

**NATIONAL QUALITY FORUM**  
**June 24, 2019**

Man: (Unintelligible).

Man: Yes I'm - I've joined or I am joining. I'm clicking the join, it says call me and join the web meeting but I don't (unintelligible)...

Man: ...I just want to join...

(Susan): No just a little bit lower on -- this is (Susan) -- a little bit lower on that you will see Connect with Video.

Man: Okay.

(Susan): That (ought to do it).

Man: Got it okay great.

(Teero): All right good afternoon everyone to our Patient Safety Spring 2019 Cycle Measure Review web meeting. It's our Post-Measure Evaluation web meeting to go through what we were unable to cover at last week's very productive in-person meeting. So I'll go ahead and pass it to our co-chairs to just give a quick welcome.

(Ed): Welcome everyone I hope to get people actually some time back if we get through these measures which I think we have three measures is that correct...

Man: Correct.

(Teero): Yes.

(Ed): Yes so we'll see how well we do but great meeting last week. Sorry I couldn't be with you in person. It was very productive.

(Teero): All right so we will just go ahead and get moving. So we are reviewing three measures, the three measures we did not get to in last week's CDC's measure 27-20, the antimicrobial measure as well as ANA's two measures, Nursing 02-04 and 02-05. Next slide.

So we just want to do a quick roll call at this time to see who's on the line. So I know (Ed) you are on. (Iona) I know I heard you.

(Iona): Yes.

(Teero): (Jason Adleman)? Okay (Richard Brilly)?

(Richard Brilly): Here.

(Teero): Thank you. (Charlotte Alexander)?

(Charlotte Alexander): Here.

(Teero): Okay (Laura Ardizzone)? (Curtis Collin)?

(Curtis Collin): I'm here.

(Teero): (Christopher Cook)?

(Christopher Cook): Here.

(Teero): (Melissa Danfor)?

(Melissa Danfor): Here.

(Teero): Okay (Teresa Edelstein)?

(Teresa Edelstein): Here.

(Teero): Okay I believe (Lily Gelinas) is going to join us a few minutes late (Lizzie)  
(unintelligible)...

(Lily Gelinas): I'm here.

(Teero): Oh perfect okay.

(Lily Gelinas): Yes thank you.

(Teero): (John Jame)?

(John Jame): I'm here.

(Teero): Okay (Steven Lawless)?

Man: (Unintelligible).

(Teero): (Lisa McGifford)? (Susan Moffat Bruce)?

(Susan Moffat Bruce): I'm here.

(Teero): Thank you. (Patricia Quigley)? Okay (Leslie Shultz)?

(Leslie Shultz): I'm here.

(Teero): (David Stockwell)?

(David Stockwell): Hello I'm here.

(Teero): Thank you, (Tracy Wang)?

(Tracy Wang): I'm here.

(Teero): Okay, (Kendall Web)?

(Kendall Web): I'm here.

(Teero): All right, (Albert Woo)?

(Albert Woo): Yes.

(Teero): (Donald Yeely)?

(Donald Yeely): Here.

(Teero): Okay, and (Yang Ling Yu)?

(Yang Ling Yu): Here.

(Teero): Okay is there everyone who just joined that is present?

(Jason Edelman): (Jason Edelman) here.

(Teero): Okay great.

(Jamie Roni): (Jamie Roni) here.

(Teero): Okay thank you (Jamie). So I'm going to pass it to (Andrew) because a couple of you were not at our in-person meeting last week, just for disclosure of interest.

(Andrew): Yes thanks (Teero). So I know yes, couple of folks were not at the in-person meeting so didn't get a chance to do their disclosures of interest.

If you'll recall we sent you a disclosure of interest form before you were named to the committee and what we'll do - like to do is in the interest of transparency we'll ask you to orally disclose any information you provided that you believe is relevant to this committee and specifically any measures you reviewed as a member of this group and any related or competing measures.

We're particularly interested in grants, research or consulting or measurement development activities related to the measurements under review by this group.

So (Richard Brilly) do you have anything to disclose?

(Richard Brilly): No I don't have anything extra.

(Andrew): Okay. And (Albert Woo)?

(Albert Woo): I do not have - I have some conflicts but nothing that's even vaguely related to this.

(Andrew): Okay thanks (Al). And I think that's everybody. I think we got everybody else at the in-person so we can go ahead and move forward and get into our review.

(Teero): Yes and just a quick reminder quorum is 66% of the committee and we do have that right now. So at any point if we lose quorum we would not - we would stop voting so just a quick reminder.

Okay and then we'll see that slides that we have reviewed and were recommended by the committee at last week's in-person on this slide here and then one measure was not recommended by the committee, 35-01E. And then one measure consensus not reached by our committee was 01-38.

Okay and these are the three measures that we will be reviewing at today's web meeting. Next slide.

All right so I guess we'll go ahead and get started. I will pass it to our Co-Chair (Ed). We're going to go ahead and get started with 27-20 with CDC's measure so (Ed).

(Ed): Sure thank you very much. Are the CDC measure developers on the phone?

(Dan Pollack): Yes (Ed) this is (Dan Pollack), I'm here (unintelligible).

(Ed): Well we appreciate you calling back. I know we kind of ran out of time and you had to go to the airport so thanks for calling back.

As mentioned this is the antibiotic use measure. This is a up for re-endorsement from the National Healthcare Safety Network. And I believe for this one we're going to have (Chris Cook) is the lead discussant. Did I get that correct (Chris)?

(Chris Cook): Yes that's correct.

(Ed): Okay so why don't you take us through the usual format regarding this particular measure.

(Chris Cook): Okay as you can all see it is the National Healthcare Safety Network antimicrobial use measure. It is one of the measures from the CDC and it is a process measure that is at the facility-level of analysis. And we originally endorsed this measure back on December 10 of 2015 and so this is the first re-endorsement (unintelligible) for this measure.

As you can also see there on the brief description this measure assesses antimicrobial use in hospitals based on medication administration data that the hospitals collect electronically at the point of care and then report via electronic file submission to the CDC in HSS.

One of the things I want to sort of take a step back and to put everybody's understanding of why is it important for us to measure antimicrobial use, I think we're all familiar with the statement that's, you know, not everything that matters can be measured and not everything that can be measured it matters.

And from what we see in a very large global picture is that we have an overabundance of antimicrobial prescribing. We use our antibiotics far too

frequently and that has resulted in what we are seeing as a lot of our antibiotics are having tremendous amounts of resistance throughout the healthcare environment.

We are seeing that literally globally oftentimes moving from Asia, moving across into Europe, into the US and what that is creating is a lot of issues with multi-drug resistant organisms and which limits the ability of our clinicians in being able to have enough antibiotics in the toolkit to really be effective in treating a number of infections.

So this measure is part of what was a presidential council address in how we are going to fight antimicrobial resistance. It is now a mandate that all hospitals have an antimicrobial stewardship committee and that they put antimicrobial stewardship practices and policies in place to help curb this rise in resistance that we know is due to, you know, just overabundance, over, you know, prescribing of antibiotics.

So this measure itself actually is one where there is very nascent measures in place and it's because it's a very difficult area as it seems to be all medications to actually get a good measure in.

This measure itself looks into different units within a facility, both the adult and pediatric patient units. It looks into the medical ICU, medical surg ICU, surgical ICU in the adult-only section, the medical ward, med-surg ward, surgical ward, hematology oncology ward for adults and then step-down unit.

