172:22 232:10 likelihood 181:6 **LIMA** 13:14 limit 250:15

limitations 227:11 limited 159:21 220:15 222:22 225:15 296:12 limiting 7:19 limits 264:18 line 6:20 81:7 280:18 linear 133:4 lines 6:19 linked 212:1 348:18 links 184:5 lips 329:8 Lisa 101:5 242:1 list 21:20 37:9 68:2 112:16 113:22 252:4 290:16 296:6,7 297:1 297:4,17 304:8 listed 15:5,13,14 198:10 255:21 297:9 337:16 listening 324:22 listing 39:18 literature 46:7,8 137:7 139:3 145:11,14 181:1 184:9 187:9,14 187:15 191:1 250:22 256:17 264:1 296:10 296:11,13,21,22 317:2 little 11:9 15:1,13 16:4 21:7 22:21 31:13 32:22 33:11 38:8 45:19 54:11 63:21 75:18 94:7 96:19 100:21 112:15 124:13 141:6 148:20 154:20 171:17 174:15 189:13 200:12,15 207:18 210:6,12 241:3 262:13,18 293:3 314:2 326:18 336:1 345:8 live 96:15 221:6 lived 95:12 Liz 128:22 234:3 302:17 328:3 local 333:14 locally 302:12 location 80:19 logic 221:9 222:2 logistic 114:7 long 7:8 13:13 39:19 131:1 183:14 199:20 214:17,19 250:15 long-standing 9:15 long-term 13:8 longer 32:2 145:1,1 183:10 207:1 225:15 240:21 264:15

Neal R. Gross and Co., Inc.

Washington DC

longest 290:21 look 21:19 24:20 25:19 37:22 38:1 60:1,22 63:19 81:13 88:8.9 97:16 99:17 100:12 112:18 119:11 140:5 146:20 165:8 176:8,9 176:21 191:7 192:14 195:13 215:20 223:19 227:17 228:2 232:2 240:18,22 241:5,6,8 241:10,11 243:22 247:6 255:8 256:14 272:3 275:19 279:11 279:17 282:14 284:12 285:3 302:19 305:4 309:13 313:16 322:18 327:8,12 328:18 331:15 336:2 339:19 344:17 345:20 looked 48:19 86:17 93:16 100:2 104:17 110:1 116:7 144:8,12 146:18,19 223:15 230:19 294:16 302:22 314:17 317:2 333:15 looking 8:11 17:19 40:13 47:3 53:10 54:7 54:9 55:5 58:7 64:18 88:16 89:5 101:17 110:12 113:11 114:9 116:5 126:12 135:22 136:2 142:19,22 147:2 175:12 186:11 202:7 211:10 215:22 220:15 221:5 222:22 224:2 225:19 232:8 232:11 234:16 249:8 249:17 259:22 268:10 269:17 271:3,16,18 277:15 278:6,21 279:3 281:10 284:10 299:18 310:1 314:13 324:18,19 326:4 332:10 339:10 340:16 342:5 346:15 looks 113:20 142:6 163:5 255:10 257:5 343:15 loop 79:12 lose 21:1 losing 23:4 334:18 loss 37:17 269:18 287:9 292:7 297:21 321:15 lot 7:5 24:2 25:14 30:18 36:18 63:21 71:19 73:15 113:19 140:14 140:21 148:15,20

155:17,18 168:6 171:19 175:9 193:9 193:18 198:4 199:8 225:8 231:7 244:16 257:8,9 259:10 261:19 263:21 271:12 273:5,6,9 287:9 290:6 302:22 305:14 310:8 310:11 313:4 317:10 317:12,15 318:7 lots 8:3 24:5 144:2 Louis 129:9 love 46:17 112:19,22 230:8 347:14 low 15:14 16:19 19:7,13 20:3 21:4 26:10 27:4 27:10 28:20 29:4,17 30:1,9,15 48:6,12 53:21 56:20 57:4 62:12,18 64:22 66:17 67:1 78:10,11 89:2,12 91:1,6 92:2,8 97:6,12 98:8,12 101:14,22 108:5,11 111:21 112:5,9 113:8,15 115:17 116:2,13,19 117:8,14,20 118:4 123:4,10,14,22 124:6 124:20 125:4,18 126:1,9,17,22 127:6 127:10,16 138:1,10 138:15 139:16,21 154:11,15 156:2,8 158:15,21 162:4,9 164:4,10 167:8,13 169:6,12,21 170:5 173:16 185:20 188:15 188:21 196:5,11 199:17 212:19 213:1 215:2 254:21 258:7 267:17,21 269:11 285:6 288:7,11 289:15 298:10,12,15 312:14,19 319:7,13 323:9,16 342:2,12,17 343:1 349:7,9,14 low-frequency 47:18 low-oxygen 199:11 lower 32:19 47:6 53:20 111:12 122:17 172:3 261:16 275:6 300:8 lower-star 47:2 lowest 15:21 187:21 lump 166:2 lumped 146:14 lunch 215:17 lung 40:10,10 Lynn 2:13 33:15 35:16

			572
38:21 48:15 55:21	MARKMAN 2:6 88:12	meant 44:1	165:19 166:3,4,10
301:5 313:9 323:4,4	237:1 290:10 293:6	measurable 186:17	167:7,11,21 169:5,11
301.5 313.9 323.4,4	313:11 334:20 335:1	measure 2:12 4:8,12,14	169:20 170:4,10,15
м			
	346:3,13 347:2	7:15,22 11:9 12:1,3	170:20,21 171:6,16
MA 3:4	Markov 71:20	15:2,3 16:10,15,22	171:18 174:6,9 175:6
macro 313:13	Massachusetts 2:8	17:15 18:4 19:1,5,21	177:22 178:2,6,7
macrocytic 256:15	massive 303:16 320:4	19:22 20:5,20,22 21:3	180:8 184:19 185:1
<b>Magee</b> 3:17	match 264:14 288:20	21:6,17 23:3,15,19	187:3 188:14,20
magic 351:2	290:14 293:16 294:3	24:2,22 25:5,18 26:8	189:6,14 195:4 196:4
main 133:3 171:11	matched 106:1 292:4	27:3,9,18 28:3,19	196:9,16 197:1 198:4
258:1	matches 305:12 337:20	29:3,16,22 30:8,14	198:11 202:14 206:17
maintain 45:21 55:15	338:12 339:12	31:4,8 32:18 33:2	207:13 209:1,4,12,18
59:21 266:15	material 143:17	34:6,7 35:22 36:7,13	210:7 212:18,22
maintained 42:13	materials 213:19	37:7,16,17,18 38:2	213:4 214:22 215:9
221:12	matter 37:15 62:6	39:4,18 40:13,22 41:4	215:10 216:10,10,13
maintaining 38:4,4	128:17 244:22 312:6	42:9,12,13,18,22 44:3	216:13,14,19,19
maintains 33:9	344:9 352:6	46:6,20 48:4,5,11,18	217:9 218:1,5 219:3,4
maintenance 15:3	<b>max</b> 51:18	48:20 49:19 50:12	219:6,11,11,16,17,20
21:12 23:6 106:11,14	maxillofacial 297:5	52:14 53:8,12 54:6	219:22 220:3,5,7,17
107:3 130:2 159:13	maximum 118:10 294:8	55:16 56:8,18,19	220:20 221:3,10
159:17	<b>MBA</b> 1:17 2:7,13 3:3,12	57:17 59:2,22 62:11	222:1,1,6,8 223:2,6,8
major 22:11 65:20 71:2	3:14,18	62:17 66:16,22 70:6	223:9 224:3,9 225:17
71:8,10 79:18 86:19	MBOS 295:22	70:12,16,20,22 71:1	225:18,21 226:2,4,8
93:6 104:22 110:3,11	McCARTY 2:7 34:4,17	72:15,21 74:8,13 75:3	226:11,21 227:15
131:5 149:11,12,15	34:20,22 35:5,10,13	75:13,14 77:6,7 78:17	228:14 231:1,5,10,14
149:18 150:19 151:5	39:1,13 49:17 50:7,13	79:21 81:3,3 84:16	231:15,21 232:6,9,17
151:12 152:4 252:7	50:22 51:3,21 55:19	85:8,9,16,19,22 86:2	235:1,2,3,9,10,11,14
263:18 268:18 273:3	56:6 57:22 62:21 63:9	86:14 89:1,10 90:21	235:18 236:3 237:20
273:10 290:17 291:4	70:1	91:4 92:1,7 93:15,21	238:6 240:7,14,20
291:12,16 303:14	<b>MD</b> 1:11,13,15,17,18,19	94:3,8,15 97:5,11	241:1,13,18 242:9,10
326:3	1:21 2:1,4,6,8,15,15	98:6 99:7 101:13,20	245:8,9,11 248:6
majority 187:17 262:12	2:17,18,20 3:2,9,10	102:10,20 103:1	249:7 251:1,5,16
269:6	3:11,14,15,16,16,17	104:16,18 107:1,10	253:2 254:2 255:1,8
making 37:2 69:10	mean 21:8 24:18 25:10	108:4,9,18,22 109:5	255:10,20 256:9,11
156:18 157:2 172:6	27:21 40:20 50:8,15	109:11 110:10,16	259:16 265:6 267:15
192:19 230:14 307:18	50:21 51:3 60:10 83:2	111:1,3,7,12,20 112:3	267:19 269:13 272:1
318:21 336:2	83:15,15 88:13 93:8	112:7,14 113:1,7,13	274:10,11,12 275:1,4
mammary 4:3 12:2,5	110:19 183:12 186:5	115:16 116:1,12,17	276:16,18 277:21
13:1,3,5 15:17 17:11	198:17 205:9 209:21	117:3,7,12,19 118:2	278:10,13 280:22
19:1 22:21	216:6 221:15 222:4	119:8 120:1,6,9 121:5	284:2,9,15 285:4,22
manage 286:11	224:10 228:10 234:15	121:12,20 122:1,2,3,7	286:9 287:15 288:5,9
managed 282:8	237:2 239:2 243:22	122:11 123:3,8,14,21	288:14,18 289:17
management 2:21	244:9 256:12 257:14	124:4,14,19 125:2,6	290:21 291:19 292:2
246:10 247:3 265:20	282:22 283:16 293:7	125:17 126:8,15,21	292:20,21 293:5,15
266:2 284:3 329:11	309:6 312:8 313:16	127:4,9,14,22 128:9	293:21 294:16 295:5
331:17 344:1	318:17 325:22 335:2	129:2,4,18 130:3,4,8	295:6 298:8,14 299:2
manager 2:7,9 3:6,7	338:22 346:13,14,14	130:11,14 132:11,15	299:9,14 300:2,22
64:5	346:16 347:17	132:20 133:2,21	302:10,15 303:3
mandate 100:3 104:3	meaning 33:8 272:18	134:19,20 135:8,10	305:6,19 306:9 308:6
mandated 28:8	282:21 284:13 329:17	135:19 137:17,22	310:2,3,7 311:14
mangled 204:22	meaningful 18:7 74:20	138:1,8,14 139:4,6,15	312:1,12,17 313:8,17
manner 94:2 249:12	92:12 140:7 186:18	139:20 146:7,16	314:4 315:2,11 316:4
manufacturer 64:13	198:2 212:13	152:16 153:16 154:10	317:17 319:6,12
manufacturers 65:17	meaningless 285:8	154:14 156:1,7	322:3 323:2,8,14,15
mapping 216:17	means 44:5 61:3 143:9	158:14,20 159:3,8,11	323:20 324:21 325:9
Marcia 3:3 41:21 86:22	172:3,5 174:20 183:4	159:13,13,16,17	328:9,19 329:13,20
351:20	201:17 219:16 234:14	160:22 161:3,20	331:11,13,18 332:22
Mark 129:16	257:8,9 323:19	162:2,8 164:3,9,20	333:6 334:3,3 336:10
	207.0,0 020.10	.02.2,0 104.0,0,20	000.000 100 10,0000.10
I			

336:15,16,18 337:11 337:16,19 338:3,11 338:13,17 339:2,9,16 340:5.8 342:1,10,16 342:22 343:5,13,15 345:1,15 346:10,14 346:17,21 347:16 348:18 349:3,12,15 349:18 measure's 232:9 294:12 measured 184:7 210:10 305:13 318:14 measurement 2:9,13 3:3,4 9:19 130:11 159:19 165:1,2 171:6 215:14 216:16 225:1 231:12 300:22 311:8 measures 4:3,19 5:1 7:17 8:18 9:14,17 10:11,22,22 11:1 16:14 22:6,12 23:11 24:7 27:14,17 30:18 30:19 33:4,6 38:2 41:12 42:6 43:6 44:9 45:4 53:20 54:1 65:4 65:7 71:9.16 72:11 75:1,7 77:11 84:18 85:4,13 87:5 91:12 92:14 93:9 105:1 107:2 112:21 118:7 119:17 125:7 126:5 130:2 131:2 133:11 133:21 148:7 158:4 172:9 203:18 204:11 208:18 210:18 214:8 214:15 216:3 217:7,8 218:14 220:12 222:11 223:15,18,19 224:12 226:6 227:8,12 229:8 229:22 230:1,3,8,18 230:21 238:12 241:9 241:11 245:5 246:10 247:1,9,10,18,22 248:3 250:11 265:15 266:9,11,13 267:4 282:4,9 284:22 302:1 311:3 315:9 321:12 332:17 335:18 350:10 350:19 measures' 119:6 measuring 74:1 186:8 289:7 327:15 332:19 mecca 188:1 mediastinal 12:9 Medicaid 2:6 medical 1:18 2:6,11,22 3:17 11:12 62:1 141:8

187:22 189:18 316:21 317:4 **Medicare** 133:14 medication 58:9 59:18 medicine 1:16,20 2:3,4 50:10 51:15,20 59:16 61:16 medicines 37:10 meet 139:11 237:4 254:7 298:18 300:20 333:13 341:8 meeting 8:11,12 42:5 135:22 171:14 meets 131:21 200:20 Melinda 3:5 72:18 74:21 101:5 118:6 214:6 242:2 320:11 335:5 339:20 351:18 member 4:21 5:18 6:7 6:12 14:19,22 15:12 16:6 17:19 19:9 20:9 21:5 22:2,14 23:7,9 23:17 24:9,16 25:13 25:17 26:2,17 27:20 28:6,13 29:7 30:4,17 33:18,21 34:2,4,17,20 34:22 35:5,10,13,17 36:9 37:21 39:1,13 41:6 43:4,12,16,20 45:15 46:4 48:16,19 49:1,11,13,17 50:7,13 50:22 51:3,21 52:9,18 55:19 56:6 57:9,22 58:1,17 60:4,15 62:7 62:21 63:9,11,14 65:1 67:4 68:18 69:11,16 70:1 73:14 74:15 75:15 76:2 77:18 78:4 78:7,10,13,16 79:7 80:1,12 81:19 82:5,9 82:15 83:2,11 84:10 87:13 88:12 89:14,18 89:20 90:1,4 91:9 92:10 93:18 94:22 95:5,9 97:14 98:14,21 99:16 100:7,19,20 102:2,9,19 104:7,11 106:21 107:5 109:8 110:18 111:10 112:6 112:13 113:17 114:9 114:20 115:4,8 116:4 116:20 117:2,16 119:16 121:19 122:2 122:14 123:12 124:7 124:13,17 125:5 126:4,18 135:6 136:14,16 137:7,16 138:19 140:2 141:5

142:17 143:13,19 146:12 148:5 150:17 152:1,7,18,21 153:7 153:14 155:16 156:12 157:4,13,18 158:3 160:8,12 161:14,19 162:13 163:15,20 164:18 165:21 166:15 166:18 167:16,19 169:1,15 178:15 179:5,12 181:13 182:3,19 183:3,17,22 184:9,14 185:11 186:20 187:5 193:7 194:10 198:8 200:6 201:9 203:5 205:9,22 206:3,12 207:10 208:16 210:3 213:16 223:14 224:4,7,8 228:22 230:11 232:4 234:5 237:1,15 238:10 239:7,12 240:13,19 241:3 243:8 249:4,5 250:6,9 252:22 253:6,9 254:19 255:14,17 256:4,5,6,21 257:7,11 258:14,16 259:18 261:12 266:19,22 267:4,9,12 272:13 273:1 274:22 275:18 277:6,19 278:4 279:13 282:3,20 283:16 284:7,20 287:3,13 289:13 290:10 292:19 293:6 293:13 295:9,16 296:1,5 297:8,14,17 297:20 300:2 301:7 301:22 302:18 303:8 303:12 305:18 307:12 307:16 308:8 309:22 313:3,11 314:2 316:3 316:8,11 318:12 319:19 320:1,6 321:7 322:4,7,16 325:9,22 326:11,15 327:19 328:4,11 332:3,14 333:9 334:20 335:1 341:2,19 344:22 346:3,12,13 347:2,17 347:22 351:22 352:2 352:4 members 9:7 24:2 42:18 180:18 181:18 181:19,22 182:6 186:14 192:8 194:21 205:22 252:21 350:21

351:4,9,12 membership 44:2 Memorial 2:18 mention 42:3 72:19 73:3 92:21 264:19 265:15 281:3 mentioned 22:17 56:6 59:4 74:2 75:20 90:5 91:13 110:5 119:7,19 132:5,12 133:16 149:21 150:4 155:3 164:16 197:9 209:16 264:10 267:1 309:15 329:15 345:17 mentioning 256:1 mentions 265:13 merit 206:5 message 14:14 38:11 42:7,19 213:5 met 1:8 209:19 210:1 metal 200:22 methods 344:3,5 metric 27:22 163:11 168:19,22,22 221:11 235:3,4 236:4 300:12 300:15 310:22 337:20 338:12 metrics 24:19 75:17 100:8 112:19 171:13 MHA 3:13 MHSA 3:15 MI 154:4 157:15 306:15 Michelle 3:12 246:2 247:13 microbial 199:16 microliters 327:16 microphone 185:17 mid-20s 173:21 middle 113:17 migrated 186:13 miles 273:7 million 9:9 186:5 268:11 millions 186:4 mind 63:20 154:20 221:5 223:11 265:19 291:1 minds 205:4 mine 206:14 minimize 281:12 **minimum** 78:9 Minnesota 2:12 208:18 minor 107:11 149:15,18 150:19 151:2 minority 36:12 minus 109:18 226:9 297:4 minute 33:8 50:1