And what it does it creates a SAAR which actually stands for the Standardized Antimicrobial Administration Ratio and then looks at the observed to predicted antimicrobial use for up to 40 different antimicrobial agents and their patient care location.



So the difficult part around this especially with the SAAR is that we know that too much use is ongoing but we don't have a perfect assessment or knowledge of what is the right amount. So what this measure is doing is allowing people to see observe versus expected in typical other units that are very similar to themselves and then that opens up basically a red flag for the antimicrobial stewardship committee if it's outside of what you would expect to then be able to dive into that qualitative data and see what's actually going on in the facility to try to help improve antimicrobial stewardship efforts that are prescribing of antibiotics.

And so that's what I have as an overview. CDC do you want to add more to that or (Ed)?

(Dan Pollack): This is (Dan) at CDC. No that was an excellent overview thank you.

(Ed): (Dan) you might - if I'm correct (Dan) they added two categories to the adult side, the step-down and the general hem-onc if I remember correctly from the previous submission.

(Dan Pollack): That's correct (Ed) and we added some more antimicrobial groupings as well.

(Ed): Right they changed the...

(Dan Pollack): So there are...

(Ed): They changed the groupings...

(Dan Pollack): Yes there...

(Ed): ...as well that's correct.

(Dan Pollack): Yes and so there is a bit of recasting but also with an expansion of coverage in terms of the combination of antibiotic group and patient care location. So...

(Iona): So this is (Iona), I have a question for CDC. So in the announcements you're working by unit are you doing any kind of analysis by infection type?

(Dan Pollack): (Iona) we don't capture infection type for this particular measure. We are looking at the relationship between the measure data and certain types of infections, C. difficile in particular, that we know are closely linked to antibiotic use but we don't capture infection data per se with this measure in its current version.

(Iona): Okay.

(Albert Woo): And it's (unintelligible)...

(Iona): The reason...

(Albert Woo): Oh sorry...

(Iona): Go ahead.

(Albert Woo): Oh sorry (Albert Woo). How do you calculate the expected?

(Dan Pollack): We use predictive models that take into account the up roll and patient care location characteristics which is the data that we have available to us.

(Ed): (Unintelligible) (Albert) this risk adjustment slightly different for pediatrics than for adult is how they calculate that.

(Dan Pollack): Right there're different models for both the adult and the pediatric as well as in each of those categories for the various combinations of patient care location and antimicrobial type.

(Donald Yeely): This is (Don Yeely). How do you handle the issue that by using a predicted deployment metric as part of the assessment isn't that always a lagging event? I mean antibiotic practice will change but at any moment in time newer deployment will look out of step with last year's or last five years' deployment. How do you handle that particular issue?

(Dan Pollack): Well, you know, just as was state at the outset is an updated version of the measure that we submitted and was endorsed in 2015. So one of the ways we take this into, what you're describing (Don), into account is by looking at the data and what we did for this particular measure is use 2017 data which were the most recent complete years' worth of data that we had available at the time that we submitted this new version for consideration.

So the predictive model are based on the antimicrobial use data that were reported for calendar year 2017.

(Ed): Any other questions before (Chris) goes through the evidence gap and reliability? Okay (Chris) why don't you go.

(Chris Cook): All right the evidence that was presented during the original endorsement included a number of systematic reviews that demonstrated the efficacy of antimicrobial stewardship programs towards producing better outcomes

specifically around C. difficile rates, infections being able to drop at approximately 52%.

Also with stewardship interventions associated with a decrease in either targeted of overall antibiotic use as well in critical care patients as well as the idea say in (Shay) guidelines providing for the institutional programs for antimicrobial stewardship.

New evidence since that last review was also included by the developer as a 2017 systematic review, interventions to improve antibiotic prescribing for hospitals' in-patients which included 221 studies. So it is a very much become common practice and again it's a mandate joint commission looking at it from having the stewardship committees in place.

These committees are now in the midst of making those recommendations, helping to change prescribing behavior and we're starting to see the outcomes associated with that as well as the new evidence was updated information from IDSA in (Shay) around the guidelines and recommendations for antimicrobial stewardship again also showing a decrease in C. difficile rate infections.

And so the evidence itself is feel fairly confident and strong with the evidence that has been presented that, you know, we understand that the problem is there around antimicrobial resistance. We understand and there's good evidence that antimicrobial stewardship helps to make a difference off of that and that's where the evidence is for this measure.

You want me to continue onto gaps?

(Albert Woo): Just, it's (Albert), just one question, so it's not - so we know that antimicrobial stewardship is good but how do we know that this measure is effective in improving antibiotic use?

(Chris Cook): So (Albert) you're dead-on one of the questions that I have in that. And again that's why I started it off with that quote, this is one of the areas that's nascent of information where it's almost like we're at a bootstrapping process to where we have to get it, the data in to then be able to continue to develop better predictive models, to be able to get the data in to drive the change that's necessary.

I know that (Curtis) on our committee is actively involved as an antimicrobial stewardship pharmacist. He can give us his understanding in how that plays out in his day to day role.

And so right now I think where we are is this is not a very well-developed area for measurement and so we have to look at it in a little bit different way but I think your question is extremely valid for how that's going to relate to what that means for endorsement as well as when it's getting into accountability programs.

(Donald Yeely): This is (Don), can I ask one more follow-up to that? Do we know that the presence of this measure has had any demonstrable effect on resistance rates, particularly hospital because it is a hospital measure.

There's a deluge of inappropriate antibiotic use that has nothing to do with hospitals and we're not getting into animal feed and all the rest of it but has this measure shown that it has bent the curve in any way on resistance because that's really why we have it.

(Ed): Yes we may want to take a step back (Don) and (Dan Pollack) may want to comment on this as to how this measure was proposed three years ago. It was not meant to be for public reporting or being part of a value-based purchasing. It was really meant as a preliminary measure.

(Dan) you may want to comment on that and that was based on the number of facilities that reported in then versus now how many facilities are reporting in now and where you are with the process.

(Dan Pollack): Right so all good questions and thoughts we - when we proposed the measure in 2015 if memory serves, we were using data from somewhere in the vicinity of 3 to 400 hospitals all voluntarily reporting. We're now over 1200 hospitals voluntarily reporting.

And the data are being used in stewardship programs. We are in communication with a very large, what we call our AU users group, and in fact that group was consulted as we moved towards the new predictive models in antimicrobial categories.

So we have made great strides in terms of the voluntary participation. We've made I think great strides in terms of the way in which the data are being made available to participating facilities for their stewardship purposes.

We have a companion piece to the AU reporting which is the AR reporting. And we have a later start with the AR reporting but that said we have over 500 hospitals that are reporting antimicrobial resistance data for 20 targeted pathogens. And we have begun to look at some of the data that relate antimicrobial use and resistance.

There are really only very, very preliminary findings but we expect that over time as we have wider coverage on the AR front and more years of data that we'll be able to look with greater clarity at the relationship between antimicrobial use and resistance in facilities as well as the rates of *C. difficile*.

So as (Ed) mentioned the measure in 2015 and again in this cycle we recommend for internal quality improvement and benchmarking and for public health surveillance. We don't recommend it for public reporting or payment.

But that said we think that it has value for internal quality improvement and benchmarking based on the feedback that we're getting, based on the use of the measure itself actually to monitor the impact of stewardship activity.

So it can, we believe, be a spur to improved antimicrobial use but we have with confidence studies that are already showing that as a metric it can be used to gauge the impact of stewardship intervention. I'll stop there.

(Yang Ling Yu): This is (Yang Ling Yu), I just have question about, you know, reporting by the facilities. Not reporting, you know, just collecting the data. Does this measure include ambulatory surgical centers?

(Dan Pollack): It does not. The eligibility for this measure is hospitals but acute care hospitals, long-term care acute hospitals, in-patient rehabilitation facilities, (unintelligible) access hospitals.

There in all are about 6700 hospitals that are eligible to report. And as I mentioned earlier we've got over 1200 reporting. We obviously got a long ways to go before we have comprehensive coverage but we're certainly headed in the right direction.

(Yang Ling Yu): Okay.

(Ed): Does that help everybody about where this measure is?

(Albert Woo): It, it's (Albert), it does. I mean I can see the rationale. I think that getting report of the (unintelligible) in a high outlier could be a spur for improvement. I wonder if you randomly selected hospitals and said, you know, do, you know, do better antibiotic surveillance that you might get the same result.

So I'm not convinced particularly by the facts that if you tell someone they're doing badly based on a measure which may or may not be valid that they will do better. I mean I would only, I would be very cautious about making that statement and I would only want to see this used in the way that it is currently being used. I think it would - I would be very uncomfortable seeing it used in any way for reporting or accountability.

(Ed): And that's, I mean that's how they're presenting it. They are not presenting it for accountability or public reporting.

(Albert Woo): Yes no but I mean his last statement about this would be a useful spur, you know, for improvement, there's no basis for that at least that has been presented to us.

(Dan Pollack): Well I would dispute that. I think that, you know, we have hundreds of...

(Albert Woo): Like - I'd like to hear it then if you can dispute it. Don't just - I'd just like to get the minutes.



(Dan Pollack): Yes I mean we interact with hundreds of hospitals that are reporting the AU data with extensive amounts of use of the SAAR, with use of the SAAR in stewardship activities, with use of the SAAR to measure the impact of stewardship activities.

So we're - we have confidence that the measure is actually being used to drive changes in prescribing practices and there are measurable results in facilities that are reporting and working with us on analysis that demonstrate that.

(Albert Woo): I'd love to see some of those data.

(Dan Pollack): Okay.

(Ed): So are you saying you want to see that data before you vote on the measure?

(Albert Woo): No, no I mean again I would be very conservative about if you show - if you measure anything and show it to people, you know, it can be used to monitor. It may not be particularly accurate and so I would like to see eventually any data that is available that shows that the use of this measure is related to improved outcomes.

(Jamie Roni): This is (Jamie Roni)...

(Ed): Okay (unintelligible)...

(Jamie Roni): ...and I'm on your expert...

(Ed): Time out, time out (unintelligible)...

(Jamie Roni): ...advisory committee. And I just wanted to ask (unintelligible) on the Infectious Disease Committee and we had the same conversation around the sepsis measures that we voted on. And it's one thing to report, it's another thing to use it and try to lead with policy changes and tie it to payment and tie it to improvement.

And so I would just like to add that you all are mirroring our exact conversation around the sepsis measures. And we ended up just - I mean be careful what you're voting on because it affects all of us around the nation. So thanks for letting me butt in, sorry.

(Dan Pollack): Well this is (Dan) let me just...

(Ed): (Unintelligible) hold, time out guys, (Missy) has her hand up.

(Dan Pollack): (Ed) can I just respond first?

(Ed): Sure please.

(Dan Pollack): Just to repeat and underscore that this is - this measure is not currently required for reporting anywhere, anywhere. So it's different than the sepsis measure in that regard.

We recognize full well that there is more to learn about the relationship between the measurement activity itself, the use of the data in stewardship in an impact on patient care practices. We would be the first to acknowledge that but you've got to begin somewhere.

And this remains a very important phase where we are growing the participation, further developing the measure. Because the voluntary reporting is increasing we have stronger risk - we have stronger predictive models.

We are keen on moving in the direction of enabling the measure to be used ubiquitously. We think before it can be used for public reporting and payment we want more direct measures that we anticipate and hope would be the most important predictors of antimicrobial use, namely the amount of infectious disease that's being treated or the amount of antimicrobial prophylaxis that is being required because of patients' conditions or procedures.

So those are very important predictors of antimicrobial use and we want to hone our predictive models to enable them, those factors to be more fully represented in the prediction. And at that point I think we can talk about the use of the measure for public reporting and payment purposes.

But right now it does have value for internal quality improvement. When a facility is using six or eight times what would be predicted for a particular antimicrobial agent in a particular patient care location we think that that has value and is a signal worth following up. And that's what the measure is really serving for right now.

(Ed): And that's how it was approved in 2015. So we have (Missy) first and then (Leslie).

(Missy): Thanks (Ed). So I guess I'm just wondering why we are reviewing this measure in this committee (unintelligible) there is no plans for use (unintelligible). And it just feels like based on what everyone just said (unintelligible) and usability and there's no plan it's going to fail and that's (unintelligible)...

(Dan Pollack): Well there is a plan (Missy) but it's a plan that's going to require additional work in order to bring off. The last thing we want to do is move to a measure for accountability purposes before it's truly ready for those purposes because (unintelligible)...

(Missy): Right so I'm just wondering if this is right, so the sort of the goal of this process is to endorse measures that are ready for that process. So it seems like this is an interim measure to an eventual different measure. Is that what...

(Dan Pollack): (Unintelligible)...

(Missy): I mean (unintelligible) what you're describing again right is, like, that this is what is the - an interim step to a better measure that you're using to get more data (unintelligible) improve your predictive model.

(Dan Pollack): Well I think that oversimplifies it. We're not just using it to hone or predictive models. We're also using it to drive stewardship activities. I think that the big picture here as we move further and further into measures for a variety of different purposes, public reporting and incentives, it's important to recognize when we move into relatively new areas for measurement that is it's important to have an opportunity to hone measures, to gain real-world experience.

It's not, you know, either it's ready or it's not. There is an evolution of measures particularly in new relatively complicated areas. And my understanding, our understanding of NQF is that NQF wants to grow the measurement field in ways that support measures that have maximal value first and foremost to improve patient care. And as a step in that direction we think that the measure is indeed serving that purpose.

Do we want to get to use of the measure for accountability purposes? We absolutely do. Do we have a plan for what it is that we want to add to the measure? We absolutely do. It just takes some time and effort and resources in order to get from here to there.

(Ed): (Leslie)?

(Leslie): Hi there thank you. So CMS has signaled to us that they're eagerly waiting for this measure and they're looking to CDC for guidance. So we know they are keen to have it and to add it to the portfolio for public reporting.

But they are on record as saying we will look to CDC for guidance on when it's ready so that's good but understand that CMS can do what CMS wants to with the measure regardless of endorsement status.

And I think this is a really good potentially highly valuable measure. I'm a big fan of it obviously but I do think it's unfortunate that we still don't have a category for a good enough measure for meaningful performance improvement within the walls of a hospital. And again we are kind of dancing around.

Our roles on this committee is not to think too, too much about, you know, is CMS going to put this into a payment policy. That's not supposed to be our purview but you can see we continue to have spillover in concerns - legacy concerns about really good measures that are really valuable and then we are so concerned about is it going to go into payment policy prematurely. We waffle on, you know, well maybe we shouldn't even endorse this measure.

So I applaud the measure. I think one of the challenges (Dan) and I know that your line in the sand has been drawn and I respect that. Part of the challenge

for getting these data to you are the technology challenges at the hospital space with there not being a billing, I'll use that word, proxy. You know, something reasonable for those who just can't overcome that technology barrier.