(202) 234-4433

184:13 328:14 336:15 minutes 109:3 120:10 120:13 128:5,6 129:5 171:1 215:13 244:21 304:22 misidentifying 309:10 misjudged 128:3 missed 57:8 106:21 143:22 184:1 200:3 325:7 missing 47:21 51:8 71:22 92:15,16,17,19 110:6 121:10 198:1 241:20 270:18 mission 81:8 202:11 **Missoula** 95:14 mitigate 176:22 mitigating 269:20 mitral 4:9 71:4 109:12 109:14,17,21 112:9 121:4 **MITRE** 221:12 mix 4:12 100:18 129:3 277:12 mixes 277:9 mobility 141:17 **model** 69:6 82:11 93:2 114:7 140:20 147:7 154:3 165:5,7,14 205:12,15 227:1,5 228:6 285:21 model- 9:14 modeling 82:11 139:2 154:4 197:5,5 models 71:20 105:5,9 134:17 140:22 147:9 147:13,21 154:1,5 197:22 moderate 19:6 26:9 27:4,10 28:20 29:4,17 30:1,9,15 48:6,12 56:20 57:3 62:12,18 66:17 67:1 89:2,11 90:22 91:5 92:2.8 97:6,12 98:7,12 101:14,21 108:5,10 111:21 112:4 113:8 113:14 115:17 116:2 116:13,18 117:8,13 117:20 118:3,10,12 118:14,17 123:4,9,22 124:5,20 125:3,18 126:1,9,16,22 127:5 127:10,16 138:9,15 139:9,16,21 154:10 154:15 156:2,8 158:15,21 162:3,9 164:4,10 167:7,12

169:6.12.21 170:5 188:15,21 196:5,11 212:18 213:1 267:16 267:20 288:6,10 298:9,11,15 300:6 312:13,19 319:7,13 323:9,16 342:2,11,17 343:1 349:6,8,13 moderate/low 24:17 modification 195:11,16 321:2 modifications 311:9 336:3 modifier 191:21 195:10 modify 195:4 moment 119:13 235:11 262:5 350:4 monitor 45:21 50:3 140:4,4 266:8 300:3 329:3 332:5 monitoring 300:7 313:8 month 110:13 115:11 258:22 279:12 285:5 344:13 months 58:15 59:7 86:4 112:20 172:14 258:22 morbidities 150:8 152:19 morbidity 54:21 71:8 72:2 76:6 90:8 94:6 95:21 97:16,18 110:3 110:4,8,9,11 112:15 113:2 121:11,14,15 122:15 123:16 147:19 159:20 166:7 morning 6:4,7 8:9 11:5 58:19 59:8 171:2 mortalities 130:7 mortality 10:10 32:1 71:7,16 72:1 73:16,21 76:6 90:7 93:7 94:6 95:21 97:17 110:2,7,9 110:10 111:11 112:8 112:15 113:2 121:11 121:14,16 122:15 123:14,16 130:5 144:1 186:9,10 284:10,11 Moss 2:8 14:19 16:6 28:13 87:13 165:21 166:18 189:7 190:6 194:9,10 333:9 motion 272:11 274:8 move 25:16 47:16 63:7 75:19 159:10 160:9 193:3 198:21 203:20 210:7 214:21 312:21 moved 23:13 226:13

230:21 295:21 moving 36:14 38:3 53:14 86:13 87:11 91:9 92:10 98:14 118:12 137:13 154:17 156:10 162:11 167:14 196:13 216:8,21 251:7 298:21 **MOYER** 2:9 17:19 102:19 104:7 153:14 167:19 169:1 203:5 210:3 213:16 232:4 249:5 255:14,17 256:5 314:2 322:16 **MPA** 3:4 **MPH** 1:18 2:15 3:2,2 MSBOS 294:8 295:11 295:19 296:7,14 297:1 **MSHS** 2:1 **MSN** 3:12 multi- 151:12 multi-numerator 191:16 multi-procedural/mul... 70:21 multi-system 151:5 152:4 **multifold** 172:10 multiple 65:15 85:13 91:15 153:17 174:20 191:17 214:5 285:19 MUNTHALI 3:2 19:19 20:15 21:11 22:3 23:2 107:8 207:1 209:12 233:7,12,16 240:7 320:17 **MURPHY** 3:5 16:12 20:18 75:1 119:10 125:10 336:14,22 337:4,12 339:21 **music** 7:7 muzzled 280:20 MVRR 4:10 71:5,6 72:7 72:7 Ν N 4:1 **N.W** 1:9 **NACOR** 43:6 name 9:2 171:2 214:4 245:22 247:12 naming 221:19 narrow 225:20 narrowing 315:5 national 1:1,8,14 102:5 131:20,22 171:16 173:10 174:6 192:19

192:22 204:7 216:20 217:20 219:14 nationalize 182:14 nationally 36:13 45:8 64:21 131:19 Nationwide 2:8 natural 21:6 66:6 nature 332:16 337:22 339:1 nearby 95:18 necessarily 59:15 61:16 191:2 193:11 210:10 221:6 304:1 316:6 necessary 95:1 192:15 218:4 226:2 necessitating 45:18 need 7:6 20:2 21:16 28:3 37:21 38:7 41:18 41:22 46:1 87:11 89:14 100:14 102:21 122:4 134:11 137:14 139:7 155:13 160:8 163:4 167:2,2 172:18 178:18 183:13 210:8 211:6.16 222:15 241:15,17 242:12 243:17 244:9 246:18 251:2,13 254:10,20 254:21 277:20 278:9 278:11 281:7 282:14 286:11 292:11 293:1 293:17,19 294:4,5 296:3,19 311:11 327:1 347:5 348:4 needed 218:10 226:3 236:5 265:5 294:15 344:12 needing 265:4 needle 36:15 38:3,4 198:22 Needless 65:16 needs 20:1 87:17 163:13 165:13 184:1 247:5 286:5 289:6 303:4 negative 105:15 200:4 202:8 negatively 16:9 neither 235:20 Nephew 207:19,21 208:2 Neupogen 253:21 never 47:17,21 51:18 60:8 202:12 221:14 290:7 new 6:7 7:21 9:7 14:3,7 14:9 21:21,21 54:5

55:19 57:22 59:12 60:3 62:21 65:7 105:21 110:22 116:20 117:3 122:1,2,3 135:9 136:9 137:10 144:2 153:9 170:21 177:22 178:6 180:7 216:10 217:8 218:1,13 229:21 245:6 265:21 271:17 276:14,14 296:14 318:2 350:20 351:4,12 newcomer 206:19 nice 73:17 nicely 104:15 193:17 328:21 nine 283:11,11 300:19 315:19 327:11 nitty- 175:15 non 67:16 non- 197:7 236:20 268:9 non-adjusted 197:1 non-cardiac 34:10 non-completion 289:9 non-compliance 46:22 non-endorsement 38:19 non-facetious 256:8 non-risk 199:5 202:18 non-weight 172:14 nonautologous 345:16 normal 32:7 253:12 328:1 normally 221:22 Northwestern 1:16,16 Notably 130:13 **notation** 228:12 note 40:21 166:8 noted 71:18 74:17 84:18 166:5 198:11 301:11 noteworthy 194:22 **notice** 303:13 noting 53:18 November 340:15 343:9 novo 181:7 216:10 nowadays 133:11 **NQF** 3:1 4:21 5:18 8:14 9:15 12:16 22:13 33:9 41:8,19 81:3,8 87:2 91:12 94:11 100:1 131:2 133:11 135:18 166:20 172:9 178:2 182:16 201:17,19 202:10 206:5,15,16 208:22 214:5 216:7

218:15 219:9.12 220:4,11 229:2,20 234:13 236:13 243:14 284:22 297:12 NQF's 148:7 NQF-71:15 74:2 NQF-endorsed 33:4 **NSQIP** 130:20 137:18 138:22 140:4,7,12,13 140:15 141:7 147:13 156:19 162:18 165:2 166:12,16,19 168:20 310:4 number 11:15 18:12 20:21 26:3 44:13,15 45:7 46:5 60:2 61:4 68:7,11 79:17 100:10 124:13 153:16 163:3 163:5 186:3 189:16 189:18,20 199:10,14 199:17 203:18 214:6 214:15 219:13 222:21 223:1 248:11 258:2 262:5 265:22 266:14 271:3 277:1 278:19 279:11,15,18 283:20 284:9,12 285:14 286:1,13 289:2 291:7 298:9,9,10,11,11,12 302:18 304:18 305:22 314:17 326:20 329:2 333:13 344:14 349:4 349:5,6,7,7 351:1,5 numbers 41:13,18 81:12 211:13 275:5 277:7 286:6 numerator 58:2,12 152:8 162:13 175:17 175:19 189:13 190:3 193:14 200:8 201:3 238:13,19 239:14 248:11 256:11 257:5 257:13 282:22 283:7 283:19 287:20 289:2 290:3,13 293:4 299:19 306:5 319:19 320:7 329:5 343:22 345:16 numerator/denomina... 175:16 240:4 numerators 189:16 numerous 203:14 nurse 2:14 247:13 nut 348:20 nutritional 179:1 0 O/E 137:20 160:20

163:16 **OB** 286:14 **OB/Gyn** 315:20 objective 20:10 72:13 77:3 339:8 objectively 211:2 obligation 174:12 **Obremskey** 171:10 203:15 obscure 286:5 observed 153:16 obstetric 286:2 **Obstetricians** 2:5 obtained 134:22 obtaining 227:4 253:4 obvious 74:16 218:2 322:12 obviously 129:16 133:7 133:13 136:19 163:2 201:16 216:10 218:10 275:10 277:8 321:12 occasional 289:9 occlusion 71:14 occult 265:2 occur 47:18 54:20 142:3 254:10.18 277:5 300:8 320:15 occurred 54:16 152:14 153:6 occurrence 185:20 occurring 299:4 occurs 280:6 odds 160:22 offer 87:13 office 1:14 258:22 259:11 Officer 1:17 3:2 offices 215:5 217:6 218:20 **oh** 18:21 20:13 208:12 214:6 280:19 282:11 287:5 306:14 okay 6:3 13:22 14:8,21 15:10 18:21,22 23:9 23:17 26:7,14 31:1,18 33:21 34:20 35:6,16 43:12 45:15 47:15 48:14,22 49:10 51:22 52:6,16 53:3,14 56:2 56:12 57:9,20 58:17 62:3 70:5,8,18 77:8 78:7 89:8,9,13 90:19 104:9 108:13,14,20 109:10 111:6 113:12 117:4 118:6 119:10 120:8 136:15 139:14 141:11 143:19 145:18 148:3 155:13 157:20

160:10,11 163:20 178:2 179:9 192:4 200:11 208:13 213:4 214:2 232:20 242:22 244:20 249:3 267:13 274:22 280:7,19 283:12 287:5 289:13 289:17 290:18 291:20 297:14 298:17 300:1 300:2 311:19 312:21 313:1,3 314:11 318:10 319:17 320:1 320:6 321:7 322:5 334:17 341:17,21 343:4 344:20 348:10 348:22 old 176:3 252:8 older 12:4 130:12 133:13 175:21 Olsen 2:10 177:15 179:8,9 190:18 196:1 once 60:16 87:4 99:14 103:22 154:6 159:22 220:1 223:4 226:12 228:14 243:21 299:1 330:1 350:16 oncologic 253:13 275:21 281:12 285:10 oncological 276:3 one-year 186:9 189:10 ones 40:9 65:5 186:4 200:19 230:22 236:11 301:17 326:3 332:18 ongoing 9:18 54:2 59:1 81:4 144:22 316:16 online 17:21 open 6:19,20 19:3,5 27:2 29:15 30:7 31:2 36:6 48:4 56:18 62:10 66:15 88:22 90:20 91:22 97:4 98:5 101:12 108:3,16 111:3,19 113:6 115:15 116:11 117:6 117:18 119:22 122:6 123:2,20 124:18 125:16 126:6,7,20 127:8,21 138:8 139:15 154:9 155:5 155:22 158:13 159:2 162:3 164:2,15 167:6 169:4,19 170:9 184:19 188:13 189:9 193:15,19 194:5 196:3 212:17 252:18 259:2 267:15 280:14 280:16,16,18 288:5 298:8 306:12 307:3

			376
307:13 312:12 319:5	56:20,20,21 62:11,12	4:16 171:3,5 173:3	108:17,21 120:1,5
323:7 341:22 349:3	62:12,12 66:16,17,17	175:7 179:12 180:2	127:19,22 128:8
350:1	66:18 70:12,12 74:8,9	181:20 186:21 188:1	154:3,5,6 159:1,3,7
open/closed 178:22	89:1,2,2,3 90:22,22	192:3,20 200:9,19	168:1 170:7,10,14
openness 194:1	90:22 91:1 92:1,2,2,2	204:8,19 208:18	211:11 233:13,15,16
operate 79:20 81:15	97:5,6,6,6 98:7,7,8,8	277:10 314:18 315:22	233:21 237:20 245:15
104:13 254:16 278:16	101:13,14,14,15	orthopedics 179:15	260:22 283:6,6 339:8
operated 105:18	108:4,5,5,6,18,18	187:7	339:13
	111:4,4,20,21,21,21	-	overlap 200:17
operating 80:8 81:11		orthopods 193:13	
87:16 105:17 166:21	113:7,8,8,8 115:16,17	<b>OTA</b> 171:10 179:14	overlapping 116:7
173:15 253:12 254:22	115:17,17 116:12,12	180:15 181:18,22	200:16
294:19 326:6 327:15	116:13,13 117:7,8,8,8	182:6,11 186:12,14	overlaps 39:3
328:16,22 334:7	117:19,20,20,21	190:9 192:8 195:14	oversee 214:7
operation 14:12 109:21	118:14 120:2,2 122:7	197:10 203:22 204:13	oversees 35:8
141:19 195:9 273:15	122:8 123:3,4,4,4,21	204:14 205:19 210:19	overstating 340:10
operationalizing	123:22,22,22 124:19	<b>OTA's</b> 171:16	overview 4:18 73:15
262:19	124:20,20,20 125:17	ought 287:7	129:6 171:1 247:8
operations 71:2 105:6	125:17,18,18 126:8,8	outcome 4:14 9:14	overwhelming 262:12
109:14 121:3 194:15	126:9,9,21,22,22,22	71:16 76:5,7 83:12	ownership 21:13,14
251:11,14,21	127:9,10,10,11 128:1	93:12 94:5 118:7	
operative 71:7 110:2	128:1 138:9,9,9,10	132:11 136:20 144:14	P
121:5 193:22 197:11	139:15,16,16,17	147:2,8,10,11 148:2	<b>P</b> 113:19
273:3 330:11	154:10,11,11 156:1,2	148:14 153:2 159:12	P-R-O-C-E-E-D-I-N-G-S
<b>Operator</b> 6:20 7:1	156:2,2 158:14,15,15	159:20 174:8 178:7,9	6:1
252:15,20 280:13,18	158:16 159:4,4 162:3	195:12 196:16 197:1	<b>p.m</b> 245:1,2 350:14
350:2,6	162:3,3,4 164:3,4,4,4	262:14 269:16 270:20	352:7
opinion 11:20 184:4	167:7,8,8 168:11	289:21 292:20 293:14	<b>Pacific</b> 271:7
295:19	169:5,6,6,6,20,21,21	293:20 305:5,10	package 297:13
opportunities 247:2	169:21 170:11,11	332:21	packaged 297:12
opportunity 19:22 22:8	180:10 184:20,20	outcomes 1:15 4:12	page 15:14,17
25:20 40:2 44:21	188:14,15,15,15	54:12 74:1 110:21	paid 334:4
45:10,18 55:13 56:11	196:4,5,5,5 212:18,19	129:4 130:4,9 140:5,5	pain 95:16 96:14
82:1 166:9 199:4	212:19 267:16,16,16	144:8,14,18 146:15	pains 17:21
208:3 230:5 246:8		148:11 150:9 158:4	palliative 144:6
	267:17 288:6,6,6,7		
261:9,20 272:9 285:7	298:9,9,10,11,11,12	159:19 160:13 164:21	panel 90:11 92:13
286:20 311:10 315:7	312:13,13,13,14	165:11 178:21 181:4	97:22 132:13,18
334:14,16 343:22	318:9 319:6,7,7,8	184:6 187:6 195:14	142:5 179:13,17
opposed 45:19 125:12	323:8,9,9,10 331:19	195:18 196:16 231:5	246:7 247:18 262:9
201:18 202:14 251:18	342:1,2,2,3,16,17,17	268:13	262:10 324:8
256:22 324:20,20	342:18 349:4,5,6,6,7	outflow 259:3	Paone 3:15 11:1,5
opt 321:19	349:8,8,9	outliers 18:12 88:13	13:22 14:5,8 17:2
optimal 2:1 135:13	options 189:16 190:3	131:9 161:4	18:10 31:15,18 37:4
279:21 321:13	244:18	outlining 7:12	38:15 40:5 44:11 50:8
optimizable 277:4	oral 250:15 270:2,3,5,7	outlying 138:2 145:2	50:15 51:2 53:17
279:5	order 11:9 59:2 114:10	259:14	58:12,21 60:10 61:11
optimization 275:12	187:3 254:18 266:15	outpatient 258:20	64:3 65:8 68:10,14,17
277:11 282:5 321:9	289:19 317:3,5 344:3	259:10	paper 211:16 275:20
optimize 259:7 282:5	ordered 149:2	output 65:3	276:14
optimized 275:21	ordering 294:8 316:14	outside 35:6 140:11	parallel 130:22 159:16
276:10,13,18,20	317:10,14	153:2 172:6 187:18	160:3
277:4	organization 180:8	304:2	parallels 347:18
optimizing 255:3 281:3	194:21 213:18 216:14	outstanding 8:15	parameters 304:2
opting 229:11	organizations 103:10	outweigh 198:17	Pardon 267:3
option 19:5,6,6,7 27:3,4	origin 71:13 148:19	ovarian 253:14	parent 99:14
27:4,5 28:19,20,20,20	original 94:10 153:3	over-called 148:21	parents 99:14
29:16,17,17,18 30:8,9	originally 154:21	overall 31:3,7 32:3	part 14:11 17:1 39:4
30:9,10 31:4,4 48:5,5	ortho 224:9	47:12 53:7,11 70:11	44:22 49:22 73:1
48:6,6 53:8,8 56:19	orthopedic 2:21 3:9	70:15 97:17 100:17	82:21 88:15 100:3