(Dan Pollack): You know, we hear you and we did certainly particularly in the early goings of this measure as it was being rolled out and deployed encounter technology barriers. We think that on that front there's actually been quite a bit of improvement.

And again, you know, we've gone from about 300 hospitals when the measure was first submitted to over 1200 voluntarily paying for the infrastructure themselves for this measure.

So would hospitals would be doing that in 2018, 2019 if they didn't have some understanding of the value given all the other external reporting requirements on them? I don't think so.

So, you know, we're encouraged by the growth. We're encouraged by the experience of vendors at HAB with implementation. And we think we're poised to continue the level of increased participation if not at a higher rate over the next several years.

So, you know, we're - we certainly hear you. We want to have this measure widely used. We want to have many, many more hospitals reporting both the AU and the AR data and we're on course. Could we be going faster? Well very candidly if we had more resources to do some of the development work, the R&D work that we'd love to do we could go faster.

But we are a federal agency and we are subject to all that contingent budget impact had on us. So, you know, we're really going I think at about as fast a pace as we possibly can.

(Ed): So let me recommend I think (unintelligible) we have a pretty good feeling about I think the discussion. I think maybe (Chris), maybe we ought to start going through the voting and let's see how things stand.

(Teero): Okay (Ed) are we going to be voting on just evidence?

(Ed): I think we just go through the original process, the evidence is first then gap and reliability unless the committee feels otherwise. I think we've got a pretty good feel for what the measure is, what is isn't, where it's going and some of the evidence that's out there albeit limited.

So I think we need to make a decision on whether or not to re-endorse the measure understanding it's mostly for quality improvement in public health not for public reporting. Okay...

(Yang Ling Yu): Do we have a voting link?

(Ed): Yes it was in the email. It's at the bottom of the email.

(Yang Ling Yu): Oh there I got it.

(Ed): See it? So why don't we start to vote (Chris), is that okay with you (Chris)?

(Chris Cook): Yes it's fine with me.

(Ed): Okay I think you've heard a lot about the evidence, about the gaps and reliability. I think we'll get, you know, we'll get to validity, feasibility and use and usability down the road but let's get - let's see if we can get through the first couple of votes.

(Teero): All right thanks (Ed). Just a reminder committee members you can visually see the voting screen we're screen sharing in the room. But we will need you to actually log on to Poll Everywhere to submit your votes.

So we are now voting on the evidence of Measure 27-20. I will unlock the vote and you may enter your votes, option A is high, option B moderate, option C low and option D insufficient. We're now voting on the evidence of measure 27-20, option A is high, option B moderate, option C low and option D is insufficient. (Unintelligible)...

(Donald Yeely): Hi this is (Don). My computer decided to upgrade two minutes ago and so I'm logged off right now. Can I give you my vote over the phone?

(Teero): Yes if you feel comfortable with that.

(Donald Yeely): I am, low.

(Teero): Okay thank you. So we're looking for a few more votes.

(Richard Brilly): This is (Rich Brilly) I would put moderate. I'm having trouble getting (unintelligible) the voting button.

(Teero): Okay thank you (Richard). So you are moderate?

(Richard Brilly): Yes.



(Teero): Okay.

(Richard Brilly): And (Don) is low, (Don) said low.

(Teero): Yes. All right we're still looking for a couple more votes. Okay we're now going to close voting for the evidence of measure 27-20. Two individuals voted high, 13 individuals voted moderate, three individuals voted low and zero individuals voted insufficient. So for the evidence of measure 27-20 this measure passes the evidence criteria.

(Ed): Okay let's go to gap.

(Teero): Okay we are now voting on the performance gap was measure 27-20. Option A is high, option B is moderate, option C is low and option D insufficient. We're voting on the performance gap of measure 27-20, option A high, option B moderate, option C low and option D insufficient.

(Donald Yeely): This is (Don). Mine is moderate.

(Teero): Thank you (Don). Okay voting is now closed for the performance gap of measure 27-20. Four individuals voted high, 13 individuals voted moderate, one individual voted low and zero individuals voted insufficient. So for the performance gap of measure 27-20 this measure passes this criteria.

(Ed): Guess reliability's next.

(Chris Cook): Yes so (Ed) actually we need to talk reliability and validity together. And for this measure it was actually, the developer conducted validity testing on the numerator and denominator data element. And with them they have a certain

process by which a hospital goes through pulling the data all as I said from electronic data sources because it's looking at actual doses given. There are a couple of ways for that to be done then pulling that in according to what was prescribed. And then from the different units making sure everything comes in.

The process that they have led to a greater than 99% agreement for all required data elements prior to a data submission to CDC. And so once an individual facility has gone through that process and they've worked out the bugs it seems that from that standpoint on it works pretty well.

There was an expert panel of infectious disease physicians and clinical pharmacists by means of a census development using a (unintelligible) process around face validity for the data elements, what, you know, what (unintelligible) was actually pulled. Did a - this group has met also in 2018 to review those data elements and to make sure the face validity was still there.

And then we talk about a risk adjustment each one of the SAAR antimicrobial agents is modeled separately again not only to location, also from adult, pediatrics but then also includes factors such as hospital teaching status, bed size, ICU bed size, percentage of ICU beds among total beds and then the average length hospital stay as well as patient care location.

(Ed): Thank you (Chris). And you want to take reliability and usability together or feasibility and usability?

(Teero): (Ed) you mean reliability and validity together?

(Ed): I'm sorry yes reliability and - forget what I just said.

(Teero): Okay.

(Ed): (Unintelligible) if there's no other comments perhaps we can vote on reliability then.

(Teero): Okay I'll pull up your votes for reliability. Everyone should be able to view the screen, the voting screen but just as a reminder for committee members to make sure that you go to Poll Everywhere to submit your vote.

We're now voting on the scientific acceptability which is reliability of measure 27-20. Option A is moderate, option B is low and option C is insufficient. Option A is moderate, option B is low and option C is insufficient. We are voting on the reliability of measure 27-20.

(Donald Yeely): This is (Don) and it's moderate.

(Teero): Thank you (Don).

(Donald Yeely): I should be back on in two minutes here.

(Teero): Okay perfect. All right we're going to close voting for the reliability of measure 27-20. Sixteen individuals, no sorry, 17 individuals voted moderate, one individual voted low and zero individuals voted insufficient. So for the reliability of measure 27-20, 17 voted moderate, one individual voted low and zero voted insufficient. So measure 27-20 passes the reliability criterion.

Are we ready to go...

(Ed): So now we have validity based on (Chris)' comments. Anything else before we vote on validity? Okay let's vote.

(Teero): Okay we are now opening voting for the validity of measure 27-20. Option A moderate, option B low and option C insufficient. For the validity of measure 27-20 you may submit your votes. Option A moderate, option B low and option C insufficient.

(Donald Yeely): This is (Don), moderate.

(Teero): Thank you (Don). Okay voting is now closed for the validity of measure 27-20. Okay 17 individuals voted moderate, one individual voted low and zero individuals voted insufficient. So for the validity of measure 27-20 this measure passes this criterion.

(Ed): Okay (Chris) I guess the next one would be validity and the data element testing.

(Chris Cook): Yes feasibility I think is next (Ed).

(Teero): Yes.

(Ed): I keep doing this wrong. Okay feasibility.

(Chris Cook): So all these data elements are in (defining) fields and electronic sources and routinely generated within either the medical medication adherence record and within the EHR.

I think the most difficult part is that it does take a little bit of programming, time and commitment for it to actually be pulled all together into a comprehensive file to send to CDC. However as we see - we know that this is part of joint commission requirements for stewardship program.

We see in the last several years since that has passed and we have such a emphasis around stewardship that they've gone from literally several years ago between 2 and 400 hospitals to as we were just saying well over 1200 hospitals now.

There's no fees associated with the use of this measure. I think the biggest part again is that technical cost and implementation challenges at the beginning but it is an important piece for pharmacists and infectious disease physicians within the hospital to have an area or a measure to, you know, be able to do their work around stewardship. And it seems that hospitals were able to do this and I suspect in the coming years many more will as well.

(Ed): Thank you (Chris). Any questions about feasibility? Then I guess we'll to vote on it.

(Teero): Okay thank you. We are now going to unlock the vote for the feasibility of measure 27-20. Option A high, option B moderate, option C low and option D insufficient. For the feasibility of measure 27-20 you may submit your votes. Option A high, option B moderate, option C low and option D insufficient. (Don) you were able to get on this time?

(Donald Yeely): I am.

(Teero): Awesome.

(Ed): That was a quick update (Don).

(Don Yeely): Yes.

(Teero): Voting is now closed for the feasibility of measure 27-20. Three individuals voted high, 14 individuals voted moderate, zero individuals voted low and one individual voted insufficient. So for the feasibility of measure 27-20 this measure passes this criterion. So we can move forward to our...

(Ed): Okay (Chris)...

(Teero): ...usability and use.

(Ed): Let's go usability and use, I'm going to get this right eventually.

(Chris Cook): So as of current point we do know that as part of National Health Care Safety Network, we do know that over 1200 hospitals are currently using it. It is being used primarily for quality improvement purposes within the hospitals.

And as we've already had in our discussions at this point in time it's still early in its development over all when we look at long-term perspective for it to be used in an accountability program. So right now it is not an accountability program.

Already mentioned before CMS has its eyes and would like to see when it does become valid and reliable to be able to get us good information in that area, however that's part of this whole conversation. Right now we don't have any other alternatives. This was the best that we have in all of antimicrobial stewardship measures.

And again commend the CDC for what it's doing and hopefully getting to the direction that we need it to be to give us the good measures down the line to the use and accountability program.

(Yang Ling Yu): This is (Yang Ling Yu), I have a question. Do we - what is the typical time for a process measure to be brought into an outcome measure that, you know, that would have public reporting or accountability built into it? Because this measure was first started in 2015 so that's four years so are we looking at another four years typical time or another eight years as a typical time? Hello?

(Ed): (Unintelligible) refer to (Andrew). Obviously the - in terms of reporting as the screen indicates six years seems to be - so the next go-round we would expect to see more conclusive information as I understand the NQF process but I'm going to defer to (Andrew) to comment on that.

(Andrew): Yes we don't really have any sort of insight into the length of time that typically takes. It really I think varies from the measure. We might turn to our colleagues from the CDC to see what their expectations or predictions might be.

(Dan Pollack): So this is (Dan), thank you (Andrew) and thank you for the question. As the SAAR is really multiple measures as we've talked about already, both for the adult and pediatrics. And then within each of those H categories multiple SAARs that represent combinations of antimicrobial agents as well as patient care locations.

In all likelihood within three years when we resubmit again we're going to have within the multiple measures a subset where we have the capacity to have a measure of infectious disease burden that would enable us to incorporate that in predictive models. And enable us to say we're ready to see at least these subsets used for accountability purposes.

And I think the likely source of much of that is going to be the pathogen reporting in the antimicrobial resistance module that includes not only the

genus and species but also the susceptibility results so that we'll be able to address the likely concerns that prescribers might have in a given facility that we are treating more of this particular pathogen with it, a susceptibility pattern.

But when we have those data as a result of the AR reporting we will be in a good position to include the pathogen data in our predictive models. And so I anticipate that three years from now we'll be able to again have at least a subset of the SAAR measure used for accountability purposes.

(Yang Ling Yu): Yes thanks (Paul) for explaining. You know, this is the important measure and right now it's only about 20, maybe (unintelligible) my estimate's correct about 20% of hospital participate. I just encourage to CDC to have some, like, incentive, you know, method to encourage more hospital to participate.

(Dan Pollack): Yes we'd love that.

(Iona): Hi (Dan) this is (Iona).

(Dan Pollack): Yes Iona.

(Iona): I'm sorry so can you quickly comment on the debate about laboratory methodologies for detection and the impact that that may or may not have on this measure as hospitals look away from measures that are - that are creating more false positives than they're accepting. Can you give us just a brief insight into that - what that debate's about and what its relationship would have to this measure if any?

(Dan Pollack): Well there are these advances in diagnostic microbiologic technology that sometimes are referred to as non-culture based testing or molecular testing.



And we recognize full well that as these new technologies permeate throughout clinical medicine we will have to adjust accordingly within both our AU and AR and our HAI measures.

So, you know, we have ideas about how we can proceed on the infection front. We look forward to incorporating some of the new technologies and results in the AR reporting as well.

And as I've said we do have this anticipated use of the AR data for AU reporting so there is an important test dataset that we are anticipating will require new approaches for the use of some of the microbiology results reporting that we have into the system.

(Ed): Thanks (Iona). Any other comments before we vote on this usability and use? Let's vote.

(Teero): All right thank you. We are now voting on the use of measure 27-20. Option A is pass, option B is no pass. Voting is open for the use of measure 27-20, option A pass, option B no pass.

Just want to do a quick (unintelligible) check, (Richard Brilly) were you able to log back in?

(Richard Brilly): I'm back in. I had to get up out - I had to go out of the room so I didn't get to vote on the last one.

(Teero): Okay no worries as long as (unintelligible)...

(Richard Brilly): I just voted now though for this, for the usability.

- (Teero): Perfect thank you. All right voting is closed for the use of measure 27-20. Sixteen individuals voted pass, two individuals voted no pass. So for the use of measure 27-20 this measure passes this criterion.
- (Ed): Okay (Chris) I think we're coming down the stretch here huh.
- (Chris Cook): That was our last piece is just any competing measures and there are none.
- (Teero): One second I just want to go back, did we need to have any other discussion on usability? If not we should probably pause and (unintelligible)...
- (Ed): Yes (unintelligible) we didn't vote on it. We need to vote on usability also.
- (Teero): Okay great. So voting...
- (Ed): (Unintelligible)...
- (Teero): Voting is now open for the usability of measure 27-20. Option A high, option B moderate, option C low and option D insufficient. You may submit your votes for the usability of measure 27-20, option A high, option B moderate, option C low and option D insufficient.
- Just looking for a couple more votes. Okay just one more. Okay we're going to close voting for the usability of measure 27-20. Three individuals voted high, 11 individuals voted moderate, two individuals voted low and one individual voted insufficient.
- (Ed): Okay I think this - are we down to the last vote now?
- (Teero): Okay did you want to have any discussion for the last criterion?

(Ed): No just put it up there.

(Teero): All right we're now voting on the overall suitability for endorsement of measure 27-20. Option...

(Ed): Does anybody have - I'm sorry I was going to say does anyone have anything to add that hasn't already been said before we vote on this last measure, last part of the measure? Okay then I say we vote.

(Teero): Okay we're now voting on the overall suitability for endorsement of measure 27-20. Option A is yes, option B is no. You may submit your vote for the overall suitability for endorsement of measure 27-20, option A is yes, option B no. Just looking for a couple more votes.