I			• • •
101:8 106:13,19,19	59:5,6,8,19 60:6,17	294:18,21 295:1	29:3,3,4,4,10,22,22
109:20 145:2,3,7	60:22 87:15 95:22	299:7,15,16 300:3	30:1,2,14,15,15,16
148:1 150:2 152:16	106:4 128:3 136:20	301:15 303:18 306:19	31:9,9 32:15 35:19,20
172:4 173:9 203:17	143:2 148:9,11 149:8	307:3,10,12 308:2,16	35:20 36:14,16 37:22
203:20 218:4 232:7,8	149:8 150:22 151:10	313:21 314:22 321:8	41:11 42:21 44:12
232:22 261:16 280:9	152:9 153:5,17 154:3	321:10 322:19 323:3	46:5,16,16,17,22
280:12 297:11 312:1	179:1 197:16 246:9	328:5,15,20 331:11	48:11,11,12,13 53:13
331:11 336:8 337:12	250:13,16 253:14	331:13,14,17 333:13	53:13 54:20 57:3,3,4
338:10 339:10	254:13 259:14 261:22	334:7,10 343:17,18	57:4 62:17,17,18,19
partially 249:6	262:15 264:21 265:1	343:21 344:14,17	66:22,22 67:1,2 70:17
participant 84:3,4	277:4 278:7,8 281:20	345:3	70:17 71:21 72:1,1
participants 9:18 124:9	282:15 283:13 286:18	pattern 172:22	73:21,22 74:13,13,17
157:5 168:20	289:21 292:22 299:12	patterns 173:5	74:18 83:19,22 85:9
participate 67:6 103:4	303:4,7,15 304:1,6,16	pause 135:3 342:4	89:11,11,12,12 90:7
137:18 168:15 190:11	308:20,21 309:5	346:19 348:15 350:4	91:4,5,5,6,13 92:7,7,8
participating 10:17	327:18 328:2 329:18	350:5	92:8,15 96:4 97:11,11
29:11 63:16 67:20	patient's 106:4 133:3,4	pay 69:13 134:13	97:12,12 98:11,12,12
142:11 291:3	133:6 306:15		98:13 101:21,21,22
		pay-for-performance	, ,
participation 134:9,15	patient-centered	44:6	101:22 108:10,11,11
134:22 182:3,5 206:7	141:16	paying 321:20	108:22 109:1 110:7,8
particular 15:2 21:15	patient-centric 148:7	Payment 190:11	111:8,8,12 112:4,4,5
37:9 46:9 53:17 54:12	patient-graded 150:10	<b>PBM</b> 4:19 5:3,7,11,14	112:5 113:14,14,15
77:6 78:19 93:21	patient-oriented 195:18	<b>PE</b> 136:18,19,22 137:9	113:15 116:1,1,2,2,18
102:10 104:17 166:3	patient-reported	pediatric 166:14,16	116:18,19 117:13,13
179:22 187:11 208:6	195:14	321:10 325:10	117:14,14 118:3,3,4,4
208:7 215:21 216:3	patients 5:15 9:9 11:13	peer-reviewed 139:3	120:6,6 122:11,12,16
259:16 264:18 269:13	12:4,7,11 32:3,6,9,11	178:12	122:21 123:9,9,10,10
280:22 281:14 286:12	40:10 44:14,16 45:7	<b>pelvic</b> 253:16	124:5,5,6,6 125:3,3,4
286:15 292:14 294:16	50:16 54:7,9,21 58:13	penalizing 309:9	125:4,22 126:1,1,2,15
294:20 295:4 312:7	60:2,8 61:12 73:18	penetrance 10:4 15:19	126:16,16,17 127:5,5
315:21 344:13,13	81:20 104:14 105:11	24:21 25:3 28:7 29:8	127:6,15,16,16
345:15	105:17,19,22 109:17	37:22 64:20 83:17	128:10,10 131:7
particularly 10:9 41:3	110:1,14 114:4	137:19 180:16 181:6	134:21 138:14,14,15
51:15 54:1 65:17 66:4	120:16 121:8,17	181:17	138:15 139:10,20,21
76:6 104:18 132:16	130:12 135:19 136:2	penetration 9:22 10:3	139:21,22 143:7,12
178:21 194:22 218:2	145:1,9 150:5 157:6	<b>Penn</b> 203:1	144:15 154:14,15,16
253:13 283:19 296:16	165:22 175:17,20	Pennsylvania 171:4	156:7,7,8,9 158:20,20
310:12	185:14 187:18 190:20	Pennsylvania/Ameri	158:21,21 159:8,9
partners 1:17 100:5	191:13,15 201:15	1:12	161:2,5,10,11 162:8,8
PAs 120:18	204:22 205:14 221:22	people 8:3 24:5,12 25:1	162:9,9 164:9,9,10,10
pass 213:4 220:22	222:5 239:6 248:8,10	25:3 38:6,13 45:8	167:12,12,13 169:11
222:5 258:14,15	249:9 252:4 253:11	47:5 52:1 60:20 64:9	169:11,12,12 170:4,5
267:1,5,9 320:13,14	253:13,16,22 254:6	66:3 67:10 87:7 95:16	170:5,6,15,16 172:17
321:3 335:11 343:3	254:21 255:3,4,6	103:4 135:21 136:1	173:16,17 178:11
345:20	258:18 259:1 262:3	136:17 174:5 180:18	185:2,2,9,9 186:1
pass-through 63:17	262:12,15,20 263:9	180:18 182:18 187:8	188:6,9,20,20,21,21
64:8 67:15	263:12 268:10,11,13	187:9 199:2 205:17	196:10,10,11,11
passed 20:2 209:22	269:12,14,17,18	205:20 212:5 214:19	212:22 213:1,1 215:4
230:21 231:11 312:22	270:9,16 271:4,13,15	233:17 236:9 269:5	215:4 246:12,20
338:8 346:9	271:19 272:6 273:7,9	279:5 298:19 309:10	263:10 267:20,20,21
passes 15:11 26:11	273:22 274:1,13	310:10 312:2 313:6	267:21 288:10,10,11
39:17 223:8	275:1,5,8,21 276:2,7	314:6 315:19 326:17	288:11 289:15 290:19
patency 13:13,16		335:4 346:9 349:17	
	276:10,17 277:1		290:20 291:5,7,9
path 207:7 218:12	278:11 279:2 281:4,4	percent 9:10 10:4,7,9	294:15 298:15,15,16 306:2 312:18 18 19
336:19 Pathologists 201:2 18	281:12 283:7,20	10:16,18 13:15,17	306:2 312:18,18,19
Pathologists 291:2,18	284:4 285:5,10 286:3	15:15,16,18,18,21	312:19 314:22 315:1
292:15	287:17 288:19 290:4	24:22 25:2 26:8,9,9	315:6 319:12,12,13
patient 2:1 50:4,10 58:4	293:17,19 294:3,12	26:10 27:9,9,10,10	319:13 323:15,15,16
I	I	ı	

323:17 333:1 334:6 334:10 342:10,11,11 342:12,22,22 343:1,2 349:13,13,14 percentage 12:4 39:17 40:4 181:22 277:14 percentile 47:6 perception 43:22 percutaneous 11:12 perfect 79:4 136:4 201:9 perfection 188:2 perfectly 35:1 207:16 perform 11:19 132:6 135:16 199:3 249:16 performance 18:3,6 19:20 21:16 24:18 26:7 36:11 42:13 46:19 48:4,10 56:19 57:10 74:16 75:21 82:18 87:21 88:21 89:1,10 92:12 96:19 111:20 112:3 116:6 123:3,8,17 135:17 138:8,13 161:13,16 162:2,7 188:12,14,19 220:16 231:13 232:6 245:10 275:14 289:10 310:21 313:1,4 319:6 319.11 performed 9:10 72:12 109:15 246:11 247:10 248:1 292:9,10 performer 15:15,15 performers 111:11,13 111:15 122:15,18 performing 79:1 peri-op 274:16 perinatal 266:1 period 80:10 121:9 152:15 161:1 174:14 204:3 254:17 263:1 273:17 276:4 periodic 23:5 205:21 periodically 21:8 perioperative 248:22 258:12 275:11 345:4 permanent 71:12 180:12 person 134:13 200:9 309:19 personally 308:14 perspective 68:6 100:2 179:15 180:7,16 263:15 272:15 321:6 324:3 337:6 349:17 perspectives 210:4 PEs 137:11

pets 221:19 **PFO** 109:19 Pharmacy 2:11 **PharmD** 2:10 **PHASE** 1:3 **PhD** 2:19 3:3,9,14 philosophical 42:16 43:2 philosophically 81:7 philosophy 84:15 **phone** 6:18,19,22 129:16 252:12,14,21 324:1 347:9 348:2,5 phones 350:1 phrased 257:8 physeal 191:8,9 physician 75:4 215:5 217:6 218:19 317:13 332:19 physicians 1:22 40:16 44:7 75:10 physiologic 59:16 61:9 physiology 332:21 pick 262:2 273:14 275:16 351:5 picked 180:2 209:5 250:15 picking 99:5 100:22 137:10 **pickup** 148:13 picture 79:14 112:10 123:15,17 piece 18:9 89:16 162:14 165:4 241:20 263:20 336:14.16 337:14 pieces 135:9 284:15 **pilot** 141:14 224:10 Pittsburgh 2:22 3:18 294:17 314:16 316:13 334:1 PITZEN 2:12 27:20 36:9 57:9 58:1,17 60:4 62:7 63:11,14 65:1 98:21 99:16 100:19 141:5 142:17 143:13 143:19 157:4,13,18 158:3 186:20 200:6 201:9 208:16 230:11 240:13,19 259:18 287:13 place 68:8 106:6 130:21 131:1 132:4 140:3 141:22 149:3 187:3 195:8 197:3 259:19 315:8 placed 13:14 17:17 21:3 223:3 places 15:13 36:18

80:18 95:16 96:14 173:17 258:19 **plan** 86:1 88:14 106:12 194:3 195:11 210:13 planes 8:3 planned 193:14 194:5 planning 198:5 259:21 292:6 plans 285:20 plateau 4:16 170:21 171:7 172:2 173:18 175:22 178:4 platform-wide 166:12 plausible 94:4 play 60:20 237:3 239:1 328:13 333:11 playing 7:7 please 57:14,17 58:2 63:13 89:6 119:21 127:20 140:1 221:4 252:15 264:7 268:2 321:4 340:9 342:6 350:3 351:19 pleased 246:5 plus 71:4,6 72:7 87:3 109:18 121:4 132:4 142:1 pneumonia 148:14 152:22 154:3 pneumonias 148:21,21 150:1 point 23:1 55:9 64:8 65:14 69:8 72:18 73:17 75:12 78:2 82:20 83:1 87:14 88:18 90:13 99:21 114:8 175:6 184:4 191:8 199:7 206:9,14 209:4 224:16,17 240:2 243:17 256:2 262:18 270:18 275:13 277:7 282:4 329:13 342:7 348:4 pointed 95:2 118:7 265:12 points 63:2 67:5 79:22 90:14 106:18 107:18 280:21 305:20 311:14 policies 300:17,21 301:2 policy 2:5 163:10 301:1 poor 88:13 poorly 79:1 96:3,5 population 34:21 55:2 95:10 133:13 140:6 151:10,11 168:14 191:7 194:19 263:22 281:15 286:15,16,19

287:16 325:10 populations 249:17 261:22 283:13 286:1 286:4 portfolio 9:13 21:14 portion 220:19 portray 33:13 pose 206:19 246:14 position 85:6 positions 102:13 **positive** 187:6 189:19 190:21 291:10 possibility 94:11 223:9 229:7,7 235:17 possible 65:16 85:7 96:16 110:21 163:6 227:6 236:3 258:7 276:21 277:11 290:5 possibly 76:22 209:15 235:20 296:22 post- 31:21 320:21 330:10 post-draft 350:15 post-meeting 350:13 post-op 189:17 306:13 post-operative 140:8 140:10 301:12 post-operatively 51:16 331:4 post-trauma 285:12 post-update 148:19 postpartum 303:17 328:6 potential 50:9 60:11 65:6 96:12 152:2 197:2 198:15 227:18 230:6 231:10 potentially 16:17 47:22 144:5 151:21 172:9 176:22 236:2,4 241:5 241:12 242:8 261:21 324:1 335:9 340:22 powerful 66:2 **PQRS** 9:13,21 23:14,15 43:7 44:3 practical 61:12 142:15 273:8 practicality 250:1 practice 2:14 22:18 75:3,9,10 81:5 90:6,7 184:6 199:5 232:7 260:11,13 261:10 273:6 300:13 316:13 317:18 318:21 326:13 practices 131:18 208:19,20 259:22 260:6 261:17 practicing 22:20

practitioner 332:19 practitioner-level 77:11 practitioners 277:3 pre- 289:19 pre-meditated 193:4 pre-op 65:11 262:18 263:20 274:17 287:22 330:20 343:18,21 pre-surgical 275:2 pre-thought 193:4 preamble 9:7 preceded 304:10 precipitating 16:15 precise 304:15 predictive 119:6 140:16 190:22 predictor 248:22 preemptive 307:5,19 preference 149:8 preferred 275:12 pregnancy 303:14 pregnant 328:5 premature 206:16 premise 97:20 preop 248:20,21 preoperative 4:6.19 5:3 5:7 32:20 49:20.21 53:15 135:13 245:18 245:18 248:7,9 249:7 250:20 253:19 254:17 258:9 265:1 273:4.20 274:11 277:1,5 279:6 279:10 280:4 288:15 294:20 331:2 344:5 345:2,11 348:19 preoperatively 51:6 54:11 55:6 58:5 253:11 255:4 275:22 276:11 281:4 preparation 8:14 prerogative 325:17 Presbyterian's 203:1 prescribe 50:2,10 present 1:11 3:8,22 44:18 82:10 104:22 162:16 170:22 181:16 276:2 278:20 311:2 presentation 133:15 213:20 285:21 presented 25:21 138:20 184:5 226:1 283:2 **President** 2:4 3:2,3 129:10 presiding 1:10 press 252:16 350:3 pressed 86:10 pressure 50:19 202:8 pretty 17:9 26:18 29:10

73:20 74:16 78:10.11 86:7 90:5 99:1 171:18 172:6,11 187:12 prevalence 263:9 302:7 prevent 32:12 295:5 307:5 prevention 32:4 307:22 previous 12:8,9 28:4 32:6,18 48:18 49:5,9 52:7,10 53:20 54:1 57:10 71:9,15 121:12 167:17 309:16 previously 12:15 121:3 190:18 197:20 264:10 295:19 338:3 price 67:6 primarily 286:10 314:18 primary 14:20 31:14 33:16 109:8 314:20 prior 51:10 75:17 91:12 130:14 142:21 159:22 160:4 168:22 211:9 231:21 237:21 248:12 249:9 250:2 255:9 269:22 274:18 275:7 279:4 281:11.19 288:21.22 289:4.10 291:6 292:10 299:12 318:16,18 343:19 priority 240:19 private 130:20 291:3 pro 103:2 probability 71:21 probably 13:4 17:9,14 41:17 59:15 68:11 73:10 85:17 86:10 91:18 94:18,19 99:10 106:5 112:22 117:2 131:1 134:14,20 143:14 148:12 149:6 163:9 167:19 168:5 185:21 197:13 203:7 206:9 212:11 226:18 262:9 264:16 265:4 299:5 321:1 problem 41:4 73:7 84:20 92:15 106:6 163:10,10 180:4 187:1,15 188:10 226:16 241:4 250:12 254:14 257:21 258:1 258:3 259:1,8,9 294:6 304:8,9 315:18 339:14 problems 50:20 254:1 259:17 procedural 133:6 194:4 procedure 11:18,22

50:18 109:19 121:5 166:21 185:8 246:11 246:13 248:13,16 273:4,10 274:19 278:17,18 288:21,22 289:4,5,10 296:20 297:4 343:19 procedures 11:16,19 12:12 85:11,11 109:15 150:9 168:6 249:16 252:6,7,10 286:2 287:18,20 289:9 290:15,17,18 291:5 294:13,14 297:2,5,6 314:18 proceed 346:4 process 10:6,22 15:2,3 17:14 21:2 22:6,7,13 37:15 46:6 51:8 64:15 65:5 73:1 86:20 87:2 88:13,16 99:18 107:9 181:8 208:20 209:7 209:16 218:6 223:16 227:13 229:10,21 230:4 231:4 232:22 233:3 236:12.14.19 292:21 301:19 305:9 327:17 332:7 processes 135:15 178:8 184:7 processing 66:6 produce 235:4 250:14 produced 221:10 productive 7:3 8:12 products 207:21 profession 150:11,13 152:3 165:12 professional 2:14 81:5 professor 1:11,19 2:10 2:15,15,20 9:3 profile 276:18 279:1 282:14 299:10 profoundly 262:16 program 1:14 2:7 64:14 103:22 130:22 131:13 132:1,17,22 134:5,7,9 134:10,22 137:6 156:16 157:1,9 166:17 168:15 190:12 216:20 218:11,12 219:12,14 220:5 222:20 223:2,3 224:17 225:7,9,13,14 225:16,21 227:8 229:12 235:19 242:15 243:22 265:13,21,21 266:5,8,13 300:7 programmatic 132:22

programs 98:16 103:8 106:1 130:11 139:2 143:6,8 156:18 168:10 265:18 266:1 266:7 progress 165:13 progressing 276:5 project 3:6,6,7 141:14 207:6 216:3,4 246:2,5 247:16,21 302:7,16 projects 207:6 proliferation 217:5 prolonged 71:10 73:21 promoted 207:12 prone 308:2 propensity 199:11 prophylaxis 177:6 Propionibacteria 199:18 proportion 167:22 248:8 255:5 288:18 293:17 294:3 proportionally 80:4 proportions 300:3 propose 72:14 139:9 **proposed** 200:15 proprietary 165:6 prospective 193:5 prospective-type 192:19 prosthetics 199:10 protean 112:10 123:15 protocols 307:5 provide 59:13 82:1 85:6 86:2 104:4 129:5 131:22 155:10 158:8 165:15,17 171:1 213:9 230:9 231:9 255:18 311:3,16 provided 141:1 157:5 165:15 340:4 provider 262:22 providers 44:8 92:13 158:6 190:11 260:14 provides 132:18 235:22 providing 158:6 328:1 provisional 180:11 public 4:21 5:18 9:5 10:2,13,17,18 17:20 38:11 81:12,13 83:3 83:16,17 86:14 105:1 105:22 156:13 157:19 165:8,18 201:21 202:22 203:3,6 251:15 284:22 291:3 315:9 350:1,6 publication 271:17 publications 165:7