Okay voting is now closed for the overall suitability for endorsement of measure 27-20. Fifteen individuals voted yes and two individuals voted no. So for the overall suitability for endorsement of measure 27-20 this measure passes this criterion.

(Ed): Okay well that was a great discussion. I think CDC I think sort of knows what the committee will hopefully expect the next go-round in three years. It sounds like they're moving slowly in the direction that I think the committee would like to see for a robust measure.

And if nobody has any other comments on this measure then I think I'm going to turn this to (Iona) to take us through the last two measures.

(Iona): All right any other comments before we move on? I just have one question for the staff, I'm not seeing the hand raise panel. Is there something I need to do on my end or if you will keep track of that?

(Teero): Hi (Iona) this is (Teero) we will let you know via chat if anyone's raising their hand.

(Iona): Okay sounds good. All right so we'll go ahead and get started with 02-04 which is skill mix of registered nurse, licensed vocational practical nurse, unlicensed assisted personnel and contract. And (Lily) I believe you're the lead discussant on this.

(Lily Gelinas): I am and thank you so much (Iona). And just for a point of order I need to fully understand how many of the discussants group is on the phone. If I heard roll call correctly Dr. (Brilly) and (Yang Ling Yu) are the only two members of the committee that are on the call.

(Iona): I think that's correct.

(Lily Gelinas): Okay and (Patricia Quigly) is not with us?

(Iona): She's in flight.

(Lily Gelinas): Okay so she was the other...

(Iona): (Unintelligible).

(Lily Gelinas): ...nurse with experience in this area yes.

(Andrew): And (Lily).

(Lily Gelinas): Yes.

(Andrew): Sorry this is (Andrew). And just a reminder that we already actually voted on evidence for this one at the in-person so we'll jump in with performance gap and I believe the developer had a bit of - wanted to present to clarify a little bit some of the data that they had presented in their submission.

So just you can go ahead and do your introduction but we may want to give the developer a moment to give some context for the numbers that they submitted as well.

(Lily Gelinas): Absolutely and thank you for that. I had reached out to both ANA and others related to this particular measure about the performance gap and I thought it was a great discussion. We had lost several members of the committee by the time we were getting to this discussion and was glad that we had tabled it.

I also want to bring to the committee's attention that the NQF staff has emailed to us the tables that were in our documents that I guess just didn't translate well into the electronic system. And I found it much more coherent to understand when we're trying to look at the performance gaps.

So let me turn it over to (Emily Kramer) who is on the phone from the measure development side of this to talk very specifically to the performance gaps since that was the area the committee seemed to have the most discussion about. (Emily) welcome to the call.

(Emily Kramer): Thank you so much. Can everybody hear me okay?

(Lily Gelinas): Yes.

(Emily Kramer): All right excellent. And so yes last week we got to the evidence and then we started talking about the performance gap. And I do think there was some lack of clarity around the data. There are a lot of tables.

There's some summary in the summary documents but it doesn't really give the full picture so we wanted to spend a minute and try to enhance the narrative a little bit.

So these measures in 02-04 are adjusting nursing skill mix which actually the measure includes three rates which has been proportionate of hours provided by RN, proportionate of hours provide by LTMs or LVNs (unintelligible) practical or vocational nurses and the percent provided by UAP.

I will primarily focus around the RN skill mix because that's a lots of times how the conversation is mostly framed and how the evidence is framed. And the consequences for patient outcomes are most closely tied to that level of RN providing care as opposed to some of the others. So that's where we'll focus.

Again these are structural measures so I think sometimes performance can be difficult to think about because unlike an outcome measure where we can see a quantifiable harm or a quantifiable difference in how the performance is actually happening, what we're looking at here is actually what - it's harder I guess to define what's adequate or good because it varies so much from context to context whereas with a patient harm event it's pretty easy to tell the harm.

So defining what's good or even an adequate level of (unintelligible) really vary by per setting, by nursing unit type, by patient. So what we're doing is

(unintelligible) the wide variation or how wide the variation (unintelligible) within these (unintelligible) care settings in order to better understand what is high, average and low performing comparatively across this whole dataset.

And this is data from the National (unintelligible) which is an extremely large database and (represents almost 1/3) of the hospitals in the country. So this is a really big (unintelligible). Obviously not entirely representative of hospitals in the United States (unintelligible) actually (unintelligible) higher performing hospitals (unintelligible) low end of a lot of our measures you'll actually find a much lower (unintelligible) number, you know, for all the hospitals in the United States.

So the measure submission documentation included pretty extensive tables which I think (unintelligible) emailed to you in a little bit more readable format. So we look at comparisons across the unit type, across and within unit type as well as by several hospital characteristics including size, hospital type, their teaching status, their rural or urban status and magnet status.

And again you can refer to those tables on Page 28 through 32 of the full submission documentation that you should also have then in a cleaner format now. But for this purposes of summary for example we do look at adult critical care units which is the first one.

The median value for skill mixture is 89 which means that 89% of the hours are provided by RNs as compared to LTMs or UNPs. So that is - would be considered sort of mid-range performance. The bottom quartile is at 85% and the 75th percentile is 95%. So that's about a 10% gap.

And it's hard to, maybe hard to kind of understand the significance of that gap just by the numbers but if you look at the minimum value there, the minimum

(unintelligible) value 33% which means that only in some of these adult critical care units only 1/3 of the hours provided to the most critical patient are provided by the highest level of nursing staff and (unintelligible) RN which we think represents a significant potential for harm for patients. And to that between if you look at the minimum versus the maximum that definitely represents a fairly significant gap.

Also I want to note here that the unit type in NDNQI is very tightly defined. So when we're looking at the comparison data with the NDNQI units are defined by 90% of the patients receiving care in that unit have to be in that population type. So for it to be in adult - a critical care unit 90% of patients have to be in critical.

If you have only 60 to 70% who are actually critical status it's not a critical care unit. So these are very tightly defined and so we know that the comparability of these units in NDNQI is about as good as you can get.

So that's for the unit level. We see similar ranges across a lot these unit types. If you go through that whole table it'll have the med surge, the rehab, the medical surgical pediatric type units. And so those ranges from the minimum to maximum including all of the quartiles are all there.

(Iona): Excuse me I want to inter - NQF staff the table that's she's referencing is not on the web display. Is that feasible so that we could also look while hearing?

(Lily Gelinas): That's a good point (Iona) because it was in the email this morning that came as a Word table I believe but it was not in the original...

(Iona): Oh so we...



(Teero): Sure this is (Teero) from NQF. We'll start getting it pulled up thank you.

(Lily Gelinas): That'll be great.

(Iona): All right thank you. I'm sorry to interrupt you.

(Emily Kramer): No that's fine. So yes across the unit types that we present which we looked at 11 different unit types you can see the variation within each of those different unit types for the unit model. And we do have tables for that for RN, LPN and UNP skill mix. So all three of the subcomponent measures are represented there.

And then we also have a hospital level version of the measure that's been endorsed. And for - looking at gap there we've looked at several different hospital characteristics including type across general, pediatric, hospitals, rehab, psych and then a number of specialty hospitals including critical access, oncology specialty, women's specialty and have the ranges there.

I will note on the hospital level measure we report those as these scores because we use a complicated, well not complicated but we use an algorithm to weight each hospital's score by the number and type of units that they have enrolled because we know that for example (unintelligible) wouldn't have the same skill mix that would expect in the surg units and so we don't want to penalize unfairly hospitals that have a different balance of critical patients versus general patients and so forth. So these are all presented in these scores.

The one advantage of that is that we can actually pretty easily look to see these by standard deviation units. So for example if we look at the general hospital type there can see at the 50th percentile we're right about zero which is what it should be. The mean median should be right about zero. The

numbers in the minimum 25th and 75th percentile represent the number standard deviations away from the mean.

So for example with the general hospital type there you can see the minimum - the hospital with the lowest reporting on skill mix is 4-1/2 standard deviations below the mean and the highest one is about 3-1/2 standard deviations above the mean which again represents a fairly substantial range. And we (unintelligible) just say represents a performance gap on this.

So that is how we look at the range of performance on these measures but then I think to understand the importance of that range and why that matters we'll sort of point that to the evidence that we discussed in the first criterion where we show linkages between skill mix and (unintelligible) fifteen separate patient and organizational outcomes. And so that - these measures really are important for a number of outcomes for patient safety as well as organizational outcomes including the complaints and organizational efficiency.

But just to kind of I think give it a little bit of context in one study that we looked at by (Lake) and others in 2010 researchers found that increasing LPN hours by just one hour per patient day the patient fall rate in medical surgical units went up from between 2 and 4%. So by trading an LPN for an RN just one hour raises the fall rate 2 to 4% whereas increasing RN hours by just one hour in an ICU, so upping the RN hours decrease the fall rate by 3%.

So you can actually see how the tradeoff of RNs for other types of nurses, less skilled nurses can really have an impact on patient outcome. And so these gaps actually do make a big difference and we're talking one hour making a difference in a swing from about 4% better to 3% or 4% worse to 3% better.

So hopefully that helps a little bit to kind of clarify not only the ranges that we're seeing in these hospitals and how they're performing but also why that matters so much for the patient outcome.

(Iona): Thank you that's excellent. I'm going to see if there's any questions, does anybody have any questions? I think that's a much better understanding from my end so should we go ahead and vote on performance gap?

(Gary): Could I just ask a question about that for the general hospital row there that we were looking at?

(Iona): (Gary) go ahead.

Woman: Sure.

(Gary): It looks like the 25th to 75th percentile is about, oh, you know, I mean about 75 (unintelligible) 75 standard deviation units between the 25th and the 75th percentile so that's a little bit wider than you would expect but not that much.

You know, I mean you might expect a spread of a half a standard deviation and there's a spread of, you know, sort of 3/4 of a standard deviation. Is that a big difference?

(Emily Kramer): It is I - I mean it's - it doesn't represent anything, like, was skewed from a normal distribution. You're right. So in terms of, like, a statistical expectation that's about what you would see.

But from what that (unintelligible) practicality is that the number of hours that are actually being provided by nurses versus - but RNs versus those other staff is enough that it would substantially or could substantially impact the care

that's provided to patients given what we know about the number of hours and how changing one of the levels by even a single hour can have an impact on patient outcome.

(Gary): So my second question is, you know, the studies about that relate RN mix to an LPN mix to outcomes like falls, you know, they certainly, you know, sound impressive. The only - it has been suggested that there may be other confounding factors that are affecting patient outcomes.

For example it's hard for me to understand why an LPN would be so much worse at preventing falls than an RN. You know, might there be other institutional factors that are affecting both the skill mix and that outcome.

And so can you speak to, you know, sort of the ability to pinpoint the - to associate that outcome clearly with skill mix versus other variables?

(Emily Kramer): Certainly and that's why I mean when we look at the evidence you do see quite a mix of the impact and a lot of that's a factor of how well a lot of these studies control for some of those organizational factors.

So it's - some of them control better than others but for example on a unit where you would see a decrease in RN hours with an increase in falls it may not necessarily be that an LPN is worse at preventing a fall because I think a lot of times, you know, what you need to prevent is a fall is somebody present. But it might also be that the proper risk assessments aren't being done because an RN wasn't available to do it or that the understanding of the risk assessment wasn't done.

The other factor is as you point out there's a lot of complicating factors going on and if your RN staffing level is too low what's going to happen is that

other staff are going to step in and do things that are - that they're not necessarily qualified for and other areas of care are going to slip.

So it could be sort of a secondary outcome but the meaning overall is that without proper adequate RN staffing some of those multiple tasks that RNs are responsible for and they are doing at the highest level of care would be passed off to people who are not necessarily qualified at that level of care to provide it which increases the patient harm for a number of factors.

So we look at with specific outcomes and it could be that that's sort of co-occurring with other things that are organizationally specific but it really comes down to if you have adequate nurse staffing (unintelligible) the level of care across a lot of these dimension. Okay...

(Iona): Okay any other questions? All right can we go ahead and vote.

(Teero): We can thank you. We are now voting on the performance gap of measure 02-04. Option A high, option B moderate, option C low and option D insufficient. You may submit your vote for the performance gap of measure 02-04, option A high, option B moderate, option C low and option D insufficient.

(Unintelligible) for just one more vote.

Man: Why am I not seeing this?

((Crosstalk))

(Charlotte): ...I'm getting an error screen on mine. Can you record my vote?

(Teero): Sure (Charlotte). Would you like to chat your vote in just in case you may have refresh your screen?

(Charlotte): Okay if I click out of here, let's see if this will do this. Okay I refreshed does that - no I'm still getting the error message. It just says an unknown error has occurred. Do you see my vote or do you want me to go ahead and give it to you verbally?

(Teero): If you could verbally submit. I'm not seeing it right now, if you could verbally submit or you can send it via the chat.

(Charlotte): I'll give a moderate for this and then I'll log off and log back in.

(Teero): Okay thank you. So we're closing voting now for the performance gap of measure 02-04. One individual voted high, 12 individuals voted moderate, three individuals voted low and one individual voted insufficient. So for the performance gap of measure 02-04 this measures passes this criterion.

(Iona): Thank you, (Lily) you want to go ahead and talk about reliability and validity.

(Lily Gelinas): Sure so we're now on the second criteria, scientific acceptability of measure properties which includes reliability and validity. And I would tell you that in your packet of information it's really important to understand how the developer updated the reliability testing during this maintenance period.

As you recall this measure was originally endorsed in 2009 and was re-endorsed in 2015. And the updated data in your packet that looked at the National Database of Quality Indicators or NDNQI was between January 1 and April 30, 2017. The data looked at 18,142 nursing units and 1911 hospitals.

And the reliability of the data at the unit level and the hospital level reported for skill mix ranged from 0.86 to 0.92 and greater than 0.8 is considered high reliability.

So do we do these together (Iona)? Remind me, do we vote on reliability first and then I'll talk about validity. What do we do here?

(Iona): NQF staff can you remind us do we have vote?

(Lily Gelinas): Because I'm only seeing reliability on my voting screen.

(Andrew): Yes we'll vote on reliability first and then validity separately.

(Lily Gelinas): Okay.

(Iona): All right go ahead. So any questions on reliability?

(Lily Gelinas): Or (Emily) any comments you want to make about reliability?

(Emily Kramer): No I think you summarized it pretty well. Our ICCs do range, they're mostly in the high .8 for the different unit types. We do look at the reliability across a number of unit types as well as at hospital, overall hospital level and all of them are in the high .8 so they're all well above the criterion.

(Lily Gelinas): All right.

(Iona): All right shall we vote?

(Teero): Yes we're pulling up the votes now. We're now voting on the reliability of measure 02-04. You may enter your votes, option A is high, option B is moderate, option C low and option D insufficient. You may submit your vote for the reliability of measure 02-04, option A high, option B moderate, option C low and option D insufficient.