			380
			l .
publicizing 296:17	47:13 73:18 81:6,22	255:15 274:2 320:18	rapid 217:5
publicly 18:3 30:6	82:2 88:17 89:15 90:1	QUINNONEZ 3:6 18:22	rapidly 327:21
86:11 87:5 102:7,9	90:21 103:16 112:11	26:6,13 27:2,7 28:18	rare 137:1,2 146:22
103:11,14 105:7	112:19 123:12,17	29:1,15,20 30:7,12	173:5
156:15,20 165:17	130:10 135:16 144:22	31:2,6 36:6 48:3,9	rarely 214:18
285:14 305:6	158:5 163:13 179:22	53:6,10 56:17 57:1	rate 4:16 50:19 144:16
published 34:10 130:17	184:7 190:11 215:8	62:10,15 66:15,20	161:7,9,11,12 170:20
139:3 145:17 146:4	215:10 216:2 225:1	70:10,14 74:7,11	173:12,15 174:2
178:12 270:4,19	231:13 235:4 236:5	88:22 89:5,9 90:20	176:21 177:1,4 178:3
275:20 276:15	249:19 277:15 284:21	91:3,22 92:5 97:4,9	186:16,17 187:11
publishing 84:21	291:16,19 302:10,15	98:5,10 101:12 108:3	188:6,8 194:13
pull 20:16 220:4 223:5	302:21 305:19 313:21	108:16 111:2,19	198:15 199:22 202:18
351:1	321:12 329:3 333:6	113:6 115:15,21	203:1 204:2 246:19
pulled 43:7 306:13	339:8	116:11 117:6,18	257:18 258:6 283:6,7
pulling 20:18 43:10	quandaries 351:21	119:22 122:6 123:2	283:7 284:3,11
287:16		123:20 124:18 125:16	rates 13:13 46:14 73:20
	quantitative 312:3,9		171:7 173:19 178:10
pulmonary 309:1	quarter 134:12	125:21 126:6,20	
purpose 36:14 79:21	question 7:21 16:7 20:7	127:8,21 128:8 138:7	185:8 187:1,10
80:7 183:9 301:3,4	20:10 24:17 34:5	138:12 139:14,19	197:18 201:22 302:8
337:20	35:13 39:7 40:20	154:9,13 155:22	306:22
purposes 9:19 80:7	49:18,20 51:1,11,12	156:5 158:13,18	rating 119:5
201:21 302:21	51:14 58:1,22,22 59:1	159:2,6 162:1,6 164:2	Ratings 72:19
purulence 199:21	63:12 64:17 65:2	164:7 167:6,10 169:4	ratio 160:20,22 257:17
purulent 189:22	66:10 75:6 78:1,2,16	169:9,19 170:2,9,13	257:22 272:18 283:19
purview 77:15	92:20 93:8 96:13	184:18,22 188:13,18	283:21 284:3,10
push 21:22 318:21	98:18 100:1 104:11	196:3,8 212:17,21	285:8 328:12
pushed 85:18	105:2 135:18,21	267:14 288:4 298:7	rational 269:9
<b>pushing</b> 103:18	136:16 141:9 144:11	312:11,16 319:5,10	rationale 166:2,5 167:1
put 8:19 16:21 19:17	148:1,3 149:10	323:7,12 341:22	167:1 255:2,7 257:12
25:10 41:12 42:14,18	150:15 152:17 153:2	342:5,9,20 348:12	264:17 301:11 302:1
43:6,11 46:6 67:15	157:4 180:20 182:20	349:2,11	ratios 137:20 163:16
68:1 69:8 100:1,13	184:12 185:18 195:2	quite 24:20 50:20 56:10	283:3
144:6 146:1 154:20	202:20 205:16 206:3	104:15 122:19 172:12	re-endorsed 17:16
155:6 172:2,9 179:14	206:5,19 221:14	254:16 268:16 276:4	32:16
180:6,15 197:13	226:17,18 228:5,22	<b>quiz</b> 219:8	re-endorsement 106:16
201:1 218:8 219:4,14	229:18,19 233:21	quorum 334:18 346:21	re-operations 71:12
219:20 222:8 225:21	239:9 251:5 252:11	348:1,10	<b>re-vote</b> 24:12
230:11 234:13 235:10	257:11 259:5,19	<b>quote</b> 197:14 257:19	reached 147:18 323:19
239:19 241:9 243:21	260:7 265:11 266:20	307:18	342:13 343:7 350:19
251:15 263:5 268:7	269:22 273:5,21	quoted 190:17 292:14	react 262:6
310:15 313:22 315:17	282:20 289:16 295:9		reaction 332:15
317:13 338:18 350:16	296:5,9,16 300:14	R	reactive 40:10
350:17	306:7 308:5 309:16	race 114:12,14,20	read 57:2 115:5
<b>puts</b> 172:16	309:20 314:8 321:18	radiation 12:10 253:16	<b>readmission</b> 46:14 94:2
putting 17:3 42:6 90:9	334:21 335:15 346:1	raise 281:19 286:10	94:14
112:7 204:7 224:19	346:7,8,11	331:10	Readmissions 152:15
226:3 257:12 273:16	questionable 94:7	raised 83:15 260:3	readmitted 152:10
	questioned 237:17	305:20	reads 26:8 342:10
Q	questions 7:14 59:20	raising 279:10	ready 16:2 48:20 86:12
<b>QCDR</b> 23:19 44:1 190:9	66:12 129:22 135:4	ramifications 234:12	108:2 113:5 123:1
197:10 212:4,5	143:15 171:20 176:19	randomized 177:2	128:13 129:1 196:2
<b>QI</b> 1:15	177:13 189:5 222:15	randomly 40:16	201:18 202:21 206:14
<b>qua</b> 67:16	223:12 296:6 315:10	range 18:2 173:20	real 44:4 67:19 78:1
qualified 9:12	323:21 335:6	185:9 283:10,13,14	113:19 218:17 221:6
quality 1:1,8,16,17 2:7	quick 20:9 78:2 99:9	299:21	254:1 285:1 333:11
2:21 3:2,4 9:19,19	113:19 157:4 266:19	ranges 136:1 283:4	real-life 226:11 244:8
11:7 24:4 36:11,15	quickly 15:7 37:5 64:12	ranging 178:10	real-time 311:1,16
38:5 46:11,19 47:12	65:8 100:8 254:16	rank 148:12	realistically 50:8
	l	l	l

reality 161:8 realize 96:5 203:15 realized 173:11,21 realizes 80:16 really 14:9,10 15:4 17:20 25:13,19 30:17 32:17 33:1 37:8 42:2 45:9,9,10 54:11 59:21 63:17 65:10 69:12 80:16,17 92:17 99:7 105:5 112:14 113:1 126:19 128:16 130:10 148:15 168:2,8 171:15 172:22 173:4 173:12 174:1 176:18 177:5 190:10,20 191:19 201:6 202:5 207:13,18 211:20 212:12 213:18 214:14 214:20 218:8 224:12 248:21 250:6 255:15 257:20,21 258:1.2 259:4 260:4 273:14 279:6 281:1 284:4 293:14,18,20 294:4,6 302:6.14 304:7 309:7 312:6 313:19 329:1 329:20 336:8 339:10 345:14 351:16 reason 13:1 39:13 41:2 45:16 47:13 49:21 55:8,15 65:2,9 69:19 112:7 172:10,21 197:7 224:18 228:5 229:1 292:2 304:5 310:20 **reasonable** 67:6,22 205:10 206:4 reasoning 250:3 reasons 12:6 44:9 53:22 61:4,15 84:18 199:10,22 261:7 273:11 recall 330:6 **Recap** 4:2 receive 58:13 194:17 219:13 221:4 292:4 309.4received 12:5 283:8 286:6 287:21 297:13 304:1 receives 103:22 receiving 275:8 290:4 recognize 68:21 69:6 73:9 166:22 192:5 327:12 recognized 179:19 recognizes 37:12

recognizing 195:6 215:16 recommend 54:3 124:16 200:12 282:17 recommendation 12:20 13:3 32:11 136:12 350:9 recommendations 324:12 recommended 301:10 340:19 reconstruction 174:22 record 19:9 26:19 62:1 63:18 64:7 99:17 128:18 141:8,13 143:2 189:18 193:22 202:17 217:5 227:4 245:1 304:7 305:4,7 309:13 335:21 351:13 351:22 352:7 Recorded 7:7 records 188:3 214:13 215:5 316:21 **rectify** 271:4 **recuse** 184:14 red 299:17 312:2 **redo** 348:4 reduce 66:8 168:17 269:14 281:20 reduces 270:21 271:8 reducing 32:1 258:3,11 reduction 189:10 276:22 277:5 311:12 **REEDE** 2:13 33:18,21 34:2 35:17 48:16,19 49:1,11,13 52:9,18 301:7 reemphasize 219:8 reevaluate 223:21 refer 147:5.19 256:10 reference 33:19 58:10 72:4 referencing 336:12 referred 259:14 263:4 referring 260:14 reflect 57:19 119:15 161:9 326:10 reflected 118:13 143:1 **reflective** 326:12 reflects 105:3 reformatting 293:14 refrain 36:20 regard 7:21 17:5 110:20 178:8 202:11 regarding 116:21 164:12 167:4 169:3 171:6 195:21 214:1 320:7 321:14 347:11

regardless 19:20 87:19 195:11 322:13 regards 54:2 regimen 51:5 region 203:12 registered 9:11 80:3 registries 66:1,2 68:20 69:16 94:17 101:3 103:6 193:1,5 204:1 214:13 registry 9:12 39:17 43:6 63:18,20 65:7 67:8,9 67:14,20 69:1 76:20 103:4 143:1 155:18 157:9 168:2 176:8 182:4,6,12,13,18 187:2,16 190:8,10 191:2 197:12,13 198:2 201:15,18 208:21 210:5,12 217:18 310:3,7 regression 114:7 181:4 regular 187:12 regulatory 61:8 **reject** 242:14 rejected 77:20 related 30:19 54:15 76:6,7 114:17 144:3 195:9 203:5 266:9 relates 60:6 195:12 314:3 336:4 relationship 94:4,7 179:14 207:22 208:1 327:2 relationships 9:15 relative 25:18 286:21 306:2 relatively 174:3 175:16 176:20 180:8 185:20 190:5 191:6 release 195:5 243:11 relevant 34:19 264:16 314:10 reliability 26:19,21 27:3 27:8,13,16,21 40:1 48:16 57:20 62:4,6,11 62:16 71:20 72:3,6,11 85:15 91:10,14,16,19 92:1,6 110:12,15 115:7,8,16,22 121:16 124:7,10,19 125:2 131:11,14 132:7 138:18,19,21 139:1,8 139:9,15,20 143:11 144:1,7 162:12,16 164:1.3.8 176:6.7.10 189:2,4 190:14,16 191:4 195:21 196:4,9

196:20 198:3.12 206:8 224:4 234:19 238:15 239:16 240:9 242:20 reliable 140:9 235:14 308:12 relook 232:5 281:7 329:13 reluctance 285:2 reluctant 42:18 rely 153:3,5 remain 73:20 remaining 35:22 351:8 remains 14:10 32:10,17 32:21 33:3 53:19 73:22 remark 141:11 remarks 129:20 remember 47:16 57:13 197:15 223:14 remembering 86:22 remind 328:5 reminded 101:4 reminder 305:9 removal 174:21 remove 23:21 42:9 removed 130:13 133:18 147:14 159:22 removing 33:5 renal 71:12 263:12 270:13 285:11 renewal 135:8 reopen 157:11 274:4,8 **repair** 71:5 109:12,17 109:18 306:12 307:4 repair/replacement 4:9 121:4 repairs 69:3 252:8 repeat 259:13 309:21 repetitive 110:4 348:3 rephrase 50:22 replaced 265:5 replacement 71:4,5 109:12,18 172:18 199:15 251:8 252:10 256:2 264:22 296:3 297:7,18 314:20 replacements 314:19 replenished 270:11 report 24:3 25:7,11 40:12 44:3,5,8 45:6 57:13,14,18 69:9 72:20 76:8,10 77:5 103:14 107:3 139:10 154:5 156:15,21 160:14 163:15,17 166:7 174:13 187:10 189:4 198:12 202:7

220:17 231:16 235:3 237:12 238:5,8 245:8 245:9 266:9,14 283:2 285:2 332:6 350:16 reported 25:1,6 30:6 87:5 102:8,10 103:11 133:8 153:22 162:17 173:19 187:6 285:14 305:6,22 315:14 **reporting** 9:5 10:2,13 10:17,19 17:20 18:4 76:16 78:20 80:3,22 82:16,17 83:17,18 85:22 86:11,14 105:2 105:22 156:13 161:1 168:10 174:5 186:15 187:12 201:21 285:1 285:4 reports 78:19 88:16 188:6 represent 133:5 represented 335:20 representing 129:11 132:13 138:3 represents 45:7 134:20 reproducibility 143:5 143:11 requested 182:20 **requests** 83:18 **require** 94:19 168:19 171:19 252:10 254:4 254:17 266:13 267:5 267:10 297:7 326:8 required 156:14 290:1 290:7 345:4 requirement 61:8 168:17 233:5 266:7 282:13 317:14 requirements 44:6 218:16 requires 40:22 99:21 254:3 269:21 316:14 reread 200:14 research 2:1 302:6,16 resembles 297:3 reserve 16:8,21 17:3,7 17:17 19:15,17,21 20:5,7,11,21,22 21:3 21:19 22:3,12 23:10 24:9,11 33:9 38:10,18 41:7,9,11,12,15 42:7 42:8,14,18 43:7,11 44:5 45:16 46:7 reserved 21:6 resident 318:4 **residents** 318:3,8 resistant 199:13 resolve 125:15

resolving 250:1 resource 99:17 158:1 246:17 resources 36:19 37:7 289:19 294:5,10 respecified 216:13 respect 16:12 68:18 93:10 97:14 102:3 129:18 229:20 respective 111:11 respectively 122:16 respond 37:5 51:19 180:19 315:10 350:18 responded 59:19 179:18 response 15:9 18:16 23:16 28:16 29:14 30:22 36:3,5 40:19 49:3,7 51:13,15,20 52:3,5,12,15,21 53:2 56:4,14 59:16 63:6 66:13 70:4,7 74:6 89:17 90:18 97:3 99:9 181:6 243:13 251:1 responses 155:11 responsibilities 214:6 **responsible** 69:9 77:2 83:6 247:15 rest 20:6 26:17 188:5 209:21 346:9 restricted 225:4 restrictive 299:5 300:9 306:21 344:8,19 resubmit 89:6 220:7 227:7 342:6 result 11:15 80:18 82:10 88:9 229:9 242:8 282:22 329:6 results 57:2 78:22 86:3 92:17 147:8 220:6 221:6 223:6 224:3 225:20 244:1,7 248:5 266:9 314:4 resumed 128:18 245:1 retaining 16:18 rethink 177:4 272:20 276:14 retracting 47:11 retrospective 185:13 190:19,22 192:17 308:2 return 129:21 194:3 returned 130:6 revascularization 308:18 revealed 130:16 reverse 275:3 review 23:6 42:10 86:19

Neal R. Gross and Co., Inc.

Washington DC

107:15 159:11 160:9 181:1 214:7 216:8 240:15 271:18 274:13 275:20 276:19,20 281:21 282:18 296:21 305:11 327:4 329:16 333:14 344:1,1 348:7 reviewed 21:8 92:13 104:16 119:17 reviewing 216:2 220:12 222:17,18,19 **reviews** 140:10 revised 132:3 revision 131:22 revisit 21:15,21 revolt 102:5 revote 274:4 rework 41:8.8 **RHIA** 3:18 **RICHARD** 1:17 Rick 23:8 60:14 82:6 196:20 250:8 284:19 297:16 302:17 332:13 347:5 Rick's 270:2 347:5 right 13:3 25:15 49:9,10 69:4 74:15 82:3 88:1 88:3 90:3 92:10 104:5 109:7 114:1,9 118:18 118:19 128:3 142:17 150:14 153:1 157:13 157:20 160:21 162:11 170:19 188:2 192:12 196:2 221:10 226:19 233:22 238:21 242:19 243:5 249:13 256:6 259:19 260:8 271:17 284:7 326:15 334:21 336:21 337:3.8 338:8 340:22 343:5,6 351:11 rigorous 131:15 150:2 rigorously 130:7 Rim 271:7 rise 215:6 217:3 risen 56:9 risk 4:12,14 51:10,11 78:22 95:21 96:1,12 104:21 105:4,6,9,14 106:3,6,13 133:2,4,7 137:20 165:5,7,14 172:16 178:20 179:3 180:21,22 181:2,8,11 182:20 194:15 196:21 197:3,7,22,22 198:10 198:17,21 201:12,20 202:6 203:12,16 204:5,16,17 205:5,11

205:12,14 209:5,9 211:4,4 213:6 226:17 226:21 228:5,6,14 237:7 246:14 263:19 268:12,17,20 269:3 269:20,20 270:22 271:5,8 285:9,20 307:6,12 309:1,8 risk- 71:6,7 80:14 129:2 159:18 risk-adjust 79:8 risk-adjusted 9:14 49:1 71:16,17 130:4 159:12 risk-adjustment 82:13 95:6 risk-averse 105:16 risk-aversion 105:11 risks 281:13 **RN** 2:12 3:5,13 RN-BC 3:12 road 68:4 112:21 141:18 211:20 **Robert** 109:4,6 robust 10:5 robustness 105:4 role 32:9 rolled 106:10,12 room 1:8 44:4 85:2 87:16,19 136:17 173:15 253:12 254:22 293:11 294:19 299:15 314:7 326:6 327:15 328:16 329:1 334:7 **Rothman** 203:4 roughly 215:4 route 226:7 routine 193:10 263:2 routinely 13:15 67:5 302:19 **rub** 347:19 rules 243:14 run 67:10 96:1 209:6 256:14 ruptured 287:9 rural 96:9 S safety 2:7 60:6 **SAIGAL** 2:15 207:10 224:8 301:22 Sal 261:11 305:17 350:22 352:1 salvage 12:12 SALVATORE 2:15 sample 77:21 84:19 139:6 142:22

samples 291:8

saphenous 13:6,16 satisfied 62:1 satisfies 220:4 satisfy 59:2,11 61:7 218:15 save 189:7 Saver 344:6 saw 34:17 195:7 207:17 208:3 260:9.15 314:21 saying 11:10 45:11,20 82:4 181:14 183:17 204:12,20 235:17 243:14 278:2,4 287:14 314:11 325:17 says 25:22 38:11 40:21 60:19 251:22 279:15 279:18,20 scalability 121:13 scale 40:16 Scali 2:15 261:12 305:18 307:12,16 351:22 352:1 scaling 110:10 scanners 137:10 scans 151:20 scenario 278:6 316:19 Schatzker 182:21,22 183:4 schedule 294:9 scheduled 60:17 193:14 248:13 262:21 scheme 133:9 scholars 129:13 School 1:20 2:3.3 science 250:4 Sciences 2:11 scientific 3:2 71:18 97:15 98:6 126:7 131:10 220:20 231:17 238:11 245:10 scientifically 76:21 85:5 scientist 129:15 scope 45:20 score 4:9,11 12:17 33:3 48:20 72:14 96:3,5 97:17 109:13 110:20 146:15 149:13 150:19 150:21 158:7 160:18 164:21 260:20 scores 104:1 149:16 150:18 scoring 149:14 screen 263:16 269:2 288:20 289:3,5 291:13,17 292:9 293:2,16 294:2 296:3

318:17 screened 269:7 345:3 screening 4:20 5:8 245:19 248:7 249:7,9 249:11,15 256:22 257:1,6,8,16,20 262:17,22 265:1 269:8,11 288:16 294:11 328:16 345:2 345:6,7,11 348:20 screens 290:6 291:4,11 screwy 331:3 scrutinized 11:21 105:8 132:2 **SDS** 15:20 92:21 93:20 133:16 160:2 197:14 197:16 se 50:12 141:2,2 208:21 search 297:15 second 8:10 47:2 105:18 148:6 150:15 159:11 179:20 228:4 296:9 301:6 348:14 351:8 secondary 32:4 33:17 207:12 **Secondly** 202:4 seconds 9:22 184:13 327:16 section 10:16 239:16 240:4 297:9 337:9,17 sections 57:15 sector 130:20 sed 199:22 see 20:17 21:16.20 22:8 42:17 43:2 57:13 81:9 93:21 95:16 96:17 101:7,8 103:5 106:15 107:5 112:19 114:7 115:1 142:4 146:13 146:16 157:15 160:18 160:22 161:15 165:1 166:20 171:20 173:3 173:6 206:6 209:19 210:16 222:2 227:19 245:3,17 254:9 263:13,21 276:21 279:5 283:5,6,9 285:13 286:18 290:16 295:10 299:3 302:10 302:20 307:7 317:8 321:10 322:2 331:3 333:5 340:13 seeing 18:2 22:4 254:12 275:19 279:14 317:17 seek 180:12 seemingly 190:9

seen 24:9 51:19 84:22 91:18 137:11 147:20 202:12 217:12,12 290:21 sees 237:12 segments 286:15 select 351:2,12 selected 5:14 220:14 248:10 251:21 252:3 269:12 274:19 287:17 288:19 290:14 294:13 343:16 selecting 269:14 selective 297:3 self-monitoring 301:3 self-reported 212:6 send 14:14 25:11 145:20,21 241:17 291:17 335:5 339:22 351:19 sending 42:19 sends 38:11 42:7 senior 2:6,7,13 3:3,4,5 3:5,7 129:15 214:5 sense 20:8 35:1 54:7 57:17 61:10 97:19 148:8 259:10 261:19 263:7,16,21 299:3 307:21 313:13,20 328:13 329:7 331:3 sensitivity 176:11 190:21 sent 270:10 291:8 separate 62:6 93:12 114:12,14 153:19 154:5 166:16 234:7 separated 153:22 separately 27:16,19 49:5 52:14 53:1 137:9 sequelae 32:13 series 250:11 serious 130:5 136:20 147:19 159:20 serum 256:16 serve 351:4,7 service 2:18 96:1 services 266:10 serving 11:6 36:14 **SES** 94:11 session 214:1 set 23:19 37:8,11 39:8 55:4,12 59:11 62:2 64:13,16 72:8 121:6 136:5 159:21 180:1 221:9 237:8 249:18 249:22 252:5 255:18 279:18 297:3,9 310:10 331:11

sets 188:4 255:22 279:16 297:10 317:3 317:5 setting 200:21 226:11 244:8 260:11 279:20 310:11 331:9 settings 145:2 settled 110:13 seven 71:15 211:16,17 299:21 300:4,18 301:15 306:1,17 308:15 327:10 Seventy-one 98:11 severity 150:10 165:10 295:4 shaft 177:8 183:6 Shahian 3:16 54:13 56:1 65:13 68:13,15 69:2 84:6,14 86:1 87:9 94:1 99:9 100:4 100:15 102:15 103:22 104:9 105:13 118:22 shaking 27:21 87:1 Shander 3:16 268:4 272:8 274:5 280:8.16 280:19 291:22 303:10 307:14,17 329:8 347:13 **shape** 102:6 share 77:18 113:3 208:17 246:8 350:12 shared 43:21 260:21 SharePoint 255:20 shares 339:20 sharing 248:5 shattered 172:4 **shed** 232:10 shepherds 171:11 shock 322:10 326:4,18 shoot 143:7 **short** 13:8 41:6 183:14 245:20 281:18 shortcomings 152:2 shortcut 22:21 shorter 191:22 **show** 100:9 136:6 204:4 222:6 276:14 297:21 showed 94:15 190:20 showing 17:22 46:8 112:18 138:21 229:3 270:5 275:21 296:13 299:11 shown 132:21 140:16 shows 56:11 137:8 shuts 96:7 **shy** 104:13 sick 204:22 sickest 104:14

sickle 256:14 286:3 side 137:1,2 166:14 252:13 **sidelines** 102:22 sign 177:21 Signal-to-noise 48:20 signaled 43:10 signals 144:21 147:20 signed 107:22 204:14 205:17 206:1 significance 17:4 283:18 284:14 significant 11:11 12:13 12:16 18:1 44:19 53:19 54:17 92:11 103:13 114:5 138:3 167:22 172:7 209:17 217:3 242:13 269:18 271:5 291:10 292:6 295:6 320:18 324:12 significantly 11:17 107:12,14 326:17 signs 327:2 similar 32:17 41:9 71:20 117:1 121:6 210:18 Similarly 241:10 285:17 304:16 simple 171:19 175:17 191:6 simplest 251:1 simplicity 175:8 simply 58:9 172:2 244:4,6 257:19 278:15 simulated 221:8 simulation 71:21 Simultaneous 28:1 50:14 81:18 82:8 83:7 83:10,13,21 sine 67:16 single 38:13 157:11 173:16 185:13 190:18 311:15 sinus 199:21 Siperstein 2:17 25:17 26:2 45:15 104:11 160:6 161:17,19 166:15 167:4 257:11 272:13 282:20 283:16 284:7 328:11 347:17 347:22 sir 69:11 sit 119:12 278:4 site 84:2,4 142:21 175:18 192:7 248:1 255:20 site-specific 79:16

sites 10:16.18 110:14 121:17 219:19 230:6 236:3 317:4 sitting 73:5 203:2 situation 47:9 76:18 229:13 situations 79:18,19 270:9 **six** 10:11,21 67:10 112:20 118:21 142:6 **six-month** 64:15 Sixty 125:22 size 77:21 84:19 98:22 139:6 skin 199:18 SKIPPER 3:6 8:9 325:8 340:2,11 350:8 slide 216:1 220:10 222:10 230:12 **slight** 40:14 **slightly** 39:1 96:19 144:17 Sloan- 2:18 small 77:21 92:15 177:1 231:17 301:7 smaller 95:19 124:13 135:1 137:3,10,10 smart 136:17 Smith 207:19,21 208:2 smoothing 133:10 150:3 **SNOMED** 251:10,12 252:5 255:21 **societies** 179:18 **Society** 1:12 3:10,15,16 135:13 301:9 socio-demographic 130:18 socio-economic 160:15 sociodemographic 93:4 94:5,17 socioeconomic 93:11 soft 175:9 177:10 189:21 193:10 solo 128:22 solution 168:8 solved 257:21 somebody 149:17 185:19 200:20 201:22 259:13 273:13 292:3 306:13 312:5 327:20 329:21 someplace 95:14 somewhat 33:7 42:16 122:20 133:14 222:22 sooner 265:19 sophisticated 279:17

282:10 316:21 sorry 6:11 19:4,4 27:20 57:6,7 72:9 80:12 126:19 143:3 179:6,9 287:4 303:20 309:20 322:1 335:14 350:22 sort 24:4 33:10 46:12 85:18 95:22 102:4 105:5 116:5 132:19 160:19 165:5 188:4 192:4 206:13 215:20 223:16 238:11,19,22 250:11 261:15 305:20 306:18 310:4 324:15 333:10 339:3 sorts 66:7 sounded 210:4 sounds 39:11 101:7 168:3 210:6 249:10 249:22 302:6,11 314:7 source 190:8,15 197:9 228:10 322:22 sources 336:10 **sparse** 187:14 speak 132:14 264:4 **speaker** 208:11,13 215:16 speaking 28:1 50:14 81:18 82:8 83:7,10,13 83:21 339:11 **speaks** 188:9 spec'd 207:3,8 **special** 317:1 specialized 173:20 specialties 10:20 134:17 specialty 179:18 specific 39:9,16 59:18 104:11 129:22 172:21 175:22 249:21 257:2 283:14 305:12 311:6 311:7,7,9 313:17 325:6 331:13 335:5 340:6 specifically 13:9 132:10 193:15 195:13 334:19 specification 107:14 130:14 160:1 200:8 216:22 256:1 257:5 259:9 305:15 308:7 325:4 335:18 specifications 75:16 91:10,12 107:12 150:1 165:18 166:4 214:16 215:9 216:17 220:21 231:2,19

240:6.10 245:12 251:19 255:18 297:12 319:18 320:5 322:8 323:6,8,14 324:18 325:3 335:19 336:3,5 336:12,18 337:3,7,13 337:15,19,21 338:7 338:10,16 339:2 340:21 348:21,22 specificity 176:12 190:21 specifics 78:18 specified 75:2 91:11 163:3 209:13 216:11 218:14 232:10 251:22 302:3 specify 131:13 134:2 211:13 327:6 335:7 **specs** 240:8 298:5 339:6 **spectrum** 25:3 300:9 spending 36:18 spent 86:6 100:4 spigot 259:2 spinal 306:22 307:5,10 307:13 spine 209:3 spirit 292:13 **split** 183:4 spoke 236:7 sponsored 216:15 **sport** 76:5,15 77:12,13 79:10 84:19 87:15 **spot** 146:2 spotlight 208:4 spread 137:20 185:8 187:13,22 247:5 286:19 spreadsheet 255:21 spring 266:6 **SSI** 178:10 185:8 188:8 189:21 197:17 211:13 St 129:9 stacked 250:11 staff 3:1 8:14 19:13 107:4 154:21 209:11 230:11 236:8 324:12 345:19 351:15 staffers 135:18 stage 87:6 174:20 191:11 194:5 staged 193:19 stamp 206:18 stand 114:20 286:21 316:11 standard 38:6 98:18 101:2 133:10 165:1,2 166:21 173:13 188:5

188:7,7 192:8,11,16 200:20 201:5 217:20 278:10 307:2 312:5 321.11 standardization 317:7 standardized 161:7,9 standards 282:9,16 302:12 standing 1:3,8 6:22 180:13 215:17 245:4 252:19 293:11 **standpoint** 88:6 95:6 158:5 209:10 stands 203:16 star 72:19,21,22 252:16 350:3 stars 72:22 start 8:21 11:8,10 14:18 51:5,9,18 86:11 102:12 153:18 181:5 200:17 208:10 244:21 245:17 289:4 291:7 292:12 329:21 341:16 started 6:5 58:15 205:13 265:16 starting 51:16 130:1 175:6 272:3 state 19:10 96:17 103:10 104:2,3,4 105:21 165:16 167:1 167:2.21 192:20 193:2 238:4 268:21 351:13 stated 17:8 143:17 178:5.9 200:19 statement 135:11 187:5 265:16 283:1 307:19 statement's 45:5 States 1:17 9:11 10:20 29:9 76:16 96:9 194:18 295:21 statewide 208:18 static 47:8 statins 32:2 statistic 121:15 statistical 82:11 161:5 statistically 17:22 18:1 138:3 status 16:8,21 19:15,17 19:21 20:5,7,11,21,22 21:4,19 22:3,12 24:11 33:9 38:10,19 41:12 42:8 43:7,11 44:5 45:16 93:4 94:14 112:20 114:13 133:5 140:14 141:2,3,18 160:15 179:1 209:4 212:10 301:12

stay 246:15 333:20 staying 128:16 stays 44:21 steering 132:18 stenosis 12:8 step 88:2 steps 268:1 Steps/Committee 5:20 sternal 71:11 stipulate 237:5 stood 291:1 stool 262:7 stop 80:21 81:10 160:4 177:6 191:3 218:6 237:10 259:3,6 318:8 stores 275:3 strata 283:9,10 284:5 286:6 331:15 strategic 7:14 strategies 344:8 strategy 205:10 299:6 344:19 stratification 204:18 205:6 274:17 stratified 197:8 299:19 330:9 332:1 stratify 203:16 204:5,16 287:22 streamline 341:5 Street 1:9 STREETER 3:7 strict 130:9 134:3 strictly 93:6 strides 315:4 strive 163:2 188:2 striving 195:17 stroke 71:12 strong 166:1 182:10 231:2,14 285:1 291:15 300:6 strongly 14:12 17:15 54:3 226:1 251:6 structure 168:2 242:22 244:6 248:3 260:18 structured 65:21 217:16,19 244:3 310:20 struggling 150:11,14 185:12 234:8 314:2 **STS** 4:9,10 9:5,8 10:14 11:8 12:17 19:10 24:21 26:18,20 37:22 67:5,5,22 69:6 70:22 76:19 77:19 98:22 99:5 103:3,14 112:17 205:13 213:12 301:8 STS' 7:17 studied 51:4 176:16

studies 54:7 178:12 185:6,7,13 190:17,19 191:1 197:20 202:14 211:9 290:20 study 55:13 59:4 60:1 145:8,10,13,17 176:9 187:21 192:17 198:20 246:19 262:9 stuff 212:4.6 sub-clinical 137:11 subclavian 12:8 **subgroup** 276:12 subject 305:5 submission 139:5 146:16 155:1,7 156:13 208:20 231:22 235:1 260:22 submissions 119:11 submit 226:8 submitted 34:6 142:22 198:11 210:17 214:16 216:7 217:4 227:12 submitting 210:5,10,11 231:21 suboptimal 274:14 279:4 subpopulation 156:22 subscription 134:9 subsequent 93:1 subsequently 32:21 313:14 339:15 340:20 subset 194:16 278:11 283:21 substantial 111:14 174:18 276:12 substantially 135:1 172:15 **subtle** 17:6 33:13 succeed 214:22 successfully 350:9 **sucking** 146:9 sudden 96:8 suffer 269:5 sufficient 116:19 268:9 271:11 345:10 sufficiently 227:14 300:6 suggest 17:2 31:20 33:6 40:15 41:18 51:7 166:6 281:18 294:9 306:21 320:7 suggested 49:19 249:8 324:5 suggesting 177:2 suggestion 233:7,8,20 287:14 288:1 347:20 suggestions 237:6,10 293:7 298:19

suggests 18:5 31:21 suitability 10:1 30:21 31:3,8 53:4,7,12 70:11,16 108:17,21 119:20 120:1,5 127:19,22 128:9 159:3,7 170:8,10,14 233:11 245:16 suitable 75:8 sum 78:19,21 summary 110:16 sunset 22:2,4 33:11 41:10,17 superficial 147:14,15 superiority 13:5,21 supplied 249:19 support 18:6 67:11 87:22 88:3 184:10 202:14 255:3 264:1 279:22 292:1,16 301:14 311:4 317:3 318:1.5 supported 21:9 39:16 206:16 249:15 299:6 supporting 13:8 253:4 supportive 99:8 supports 184:10 253:18 suppose 228:9 supposed 24:19 120:11 234:7 237:15 262:6 supposition 226:22 253:10 261:19 sure 9:1 14:17 17:5,22 22:14 24:13 31:15 50:11,20 51:2 57:17 62:7,8 67:12 69:10 79:12 86:4 99:1 153:15 162:22 180:15 210:14 215:14 239:11 264:7 266:21 279:21 292:8 297:12 311:22 314:7 318:21 324:9 336:4 339:6,17 surgeon 1:21 4:7 39:5 70:22 75:19 77:7 79:9 79:17,22 80:16 81:10 82:19 87:17,18 88:8 95:18 106:3 129:9 171:3 179:13 193:21 200:19 201:4 263:4 314:21 315:1,22 surgeon's 85:10 90:6 263:15 surgeon- 82:21 Surgeon-in-Chief 2:8 surgeon-level 76:16 83:5 84:17 85:6 93:2

surgeons 3:11,14 4:13 4:15 17:10,11 22:20 50:16 72:10 74:17 79:20 83:3,9 86:3,9 88:2 91:16 96:5,21 98:15 102:4 104:13 106:1 129:4,11 132:14 133:20 135:12 142:2,9 173:3 174:13 175:13 180:2,9 191:18 192:3 201:2 204:2,8 254:12,15 256:7 287:19 315:5 surgeons' 87:21 261:17 Surgeons/Professor 2:2	
Surgeons/UCLA 2:3 surgeries 251:6 253:17 287:8 296:7 321:15 322:21	() ()
surgery 1:3,14,19 2:2,3 2:16,17,18,21 3:11,15 3:16 4:8,12,14 9:3,10 11:2,3 12:3,9,20,22 15:19 17:15 21:13 29:9 31:22 32:9 34:11 34:14 51:10 58:6,14 58:19 59:9 60:18 61:14 71:1 72:16 76:4 76:15 81:16 87:14 99:4 104:3 112:9 129:3 136:7 140:17 140:20 141:13 146:5 151:12 152:10,21 159:12 160:13 166:8 168:5 173:15 175:11 177:7 200:22 203:6,8 209:3 216:3 218:2 250:2 252:2 254:7 255:10 258:8 259:1,3 262:14 263:18 269:22 271:20,21 274:14 275:7 279:2 281:19 285:6 290:3 291:6,8 291:12,14,14,16	s s t t t t t t t
292:10,12 306:20 307:10,13 308:15 339:22	t
Surgery@qualityforu 340:3	t
surgical 1:15 5:15 10:16 11:21 109:19 112:10 129:13 134:17 142:20 175:18 192:6 194:17 248:8,10,13 252:4 268:13 271:19 274:19 275:8 281:15	t t
287:18,20 288:19	t

Ш

290:15,16,18 294:8 294:12 297:4 314:17 331:12,14,18 343:17 surgicals 289:2 323:3 surprise 214:10 surprised 86:13 256:7 surprising 207:18 surveillance 137:8 survey 135:21 258:21 300:16 302:16 survival 13:8 32:5 44:20 survive 73:18 suspect 221:20 sustain 173:13 175:18 **swamp** 147:16 symptoms 190:1 327:2 synergistic 31:22 synthetic 221:21 222:2 225:20 232:1 243:19 system 9:21 51:9 129:10 151:13 176:4 193:18 217:12,13 257:17,19 260:15 334:9 systematic 305:10 systemic 236:5 Т **T** 2:15 **'s** 67:12 table 8:6 77:12 170:22 tackling 186:22 ail 32:19: ake 7:13 17:4,21 22:20 23:18 28:4 44:20 50:18 64:1 73:10 78:18,21 79:8 106:2,3 128:11 135:4 141:9 146:18 171:1 175:1 178:1 198:18 199:19 200:22 204:21 250:15 254:22 256:13 272:11 286:14 324:7 325:17 340:13 346:3,12 348:9 aken 61:18 106:5 202:3 203:7 236:13 takes 50:4 79:13 88:7 205:14 318:7 327:15 alent 87:21 alk 75:18 90:10 135:7,9 140:3 179:2 181:11 190:13 202:9 207:5 210:12 211:3 215:19 239:16 240:9 253:1 287:4 333:10 alked 16:2,13 21:7

33:8 46:15 98:22 322:11 330:3 talking 7:6 43:19 47:8,9 65:5 86:21 134:14 142:18 145:4 161:13 172:8 202:4 213:12 229:5 230:13 234:6 239:7 240:8,16 251:7 251:14 252:8,9 296:10 316:20 335:22 336:9,16 337:1,10 338:1 target 251:7 task 11:3,7 35:8 182:8 team 76:4,15 77:12,13 79:10 84:19 87:15 88:8,10 229:16 280:10,12 351:16 technical 247:18 259:18 287:13 324:20 335:17 technically 192:11 technologies 344:7 technology 215:11 217:11 313:18,19 teleconference 3:22 tell 144:12 156:12 202:5 207:16,20 251:3 254:11 271:14 310:4 341:7,12 347:9 telling 202:1 Temple 2:18 106:21 107:5 160:6,8,12 161:14 162:12,13 163:4,15,20 164:18 167:16 169:15 223:14 224:4,7 238:10 239:7 239:12 253:9 254:19 275:18 277:6 ten 147:21 149:5 186:5 244:20 283:11 300:5 ten- 141:22 ten-minute 128:12 tens 142:1 **TEP** 340:13 term 13:13 32:3 71:5 183:14,14 191:22 211:15 256:12 348:19 348:19 351:3,6,6,7,8 351:10,12 terms 16:15,18 32:4,14 33:12 41:4 46:18 59:17 65:13 67:10 78:11 84:15 91:14 93:14 95:11 131:11 132:10 133:15,19 140:4 141:20 142:4 147:1 151:7 155:3

171:21 174:8 175:12 175:15 181:17,20 186:15 187:8,9 191:16 198:19,22 204:11 221:6 227:17 228:2 249:14 262:14 268:17 269:10,21 271:13 272:5 280:21 281:14 290:12 296:12 306:5,8 308:2 313:12 315:18 329:21 terribly 173:1 terrific 169:1 213:20 test 125:20 217:9 218:5 219:10 221:9,22 222:1,2,4 224:3 225:20 230:8 232:1 239:2,5,22 244:1,7 251:2 256:10 315:16 317:21 tested 115:10 139:1 223:4 226:11 232:6 testing 5:8 40:1 91:14 110:13 138:20 142:21 155:1.4 190:16 197:19 207:3 218:3 218:16 219:1.18.21 220:4,6,15 221:7 223:5 224:10 225:3 226:5,9 227:3,3,11,14 228:18 229:10 230:6 234:18,20 235:5 238:17,22 239:9 240:9,18 241:19 243:6 244:10 247:10 247:15 248:15 250:21 256:12 269:10 288:15 289:20 294:20 tests 149:2 256:14 262:9 thank 6:6 7:2 8:14 9:1 11:5 14:2 17:18 18:8 19:12 23:7 24:8 26:1 31:10 33:15,18 37:2 51:21 65:1 66:10 68:5 69:15 72:17 73:4 77:4 78:6 82:3 88:4,5 97:1 100:19 102:20 107:17 109:2 115:6 128:15 128:15 129:7,8 143:16,19,20 146:6 147:4 149:19 152:7 153:7 155:14 157:18 160:21 165:9 166:11 168:12 169:1 170:17 184:16 201:9 209:11 213:15,21 224:7 246:8 249:2,3 257:3

			587
000-0 004-0 005-0	44.7 44 45 04 40.0 00	thinking 44.40 45.40	40.00 44.40 50.0 44
260:2 264:2 265:8	41:7,14,15,21 43:9,20	thinking 41:16 45:19	42:20 44:18 50:9,11
266:16 267:12 268:3	45:22 46:1,4,18 47:13	60:7 86:22 201:2	58:7 61:22 68:9 70:9
272:7,8,10 274:19,20	47:20,22 51:3 53:20	third 105:20 180:6	78:18 80:10 96:17
282:1,2 288:2,13	54:2 56:1,10 59:21	202:7 216:18	99:17 101:8 116:6,7
297:16,19 310:17	63:14 67:14,22 68:9	thoracic 1:21 3:11,15	120:10 128:5 130:9
312:10 319:2 320:6	68:17,19,20 69:2,8,12	3:16 12:9	132:3 134:3 144:13
322:5 332:12 341:17	73:15,22 74:16 75:15	thoracical 307:3	144:14,16 152:15
344:22 350:2,8	79:11 83:3 86:7 88:1	thought 9:6 32:4 59:14	172:18 177:16 178:1
351:15	88:7 89:18 90:12	86:6 93:2 172:19	189:8 195:19 204:3
thanks 25:13 128:14	91:10,17,20 94:3,6,15	186:12 195:15 207:17	204:20 213:21 218:14
148:3 297:15 301:20	95:1,5 97:22 100:2,20	227:21 341:4	218:15 220:9 223:17
339:19 351:20	102:5 104:7 105:14	thoughtful 198:5	225:15 226:5 230:14
themes 86:20	106:19 111:1 112:11	thoughts 36:2 250:3	240:2 246:21 248:20
theoretical 93:19 95:6	119:7 124:14 135:6	thousand 205:13	249:21 250:14 251:8
theoretically 40:20	135:14 136:4,5,8	thousands 44:14 142:2	252:21 254:17 255:11
44:16 60:11 238:14	138:20 140:2 142:4,8 142:15 143:16 145:7	186:6	257:17 260:16,21
therapy 11:12 55:10		threat 228:18	262:17 263:1 264:10
250:16 270:14 281:19 thereabout 295:13	150:2 155:16 160:8 161:15 164:22 166:3	threats 197:21	264:11,13,18 268:16 269:22 273:9,17
thereof 32:13	166:19 167:16 169:15	three 9:21 10:22 11:1 37:10 72:8 85:13	276:5,22 281:9
thing 16:20 17:10 20:19	171:18 172:19 176:18	105:15 113:11 115:9	289:15 292:11 293:2
26:21 41:6 46:12 47:3	178:13 179:2 180:4	120:9 121:17 124:8	296:12 318:2 321:16
60:16 61:21 68:1	183:22 186:10 188:9	129:5 133:3 151:19	324:2 329:2 331:4,5
74:22 82:6 88:1	191:5,7,10,11,17	171:1 172:14 178:12	334:10 335:12 341:11
105:18,20 135:7,8	192:9 194:21 196:18	181:6 185:7,12	344:14 350:2,7
140:18 176:18 178:17	200:15,16,17 201:1	189:15,20 190:2,4	<b>Timeline</b> 5:20
179:20 180:6 187:20	202:21,21 204:12	211:17 222:17 223:1	timeliness 322:17
204:13 206:4 209:9	205:3,9 206:4,9 207:5	234:10 237:6 238:18	timely 248:9 249:12
211:3,14 234:16,17	210:8,15,19 211:11	243:3 267:17 270:5	253:6,7 258:9 343:18
266:22 270:21 310:20	211:18 212:8,9 213:4	288:7 295:1 298:10	348:19
311:21 314:12 331:9	213:20 214:10 224:16	298:11 302:3 306:19	timely-enough 250:13
341:13 348:17	225:7 228:16 232:5	312:14 319:7 323:9	times 20:12 144:3,3
things 16:13 26:20	232:12,18 235:21	340:16 342:2,17	217:7 307:2
38:12,14 41:9 46:21	237:1,19 241:7,14,19	349:7,9 352:5	timing 120:13 175:10
66:7 68:2 77:14 83:4	242:5 244:1,7,12	three-hour 73:10	177:6 191:9 258:17
83:16 86:13 94:20	249:5 250:9 253:13	three-year 21:12	259:9 261:13,18
96:14 102:19 103:3	253:14 255:7 258:16	110:12 189:11 219:21	263:17,20 273:5,21
103:11 105:13,15	259:15 268:7 269:13	351:6	tired 308:22
107:18 114:4 119:18	269:14 271:6 272:1	threshold 5:12 139:8	tissue 177:10 189:22
140:6,15 141:17	272:19 273:1 276:1,8	139:11 280:3 298:22	193:11
147:14 153:17 168:13	276:11 277:10 281:7	306:3,4 326:10,21	tissues 175:10
173:11 180:14 181:6	282:3,7,14 286:9	327:10 329:21	title 178:3 249:6
186:8 190:1 202:9	290:11,12 291:14,18	thresholds 280:2	today 6:18 7:18 10:12
208:11 210:18 221:19	292:14 293:13 294:6	305:21 310:10 311:7	10:21 54:14 55:7
222:17 225:9 234:7	294:12 300:14 301:22	314:6 333:12,18	109:7 129:12 130:2
237:17 241:14 243:9	302:14 303:8,10	throughput 100:11	131:3 165:1 171:12
254:12 269:3 271:3	307:18,20 308:1,8	throw 81:1 96:11 149:6	173:14 210:4 223:19
273:8 287:10 299:15	310:18 311:10 313:7	330:7	223:22 230:13 234:1
303:13 308:18 309:3	314:4,8 317:9,14	throwing 103:21	236:14,17,18 251:9
309:9,14 317:18	324:2,3,4,6 325:16,20	thrown 121:21 249:6	320:20 323:22
321:4 322:11 323:22	326:8,19 329:9,10,14	Thursday 350:13	told 23:18,21 221:17
326:6,7	329:14,18 330:3,4,9	tibia 4:16 172:4 183:6	223:17 338:19 346:20
think 7:11 8:1 13:20	330:14 331:4 332:7	tibial 170:21 171:7	tool 221:12 310:21
16:17 17:13 18:10,12	332:14 334:16 335:14	172:1 173:18 175:22	316:4
19:13,16 20:16 24:20	338:21,22 339:21	176:1 178:4	tools 318:1,5
25:1,4,17,19 33:11,16 37:11,21 38:2,7,7,9	341:2,12 345:16 346:7 347:10 348:2	tie 256:9 time 6:6 20:12 32:16	top 46:17 118:12,14 199:14
38:14,16,16 39:3 41:3	346.7 347.10 348.2 349:17	36:13 38:13 41:12	topic 21:15 211:12
00.14,10,10 00.0 41.0	040.17	00.10 00.10 41.12	
1			

212:9 213:14 topics 211:18 topped 19:22 20:13,14 23:14 25:5 32:15 35:18 41:7,11 42:22 45:10 65:6 topped-out 37:15,16,18 tossed 136:17,18 total 78:19,21 100:10 185:14 264:22 296:2 314:19,20 315:6 touch 9:22 10:21 89:14 90:14 206:10 351:9 touched 7:4,10 tough 15:1 town 95:13 258:19 track 26:19 47:1 79:22 107:21 174:13 tracked 79:17 tracking 88:17 168:10 173:9 tract 148:13,22 tradeoff 134:6 traditional 242:3 trail 235:10 trained 131:15 training 172:1 trains 8:3 transfer 64:21 transfuse 278:7 279:12 296:19 306:17 321:22 334:6.9 transfused 178:22 251:8 281:20 283:21 285:5 300:3 303:7 314:6,22 315:1,19 318:15 345:21 transfused/not 178:22 transfusing 279:18 282:12 299:7 300:18 304:5 315:6 transfusion 5:11 246:10 249:1 250:10 257:18 258:12 268:19 269:15 271:1,9 274:6 274:12,16 275:8,9 278:16 280:3,3,5 281:13 283:8 287:21 289:20,22 298:22 299:2,4,6,10,13,17 300:12,13,20 302:8 303:4 304:2,10,11 305:3 306:10,14,22 307:1,15,19,20 309:2 309:19 310:9 314:5 316:7.12 318:6.9.19 319:1 322:13 326:2 326:22 327:4,9

329:17,22 330:2,10 330:11,21 331:21 332:16 333:3 344:4,8 344:16 345:5 transfusions 257:15 258:4 275:11 300:8 302:20 309:11 312:3 328:2,20 329:12 332:22 343:21 344:14 344:18 transitioning 216:15 224:20 transparent 115:2 155:8 157:10 transplant 151:11 trauma 3:9 4:17 149:12 149:12,13,15 150:18 150:20 151:1,5,22 152:4 171:3,5 173:8 175:7 180:1,2,17 181:18,20,21 186:22 187:18 188:1 192:21 193:8 194:18 202:3 203:6 287:7 303:15 303:18 traumas 150:19 151:2 151:13 traumatic 286:2 328:7 traumatologists 204:20 treat 173:4 194:7 201:6 treated 147:11.22 271:16 274:1 treating 11:13 269:21 treatment 176:3 177:11 202:10 271:18 275:2 345:6 trend 47:3 trial 54:8,12 177:2 207:5 216:5 218:11 218:12 219:4,7,12,16 220:5,10,18 221:1,4 222:12 225:8,12,13 225:16 227:10,16 228:3,7,12 229:11 230:5,19,22 231:11 234:2,9,17 235:18 239:20 240:17 241:18 242:10 243:11 247:7 261:8 266:12 323:14 334:21 349:18 tricuspid 109:18 tried 85:8 210:19 211:2 trigger 107:14 306:13 306:17 307:8 326:2 329:16 333:14 trouble 345:8 troubles 253:10 true 15:20 18:13 29:7

55:10 67:19 117:16 134:8,18 135:1 147:6 150:1 211:15 262:2 275:13 313:19 try 36:20 55:9 96:20 195:17 212:8 244:11 284:16 309:6 trying 36:17 66:3 174:9 188:4 193:3,3 214:20 225:2 234:12 256:9 269:12 271:4 278:9 282:4 295:5 307:4 309:6 322:18 341:4 turn 133:7 238:11 320:19 turns 327:9 tweak 335:2 tweaking 293:3 tweaks 340:8 twice 131:1 two 7:16 11:17 46:21,22 53:20 54:1 55:6 58:15 58:15 59:7,7 64:6 72:22 75:10,11 84:22 85:11 86:6 101:17 102:19 109:3 110:1 113:11 116:6 121:11 125:7 126:5,12 130:1 131:3 145:3,7 149:19 155:17 164:21 168:13 181:10 189:18 190:17 190:22 194:12 197:20 208:17 211:9 221:20 222:21 227:3 254:12 256:8 258:22 267:16 270:5 271:3,5 274:10 288:6 294:22 295:12 296:6 298:9,11 306:8 310:16 312:13 319:7 323:9 332:18 342:2 342:17 349:6,8 351:22 352:3 two-and-a-half 94:9 two-minute 128:21 two-thirds 315:13 two-year 351:6 type 5:7 93:15 119:2 175:22 264:14 288:15 288:20,20 289:3,3,5,5 290:6,6,13 291:4,12 291:17 292:3,8,9 293:1,1,16,16 294:2,2 296:3 318:17 346:16 types 38:1 105:10 199:14 204:11 277:11 302:3 309:9,14 typical 85:10 99:12 191:22 325:13

typically 107:11 U **U** 129:9 187:22 **U.S** 186:3,6 192:21 247:4,5 269:19 271:8 272:6 UCLA 2:3,15 ultimate 277:15 ultimately 292:21 ultrasound 262:21 un-292:4 un-cross-matched 290:4 296:19 unable 226:4 227:13 unanticipated 130:6 unavailable 13:1 unavoidable 344:15 unclear 324:3,4 uncomfortable 87:19 118:11 **uncommon** 59:3.10 uncorrected 248:21 274:15 undated 304:9 undergo 12:12 32:9 306:19 307:3 undergoing 12:5 136:7 253:14 274:14 328:6 underlying 97:20 301:12 332:20 underpinning 93:19 understand 17:3 33:13 37:6 99:16 114:3 119:12 152:18 155:8 158:7 166:1,18 173:5 176:15 189:14 197:12 200:11 207:19 230:15 238:21 251:12 257:2 257:14,15 277:19 278:9,12 283:17,18 284:8,11,14,21 302:7 325:15 331:8 341:9 understandable 327:13 understanding 58:4 93:7 153:15 164:22 178:21 257:12 285:9 316:3 324:17 325:1 335:16 understands 17:6 understood 166:19 333:7 337:14 undertaken 344:3 underway 247:4 underwent 109:17 underwrite 69:7 underwritten 67:7 undesirable 275:11

			389
	407 44 450 44 450 40		404 40 470 00 044 44
undoubtedly 75:21	127:14 156:11 158:12	<b>UTIs</b> 149:22 164:19	161:12 173:22 314:11
unequivocal 270:21	158:14,19 169:14,20	V	variation 87:20 178:10
unexpected 328:22	170:3 221:2 237:16		204:4 314:9 326:16
unfortunate 76:17	242:21 243:18 245:15	<b>VA</b> 130:22	326:18 334:12
unfortunately 41:21	342:15,16,21	vac 208:7	varies 134:10 161:1
231:7 246:18 346:22	usage 5:14 299:10	vacuums 202:8	variety 134:17
uniformly 143:12 unintended 50:6 51:12	327:4 343:14,16	vaginal 297:22	various 133:1 163:16 315:16
60:5,12 80:14 104:12	use 4:3 11:12 12:2,15 12:17 13:2 17:11	valid 28:10 76:21 79:22 80:5 85:5 116:9 142:7	variously 15:14
144:4,9 237:18 241:4	18:10 19:1 23:22	142:10 196:19 235:14	vary 161:10 217:18
242:6,11 250:18	24:19 28:11 30:8,13	338:16	304:20
262:4 279:14 290:5	31:21 32:22 40:7	validated 97:22 310:6	varying 134:12
293:15,22 303:3	52:16,18 64:6,14	validity 28:7,19 29:2	valying 104.12 vascular 2:16 261:17
unique 134:7 150:6	69:22 75:8 78:22	39:3,12 49:10,15,18	261:22 263:9,15
165:12 286:5 310:19	86:17,18 102:3,3	52:7 62:20 90:11	268:14
uniquely 150:12	103:5,7,8 106:17	92:11 97:5,10 110:19	vehicle 55:4
unit 289:22 292:4	108:4,9 113:18	115:20 116:4,12,17	vein 13:6,16 22:22
299:13,18 309:18,19	117:19 118:2 127:9	118:8,8 119:1,2,4,6,7	vendor 217:14
318:14 322:19	127:14 130:3 156:10	119:8,18 125:6,9,17	<b>Venn</b> 200:17
<b>United</b> 1:17 9:11 10:20	156:18 157:2 158:12	131:12,14 132:10,12	venous 141:3
29:9 76:16 96:9	158:14,19 159:18	132:19 133:1 140:1	ventilation 71:11 73:21
194:18 295:21	160:16 169:14,20	140:21 141:6,20	verified 195:3
units 79:2 279:12	170:3 174:9 192:18	142:4,14,15,18 144:7	verify 99:18
universal 292:16	193:18 194:5 207:5	153:12 154:8,10,14	versus 24:22 41:15
University 1:12,16,19	207:20 216:5 218:1,9	164:12 165:4 167:4,7	59:7 65:3 75:11
2:11,16,22 3:18 9:4	218:11,12 219:4,7,12	167:11 176:6,14	122:21 141:7 143:1
171:4 294:17 314:16	219:16 220:5,10,18	179:3 181:12 196:14	144:22 150:19 155:18
316:13 317:4 334:1	221:1,2,4 222:6,12	196:15 197:19,21	180:1 193:15 202:11
unknown 148:19 198:1	225:8,12,14,16	208:12 209:10,14	227:5 277:11 330:10
198:3,3	227:10,16 228:3,7,12	210:3 211:3,19,20	Veterans 1:14
unnecessarily 294:11	229:11 230:5,22	212:1,2,2,13,18,22	vetted 90:11 224:13
unnecessary 250:10,20 275:10	231:11 234:9,17 235:10,18 237:16	224:5 228:18 234:20	VI 183:4 Vice 1:15 2:4,20 3:2,3
unreasonable 191:7	239:3,6,21 240:18	237:20 240:9 242:21 330:12 338:17	129:10
unrelated 64:12 99:7	241:18 242:10 243:11	valuable 318:15 332:8	view 87:14 90:5 184:4
unrisk- 201:22	243:18 245:15 247:7	value 2:9 134:7 198:14	Vinay 3:10 9:2
unrisk-adjusted 203:2	261:8 266:12 274:13	237:20 252:4 257:14	Virginia 9:3
unstructured 65:20	276:19 310:2,8 311:2	257:15 284:4 297:2,9	virtually 248:17 273:1
217:18	311:8 317:3 323:14	303:5 312:7 332:4	<b>VIs</b> 182:21 183:1
unsuitable 13:2	329:2 342:14,15,16	334:3	visible 157:10
unusual 40:8	342:21 344:6 348:18	values 113:20 190:22	vision 81:8
unweighted 147:5,10	348:19	259:21 286:20 299:12	visit 137:8 273:18
148:2	useable 133:22	299:20 300:20	visited 254:15 261:1
up/down 161:3	<b>useful</b> 24:2,3 45:6	valve 4:9 69:2 71:3,4,14	317:8
update 107:9 209:16	232:5 285:17	99:12 109:12,14,17	visits 248:1,5
updated 34:8 184:1	<b>user</b> 86:18	109:18 112:9 121:4	Vitamin 256:16
295:17	users 132:1	variabilities 198:22	volume 15:16 78:3
uploading 67:9 UPMC 317:4	uses 196:18 246:17 306:1,1	variability 22:18 25:21 74:19 204:5 314:21	voluntarily 10:19 25:6 voluntary 210:6 212:5
upper 172:3	usually 107:3 216:15	315:3,3 334:15	<b>volunteer</b> 156:20
urban 95:10	239:16 274:1 331:5	variable 37:12 55:5	vote 15:4,7 18:18,20
urgent 246:18	<b>UTI</b> 146:20,20	59:12 60:3 82:22	19:15,19 20:5 24:12
urinary 148:13,21	utilization 47:5 208:7	173:12 237:8 326:13	26:8 27:1,16,18 28:3
usability 30:4,8,13	277:20 278:1,5,13	346:4	28:4,17 30:21 35:15
52:17,18 69:22 102:3	282:10,18 284:2	variables 59:17 132:2,4	48:2 49:5,6 52:1,2,7
103:17 106:18 108:4	300:11 309:8 318:3	141:16 143:10 175:11	52:14 53:1 56:3,16
108:9 117:17,19	utilize 289:19	209:5 341:9 346:15	62:4,6 63:3,4,5 66:12
118:2 126:18 127:9	utilizes 294:5	variance 131:7,7	70:3 74:5 83:14 88:20
I		l	

	1	1	1
89:6 90:19 91:21 98:4	298:15,15,16 312:18	164:2,6,8 167:6,9,11	346:10 350:20
101:11 106:17 108:2	312:18,19,20 319:12	169:4,8,10,19 170:1,3	wanted 19:13 20:19
111:1,18 113:5	319:13,13,14 323:15	170:7,9,12,14 184:12	22:22 76:20 85:4,7
115:14 117:1,5	323:16,16,17 336:17	184:15,18,19,21	87:3,13 93:5 95:2
119:21 122:5 123:1	336:20 337:5,22	185:1 188:12,13,17	171:16 182:14 186:20
125:11,13 127:19,20	338:2,3,5 342:11,11	188:19 196:3,7,9	247:9 261:12 264:8
136:9,12 137:14	342:12,12,22 343:1,1	212:17,20,21 220:17	264:19 276:13 280:20
138:6 139:13 154:7	343:2 349:13,13,14	265:10 267:14,15,18	309:13 350:12
155:21 160:11 161:22	votes 19:11 26:6 27:7	288:4,5,8 298:7,8,13	wanting 37:6 187:8,9
164:1 167:5 169:3,18	29:1,20 30:12 31:6	311:19 312:11,12,15	wants 81:13,13 83:3
185:16 196:2 220:14	48:9 53:10 57:1 62:15	312:17 319:5,9,11	101:7 242:11 291:21
220:19 233:2,10,10	66:20 70:14 74:11	320:12,12 323:7,11	warning 128:21
233:19,19 235:9	89:6 92:5 97:9 98:10	323:13 341:22 342:8	WARREN 213:22
236:10,14,19,20	101:17,19 108:8,20	342:9,15,19,21 343:8	wash 129:9 174:17
242:4,17 243:3,4,9,10	111:6 112:2 113:12	346:22 348:13 349:2	washed 193:14
243:14 245:8,11	113:12 115:21 116:16	349:3,10,12	Washington 1:9
266:18 271:11 288:3	117:11 118:1,13,14	<b>Vs</b> 182:21,21,22	washouts 193:9,10,19
298:4 319:4 321:1	120:4 123:7 124:3	<b>VTE</b> 130:13 133:18	wasn't 135:19 211:5
337:15 338:20 340:15	125:1,13,21 126:12	146:19 159:22	249:13
342:6 343:4,5,8	127:13 138:12 156:5	140.10 100.22	waste 37:6
346:11 347:14 348:5	158:18 159:6 162:6	W	wasting 341:11
348:5,9,11 349:1	164:7 167:10 169:9	wait 208:13,13 256:8	watched 248:2
350:18	170:2,13 184:22	303:5 306:14 321:20	Waters 3:17 246:6
voted 20:3 26:9,9,10	188:18 196:8 267:18	327:19 348:14	264:5,8 280:12 286:8
27:9,10 29:3,4,22	288:8 298:13 312:16	waiting 273:17	286:9 294:7 295:14
30:1,1,14,15,15,16	319:10 323:12 342:6	wake 120:16	295:18 296:4 311:21
31:9,9 48:11,12,12	342:20 349:11	walk 308:22	312:1 314:15 327:14
53:13,13 57:3,3,4,4	voting 19:1,2,4,8 24:14	wall 47:10	333:22
62:17,18,18 66:22	26:5,7 27:2,6,8 28:18	want 6:5 8:8,14 14:14	Watt 3:18 229:15,15
67:1,1 70:17,17 74:13	28:22 29:2,15,19,21	14:18 19:10,14,14	246:4 324:14 325:15
74:14 89:11,11 91:5,5	30:7,11,13 31:2,5,7	21:14 22:17 23:2 25:7	335:14 338:1 339:19
92:7,8 97:11,12 98:11	36:6,7 48:3,4,8,10	25:16 36:16 38:13	way 41:14 45:11,17
98:12 101:21,21,22	53:6,9,11 56:17,18,22	44:20 45:3 49:13	51:4 60:4 72:20 75:12
101:22 108:10,10,11	57:2 62:10,14,16	55:22 57:15 70:3	75:13 76:21 77:2
108:22 109:1 111:8	66:15,19,21 70:6,10	77:10 78:2 83:3,9	79:13 82:16 86:13
112:4,4 113:14,14	70:13,15 74:7,10,12	86:12 87:4 91:7 99:6	88:7 96:15 100:13
116:1,2,18,18,19,19	88:22 89:4,7,9 90:20	101:8 104:1,6 106:15	112:18 134:1 143:17
117:13,13,14,14	91:2,3,22 92:4,6 97:4	114:10 115:1 134:2	149:4 150:3 152:2
118:3,3,17 120:6,7	97:8,10 98:5,9,11	141:12 142:13,14	155:9 162:18 163:14
122:11,12 123:9,9,10	101:12,16,18,19	146:1,8 148:8 149:10	164:20 173:12 175:2
123:10 124:5,5 125:3	108:3,7,8,14,16,19,20	153:14 155:7 160:11	177:3 187:16 204:12
125:3,22 126:1,16,16	111:2,3,5,6,19 112:1	162:15,21 171:8	205:1 210:15 212:13
126:17,17 127:4,5,5	112:2 113:6,10,12	178:16 180:14 181:14	216:9 217:16,17
127:15,15,16 128:10	115:15,19,22 116:11	194:11 202:10 206:6	224:11 236:8 242:17
128:10 138:14,15	116:15,16 117:6,10	207:15 208:9,17	242:22 244:3,12
139:20,21 154:15,15	117:11,18,22 118:1	215:19 218:1 219:2	251:21,22 257:7
154:16 155:2,9 156:7	119:22 120:3,4 122:6	222:16 227:7,9,17	268:7 271:12 276:14
156:8,8,9 158:20,21	122:7,9,10 123:2,6,7	228:21 230:15 232:14	284:8,18 294:6
159:8,9 162:8,9,10	123:20 124:2,3,16,18	233:2 243:16 253:20	307:15 310:15 317:17
164:9,10,10,11	124:22 125:1,12,16	254:16 265:8 271:10	330:15 332:1 335:19
167:12,12,13 169:11	125:22 126:6,11,13	271:22 272:12,13,20	339:12,16 340:8
169:12,12,13 170:4,5	126:14,20 127:2,3,8	273:11,22 274:1,4,21	342:7 345:22
170:6,16,16 185:2,2	127:12,13,21 128:7	275:16 277:16 281:12	ways 60:21 64:18 216:9
188:20,21,21,22	138:7,8,11,13 139:14	284:5 285:13 286:7	251:22 261:3,5
196:10,10,11,11	139:18,19 154:9,12	290:8 291:22 292:2,8	298:20 330:13
212:22 213:1,2	154:13 155:22 156:4	293:18 305:3 318:11	we'll 7:13 8:18 10:21
267:20,20,21,21	156:6 158:13,17,19	324:7 328:8 330:17	11:8 12:1 25:10 28:2
288:10,10,11,11	159:2,5,7 162:1,2,5,7	333:9 340:7 344:16	32:20 35:15 37:17
	I	l	I

41:15 50:1 52:6 63:2 63:3 69:8 117:4 119:10,13,14 120:11 129:20 137:15 138:6 153:10 159:10 171:20 179:2 181:11 183:14 200:22 204:3 205:5,7 236:13 242:2 245:17 245:17 248:4 252:12 252:13 262:5 293:7 314:4 321:1,4 339:19 343:10 350:4,17 we're 10:12 13:20 14:1 17:5 22:4 24:12,19 25:13 41:16 47:8,9 53:3 57:20 63:8 64:15 65:18 82:4 86:8,10 101:1 104:18 106:18 107:19 113:17 114:9 120:10 122:7 128:5 130:1 134:3 136:2 142:10,11,11 150:21 153:12 161:13 174:9 186:8 193:2 201:15 230:8 232:8,9,13 234:6 237:15 238:16 245:7 246:5 251:6,11 252:7,8 269:8,10,13 269:17 271:2,3 272:4 273:14 277:15 280:8 289:7 295:5.10.17 296:11 299:17 315:15 320:12,12 329:10,12 334:17 336:5,22 340:16 341:3 we've 9:13 17:13 21:6 24:7 25:2,21 45:14 53:22 64:12 84:22 85:8 86:6 91:18 93:12 94:8 100:2 102:21 103:9,11 120:21 131:1 132:21 138:20 147:18,20 150:7 155:16 163:8 225:4 229:18 233:20 234:6 235:6 282:12 301:17 309:7,22 310:1,20 314:17 315:4 334:1,2 341:3 347:18 weakness 203:17 website 190:9 WEDNESDAY 1:5 week 60:16 120:22 weeks 55:6 58:15 59:7 270:6 weight 97:19 149:7 weighted 72:14 80:4 147:1,3,22 149:4

weighting 90:8 93:14 98:1 149:8 150:9 165:10 weights 92:14 97:21 welcome 4:2 6:16 8:10 153:9 214:2 349:21 well-documented 13:11 well-performing 47:1 went 7:15 16:2 115:4 128:18 173:14 191:6 202:22 225:18 245:1 260:4 271:11 280:22 352:7 weren't 289:16 West 9:3 whatnot 310:5 Whitaker 2:19 6:12,13 152:6,7,18,21 153:7,9 237:15 250:6 252:22 253:6 274:22 282:3 287:3 289:13 292:19 300:2 313:3 318:12 319:19 320:1,6 321:7 322:4 332:3 341:19 344:22 346:12 352:4 352:4 wide 95:19 widely 130:17 132:21 wider 45:20 widespread 214:12 286:16 wild 232:11 William 1:9,13 willing 320:15 WILSON 3:3 18:19 42:3 win 96:6 window 219:21 254:8 260:1 263:1 264:9 Wisconsin 103:15 wish 68:2 109:22 112:16 Witness 307:7 women's 3:17 286:13 wondering 93:20 141:5 238:15 331:18 word 197:11 315:3 words 15:16 19:16 145:5 219:22 225:8 228.8 work 8:15 25:14 65:19 94:10 103:7 104:2 129:14 148:19 158:8 204:10 213:6 225:10 248:2 250:16,17 263:2 268:22 324:11 work-up 262:12 318:16 worked 129:13 193:8

302:18 working 64:9 79:9 94:8 182:12,15 208:22 247:13 286:17 311:6 323:22 333:21 workload 85:10 works 64:4 164:20 worksheet 56:8 world 188:1 215:14 218:17 268:15 272:3 303:21 307:21 333:11 worried 334:18 worry 95:13 96:20 277:13,14 330:17 worse 74:18 203:22 worsening 47:4 worst 15:18 worth 53:18 115:9 124:8 worthwhile 212:11 213:14 worthy 212:9 313:8 wouldn't 23:5 143:15 148:12 166:2 174:4 193:11 237:10 253:20 wound 71:11 142:19 176:22 177:3 189:17 190:3 193:15 196:18 200:11 208:2 wounds 208:5 wrap 234:8 write 39:8,15,21 40:21 61:22 211:16 251:20 writing 40:18 written 166:5 250:21 284:9,16 wrong 153:18 273:3 wrote 197:15 **WVU** 9:3 Wyoming 95:12 Х X 45:7 163:3 x-ray 148:14 Υ Yates 2:20 46:4 67:4 68:18 69:11,16 77:18 78:7,10,13,16 79:7 80:1,12 81:19 82:5 95:9 113:17 114:9,20 115:4 148:5 150:17 152:1 179:12 181:13 182:3,19 183:3,17,22 184:9 185:11 187:4,5 198:7.8 256:4.6.21 257:7 295:9,16 296:1 296:5 297:8,14 316:3

316:8.11 year 11:19 23:13,21 32:2 78:11,14 85:1 86:9,15 100:11,13,16 102:15 106:11,13,22 112:20 121:9 131:20 162:18 163:8 174:12 174:13,14 179:17 185:22 186:3 192:2,5 195:5,5,8,15,17,18 198:21 294:18 295:12 333:17 341:15 years 13:12,14 23:11 32:3 47:4 54:22 64:6 72:9 78:5,8 85:14 86:6 88:19 94:9 115:11 118:21 121:17 130:21 132:5,16 142:1 144:20 147:12 147:21 149:5 153:11 165:3,22 176:17 193:8 208:22 214:14 214:18 223:15 234:10 237:7 238:18 251:9 264:21 295:12 304:14 328:19 352:1.3.5 years' 115:9 124:8 yesterday 6:10,13 7:3 7:15,18 16:13 46:15 95:10 100:22 101:2 304:15 vield 131:14 York 105:21 144:2 young 180:8 younger 135:20 175:21 Ζ zero 64:8 267:19 288:9 0 **0** 26:10 27:10,10 29:4,4 30:1,16 31:9 36:7 48:11,12 53:13 57:4 62:18 67:1 74:13 89:11,12 91:5,6 92:8 92:8 97:12,12 98:12 98:13 101:22 108:11 111:8 112:4,5 113:14 113:15 116:2,2,18,19 117:14 118:4,4 120:6 122:12 123:9,10 124:5,6 125:3,4 126:1 126:1,16,17 127:6,16 127:16 128:10 138:15 138:15 139:21,22 154:15 156:8.8 158:21,21 159:9 162:9,9 164:10,10

Neal R. Gross and Co., Inc.

Washington DC

			392
167:13 169:12,12	<b>1.2</b> 100:4	<b>17</b> 1:6	<b>21</b> 116:1 156:7
170:5,5,16 188:21	<b>1.69</b> 137:21	<b>170</b> 4:17	<b>22</b> 121:14 126:16
			<b>23</b> 291:7
196:11 212:22 319:13	<b>10</b> 10:7 26:8 62:18	<b>178</b> 68:9	
342:22	91:13 121:8 143:7	<b>18</b> 12:4 74:18 96:4	<b>24</b> 55:8 58:3,13 61:19
<b>0.3</b> 72:1	148:11 164:19,20	165:22 175:20,21	177:6 298:14
<b>0.4</b> 71:22 92:15 110:7	167:12 282:12 299:22	189:7 190:6 191:14	<b>245</b> 4:20
139:8	319:12 327:16 328:18	321:8 342:10	<b>25</b> 54:20 121:16 124:9
<b>0.5</b> 72:7,8 110:7 124:10	328:21 330:18	<b>18,924</b> 121:17	294:14 319:13 349:13
<b>0.52</b> 72:6	<b>10-plus</b> 13:13	<b>180</b> 38:19 139:9	<b>25,000</b> 134:11
<b>0.57</b> 124:14	<b>10,000</b> 134:10 143:9	<b>19</b> 4:4 27:9	<b>250</b> 68:15
<b>0.58</b> 72:7 115:12	<b>10/90</b> 161:2	<b>19.8</b> 122:21	<b>252</b> 4:21
<b>0.59</b> 137:21	<b>10:06</b> 128:18	<b>1971</b> 295:15	<b>25th</b> 350:13
<b>0.77</b> 72:6	<b>10:17</b> 128:19	<b>1989</b> 9:9	<b>26</b> 110:11 117:13 124:5
<b>0.81</b> 72:12 91:17	<b>100</b> 10:9 15:18 31:8	<b>199</b> 163:5	127:5 141:14 312:19
<b>0.99</b> 92:18	36:16 53:12 74:13	<b>1997</b> 246:12	<b>26,355</b> 121:7
<b>001</b> 113:20	78:4,8 91:17 111:8	<b>1B</b> 12:20	<b>274</b> 5:4
<b>01</b> 4:19	120:6 128:9 144:15	-	<b>288</b> 5:9
<b>0117</b> 4:5 48:4,5,11 53:8	159:8 170:15 246:20	2	<b>29</b> 29:22 30:14 98:12
53:12	298:1 314:22	<b>2</b> 19:6 27:4 28:20 29:17	122:16 288:11 298:16
<b>0127</b> 4:6 53:15 56:18,19	<b>100,000</b> 134:16 185:21	30:9 31:4 48:6 53:8	342:22
62:11,17 66:16,22	<b>1030</b> 1:8	56:20 62:12 66:17	<b>2900</b> 130:13
70:12,16	<b>108</b> 291:3	70:12 74:9 89:2 90:22	<b>299</b> 5:12
<b>0134</b> 4:3 19:1,3,5 26:8	<b>109</b> 4:9	92:2 97:6 98:7 101:14	<b>2998</b> 4:16 170:20 178:3
	<b>105</b> 4.9 <b>10th</b> 35:18 47:6		184:19 185:2 188:14
27:3,9 28:19 29:3,16		108:5,18 111:4,21	
29:22 30:8,14 31:4,8	<b>11</b> 32:3 117:13 127:5	113:8 115:17 116:13	188:20 196:4,10
<b>02</b> 5:3	130:21 132:4 185:2	117:8,20 120:2 122:8	212:18,22
<b>03</b> 5:7 <b>04</b> 5:11 162:16	294:18 295:1 312:19	123:4,22 124:20	<b>2C</b> 13:2
<b>04</b> 5.11 102.10 <b>05</b> 5:14	323:16	125:18 126:8,22	3
	<b>1101X</b> 193:19	127:10 128:1 138:9	
<b>0697</b> 4:12 129:2 138:8	<b>117</b> 31:11	139:16 154:11 156:2	<b>3</b> 1:3 19:7 27:4 28:20
138:14 139:15,20	<b>12</b> 74:2 86:3 130:6	158:15 159:4 162:3	29:17 30:9 48:6 56:20
154:10,14 156:1,7	275:6,13 276:11	164:4 167:8 169:6,21	62:12 66:17 78:5,8
158:14,20 159:4,8	279:15,16,19 342:12	170:11 184:20 188:15	89:2 90:22 92:2 97:6
<b>0706</b> 4:14 159:12 162:2	<b>12,000</b> 131:20	196:5 212:19 269:5	98:8 101:14 108:5
162:8 164:3,9 167:7	<b>12:21</b> 245:1	<b>2,000</b> 251:12 252:6	111:21 113:8 115:11
167:12 169:5,11,20	<b>12:34</b> 245:2	<b>2,286</b> 72:10	115:17 116:13 117:8
170:4,11,15	<b>120</b> 4:11	<b>2.3</b> 73:22	117:20 123:4,22
	<b>126</b> 246:12	<b>2:00</b> 350:14	124:20 125:18 126:9
1	<b>129</b> 4:13	<b>2:34</b> 352:7	126:22 127:10 138:10
<b>1</b> 4:2 19:6 27:3 28:19	<b>13.7</b> 73:21	<b>20</b> 24:12 172:17 285:5	139:16 154:11 156:2
29:16 30:8 31:4 32:11	<b>131</b> 156:15	304:14 327:16	158:15 162:4 164:4
48:5 53:8 56:19 62:11	<b>134</b> 8:21 11:9	<b>20-plus</b> 214:18	167:8 169:6,21
66:16 70:12 74:8 89:1	<b>14</b> 29:3 35:20,21 57:2	<b>200</b> 68:13 134:16	188:15 196:5 212:19
90:22 92:1 97:5 98:7	92:7 161:1 248:12	311:14	<b>3-</b> 121:8
101:13 108:4,18	249:21 256:18 262:18	<b>2004</b> 296:12	<b>3,000</b> 68:22
111:4,20 113:7	264:9,9 267:20	<b>2010</b> 246:13	<b>3.2</b> 111:12
115:16 116:12 117:7	281:10 288:10 343:19	<b>2011</b> 12:20 34:6 72:9	<b>3:00</b> 8:2
117:19 120:2 122:8	345:11	109:16 116:8 121:7	<b>30</b> 9:22 13:12 78:13
123:3,21 124:19	<b>14-</b> 254:7 259:22	130:4 159:18 160:18	128:6 144:4,15
125:17 126:8,21	<b>140</b> 315:9	<b>2012</b> 32:15 34:7 56:9	159:20 178:11,11
127:9 128:1 138:9	<b>15</b> 35:20,21 91:5 109:3	116:8	184:13 185:9 263:10
139:15 154:10 156:1	120:12 199:19	<b>2013</b> 35:19	304:22
158:14 159:4 162:3	<b>15,000</b> 143:9	<b>2014</b> 34:9 72:9 109:16	<b>30-day</b> 130:9,9 134:3
164:3 167:7 169:5,20	<b>150,000</b> 11:19	116:8 121:7	144:1,8,20 152:14
170:11 173:8,16,17	<b>158</b> 4:15	<b>2015</b> 116:8	<b>30-plus</b> 54:22 161:11
		<b>2016</b> 1:6 215:3	<b>30,000</b> 132:14 133:20
181:18 184:20 185:21	<b>15th</b> 1:9 <b>16</b> 113:14 213:1		
	<b>16</b> 113:14 213:1 <b>16.9</b> 111:12	<b>2019</b> 298:8 <b>207</b> 4:18	142:9 <b>300</b> 100:16

<b>3016</b> 4:19 245:18 248:6	164:4 169:6,21	<b>65</b> 113:21 114:4,18	<b>99</b> 15
267:15,19 347:18	188:15 196:5 304:21	130:12 133:13 135:20	<b>9th</b> 1
348:18,21	<b>4.3</b> 122:21	136:8 169:11 291:5	
<b>3017</b> 5:3 274:11 281:21	<b>4:00</b> 350:14	319:12	
288:5,9	<b>40</b> 89:11 126:1 131:7	<b>66</b> 161:1	
<b>3019</b> 5:7 288:15 298:14	161:2	<b>67</b> 29:22 30:14	
<b>3020</b> 5:11 298:22	<b>400</b> 190:20	<b>68</b> 154:14	
312:12,18 319:6,12	<b>42</b> 116:18 118:3		
323:8,15 342:1,10,16	<b>43</b> 108:10 158:20	7	
342:22	<b>44</b> 121:11 349:13	<b>7</b> 128:5 148:11 187:7	
-			
<b>3021</b> 5:14 343:13,15	<b>45</b> 125:3 138:14 248:12	290:20	
349:3,13	249:21 256:18 259:22	<b>70</b> 4:8	
<b>3030</b> 4:7 70:19,21 74:8	264:9,12 289:4 293:6	<b>70,000</b> 134:14	
74:13 89:1,10 90:21	293:9 310:1 334:10	<b>708</b> 121:15	
91:4 92:1,7 97:5,11	343:19	<b>73</b> 35:19	
98:7 101:13,20 108:4	<b>45-day</b> 345:11	<b>738</b> 121:15	
108:10,18,22	<b>460</b> 137:17 156:16	<b>74</b> 110:10 124:4	
<b>3031</b> 4:9 109:4,5,10,11	<b>462</b> 110:14	<b>746</b> 110:8	
111:3,7,20 112:3	<b>47</b> 139:21 323:16	<b>75</b> 141:1 215:4	
113:7,13 115:16	<b>48</b> 4:5 97:11 101:20,21	<b>75,000</b> 134:16	
116:1,12,17 117:7,12	164:9 267:20 298:15	<b>77</b> 141:1	
117:19 118:2 120:2,6	<b>49</b> 10:16 138:1 281:10	<b>78</b> 121:14 126:15	
<b>3032</b> 4:10 120:9 121:6	49 10.10 130.1 201.10	<b>79</b> 116:1 156:7 291:9	
	5	<b>79</b> 110.1 150.7 291.9	
122:7,12 123:3,8,21		8	
124:4,19 125:2,17	<b>5</b> 30:1,15 57:3 67:1		
126:8,15,21 127:4,9	70:17 101:21 108:10	<b>8</b> 173:20 178:11,11	
127:15 128:1,9	109:1 110:4 143:7	185:9 188:6	
<b>31</b> 144:5 145:5,9 349:14	149:17 161:10 196:10	<b>8.0</b> 246:21	
<b>32</b> 154:15	196:11 312:18 315:6	<b>8:00</b> 1:9 6:2,4	
<b>3293</b> 15:17	323:15	<b>80</b> 85:9 90:6 136:2	
<b>33</b> 62:17	<b>50</b> 13:17 35:20 78:11	215:4	
<b>34</b> 33:4 138:2	112:3,4 121:18 170:4	<b>800</b> 99:2,3,10 133:20	
<b>341</b> 121:17	<b>500</b> 100:16 185:14	<b>807</b> 110:9	
<b>343</b> 5:16	273:7	80s 53:21 56:7,8	
<b>35</b> 169:11 342:11,11	<b>500,000</b> 54:9	<b>81</b> 27:9 57:3	
343:1,1	<b>52</b> 26:9 97:11 108:10	<b>84</b> 113:13 213:1	
<b>35-day</b> 254:7	164:9	<b>85</b> 91:4 139:10	
<b>350</b> 5:18,20	<b>52,841</b> 110:14	<b>86</b> 29:3 92:7	
<b>36</b> 9:17 110:13 115:10	<b>53</b> 139:20	<b>89</b> 185:2	
258:18	<b>55</b> 121:10 125:2 138:14	<u> </u>	
<b>37</b> 123:9 323:15	<b>56</b> 188:20	9	
<b>376</b> 127:15	<b>57</b> 4:6 62:17 66:22	<b>9</b> 74:17 282:12	
<b>38</b> 26:9 48:12 66:22	158:20 288:10	<b>90</b> 167:12 195:3 196:10	
258:18 267:21	<b>57.9</b> 10:17	<b>90-plus</b> 13:15	
<b>39</b> 188:20	<b>58</b> 110:15 116:17 118:3	90-second 9:7	
	312:18	<b>91</b> 162:17	
4		<b>93</b> 15:18	
<b>4</b> 19:7 27:5 28:20 29:18	6	<b>93.5</b> 56:9	
30:10 46:15 48:6	<b>6</b> 4:2 9:9 15:14 86:3	<b>94</b> 162:8	
56:21 62:12 66:18	162:8 188:21	<b>95</b> 9:9 10:4 24:21 25:2	
89:3 91:1 92:2 97:6	<b>6.5</b> 122:16	29:9 32:15 37:22	
98:8 101:15 108:6	<b>60</b> 89:10 136:7	70:16 71:21 108:22	
111:21 113:8 115:17	<b>62</b> 48:11	161:5 334:6	
116:13 117:8,21	<b>62,118</b> 109:16	<b>96</b> 15:15 46:17	
123:4,22 124:20	621,489 72:10	<b>97</b> 143:12	
125:18 126:9,22	<b>63</b> 117:12 123:8 127:4	<b>98</b> 15:21 36:14 41:11	
	127:15	42:21 44:12 46:5,16	1
127:11 138:10 139:17 156:2 158:16 162:4	<b>64</b> 291:5		

136:8 169:11 291:5	<b>301</b> 1.0
319:12	
<b>66</b> 161:1	
<b>67</b> 29:22 30:14	
<b>68</b> 154:14	
00 134.14	
7	
<b>7</b> 128:5 148:11 187:7	
290:20	
<b>70</b> 4:8	
<b>70,000</b> 134:14	
<b>708</b> 121:15	
<b>73</b> 35:19	
<b>738</b> 121:15	
<b>74</b> 110:10 124:4	
<b>746</b> 110:8	
<b>75</b> 141:1 215:4	
<b>75,000</b> 134:16	
<b>77</b> 141:1	
<b>78</b> 121:14 126:15	
<b>79</b> 116:1 156:7 291:9	
8	
<b>8</b> 173:20 178:11,11	
185:9 188:6	
<b>8.0</b> 246:21	
<b>8:00</b> 1:9 6:2,4	
<b>80</b> 85:9 90:6 136:2	
215:4	
<b>800</b> 99:2,3,10 133:20	
807 110:9 80s 53:21 56:7,8	
<b>81</b> 27:9 57:3	
<b>84</b> 113:13 213:1	
<b>85</b> 91:4 139:10	
<b>86</b> 29:3 92:7	
<b>89</b> 185:2	
9	
<b>9</b> 74:17 282:12	
<b>90</b> 167:12 195:3 196:10	
<b>90-plus</b> 13:15	
<b>90-second</b> 9:7	
<b>91</b> 162:17	
<b>93</b> 15:18	
<b>93.5</b> 56:9	
<b>94</b> 162:8	
<b>95</b> 9:9 10:4 24:21 25:2	
29:9 32:15 37:22	
70:16 71:21 108:22	
161:5 334:6	
<b>96</b> 15:15 46:17	
<b>97</b> 143:12	
<b>98</b> 15:21 36:14 41:11	
42:21 44:12 46:5,16 143:12	
143.12	
1	I

**99** 15:15 162:16,17,19

## CERTIFICATE

This is to certify that the foregoing transcript

In the matter of: Surgery Phase 3 Standing Committee

Before: NQF

Date: 08-17-16

Place: Washington, DC

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

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