Okay we have all our votes. Voting is now closed. For the reliability of measure 02-04 six individuals voted high, nine individuals voted moderate, one individual voted low and zero individuals voted insufficient. So for the reliability criterion of measure 02-04 this measure passes this criterion.

(Iona): Okay validity.

(Lily Gelinas): Okay so once again the developer did convergent validity testing with correlation coefficients and compared skill mix. Again emphasizing what (Emily) said at the outset the percent RN is where they focus their analysis and they used again the NDNQI database with the staffing levels reported by RNs in each unit from the RN survey.

Two items from the NDNQI RN survey asked nurses to provide information about the staffing levels on their unit and they ask how many total patients were assigned to a nurse on his or her last shift and the maximum number of patients assigned to a nurse at any one time on their last shift.

And in the data once again when you look at the percent of RN skill mix and RN reported nurse staffing measures the data showed the negative 0.71 for RN reported maximum number of patients on the last shift right in the middle of the screen there for those of you that are able to look at it. And then negative .69 for RN reported total number of patients on the last shift. This indicates strong convergent validity.



So let me just ask if there are any questions or (Emily) if you have anything to report there. I was not surprised at the data at all given real-world practical understanding nurse staffing.

(Emily Kramer): Yes so this is exactly what you would expect. The correlations are negative because the higher the - when the number of patients that each nurse reports of having assigned to them during their shift that (unintelligible) the lower nurse to patient ratio which sort of translates to a lower skill mix and a lower staffing level. So that's exactly as we would expect.

(Lily Gelinas): Questions from the committee?

(Iona): All right we'll vote.

(Teero): Okay we're now voting on the validity of measure 02-04. Option A is high, option B moderate, option C low and option D insufficient. You may submit your votes for the validity of measure 02-04, option A high, option B moderate, option C low and option D insufficient.

Looking, perfect all votes are in. Voting is now closed. For the validity of measure 02-04 three individuals voted high, 11 individuals voted moderate, two individuals voted low and zero individuals voted insufficient. So for the validity of measure 02-04 this measure passes this criterion.

(Andrew): So, this is (Andrew) I'm just wondering and just kind of want to get a check from the committee here, we're thinking about just for the remaining time on the conference call talking through the remainder of this measure and then the following measure but conducting our voting offline or rather online after the

call. So we won't do any voting on the call. Is everybody okay with that so we can (unintelligible) with each criterion and then we'll vote after the call?

Man: Sure.

Woman: I just don't...

Man: (Andrew) this is...

Woman: I mean I have a hard stop at 2 o'clock Central for me and I wouldn't even be able to vote after the call.

(Andrew): I mean we'll give you, you know, a day or two, you know, you don't have to vote immediately after the call. (Unintelligible), you know, as soon after as you can is good so while it's fresh in your memory. So are there any objections to that?

Woman: Is this (unintelligible) this is just ANA, is this standard procedure to not vote on it after...

(Andrew): We do it sometimes if - sometimes when we run out of quorum or we, you know, lose quorum on a call we'll do a Survey Monkey after the call. We're just thinking we'll do it sort of preemptively in this case because we don't have a lot of time.

(Lily Gelinas): What I worry about (Andrew) is just having the adequate discussion that we need to answer the committee's questions.

(Andrew): Right.

(Lily Gelinas): We only have 30 minutes left.

(Andrew): Right.

(Lily Gelinas): We spent an hour on the first measure.

(Andrew): Right that's - we do - we did try to focus our time if there are any particular concerns based on committee members reviews, you know, prior to this call. You know, this is sort of our best effort at trying to get through what we have to get through. We don't want to try to have to schedule another call with you, you know, the committee members. It'll be pretty tough to get that in.

(Iona): So just to summarize the intent is from this point forward we're not voting we're just working through the issues is that correct?

(Andrew): Right that's our proposal.

(Teero): And the committee - the project team will follow-up with you with a link to the Survey Monkey so that you can be able to do that as well as a copy of the recording so that can help to manage your discussion as you're keeping notes if that will help with your voting.

(Ed): And this is (Ed). That's happened before. It's not ideal but we sometimes have to do the voting afterwards.

Man: And I assume you're going to set a pretty quick deadlines for that voting to occur.

(Teero): Yes voting results, and we'll lay all this out in the email but they're due 48 hours following the call. And so we will make sure that we're clear about the deadline and when everything has to be submitted.

I know transcripts take a little bit longer. We'll try to get that out to the committee if it's available but we'll definitely have the recording attached as well.

Woman: Well I don't know what our...

Woman: Hello...

Woman: ...options are. Well I can tell you I would rather complete the voting on 02-04. I think it's important for the committee to understand that the reason we talk about 02-04 first is because the ratio of the RN hours and total nursing hours are elements of the numerator for 02-05.

And so I would think that if we can get through 02-04 and have the discussion and the vote it would much easier for the committee to understand what it is that we might have discussion around for 02-05.

Because again 02-04 is the numerator but we won't be talking about the denominator until we get to the discussion around 02-05 and I don't know if we're going to have time for the discussion but.

(Teero): Okay I'm looking around at the staff in the room and we're seem to be okay with that. If (Ed) and (Iona) are fine we can go ahead and proceed with the feasibility.

((Crosstalk))

(Iona): ...received that way actually. Go ahead (Lily).

(Lily Gelinas): (Unintelligible) yes.

(Ed): Agreed.

(Lily Gelinas): I would tell you I absolutely agreed...

(Iona): (Unintelligible).

(Lily Gelinas): ...with the early preliminary voting by our committee for feasibility which was moderate. And the feasibility testing the developer noted that the mean hours required to extract clean data and submit the staffing measures was a range of six with a range of 1 to 32 hours each month.

When it comes to feasibility I would tell you that NDNQI spends an awful lot of time with on-site coordinators at the hospital level to educate them, update them with changes in data collection guidelines, et cetera, et cetera.

I think one of the reasons that you did not vote high and this is what I'd like to hear your comments on is because nurse staffing and nurse staffing processes are not as easily collected through the EHR as are discreet measures, say for instance around antibiotics or other clabsi or cauti or anything else.

But the secure NDNQI database and the staff that support it spend a tremendous amount of time to make sure that the data is collected correctly.

(Iona): Any questions or comments? This is just an observation, this is (Iona).

(Lily Gelinas): Yes.

(Iona): I think that the nursing as a whole is highly invested in this database in terms of reporting. And a little bit later on in usability I guess my questions, you know, are (unintelligible) now but I have some questions related to the usability of this information that might be relevant to the feasibility so. With that we'll move forward.

(Lily Gelinas): Yes it's...

(Iona): Any other questions?

(Lily Gelinas): ...(unintelligible) comment.

(Iona): Shall we vote?

(Lily Gelinas): Yes.

(Teero): Okay we are now opening the voting for feasibility of measure 02-04, option A high, option B moderate, option C low and option D insufficient. You may submit your votes for the feasibility of measure 02-04, option A high, option B moderate, option C low and option D insufficient.

Thank you for your votes it looks like all votes are in. For the feasibility of measure 02-04 zero individuals voted high, 14 individuals voted moderate, two individuals voted low and zero individuals voted insufficient. So for the feasibility of measure 02-04 this measure passes this criterion.

(Iona): Okay use and usability.

(Lily Gelinas): Okay I'll move quickly to use first. I would point out to the committee that current uses of this measure include publicly reported data and current use in accountability programs. So we've begun to amass some very good use data.

And in your general materials you'll note that four states are using the data, Illinois, Maine, New York and Vermont. And the professional certification recognition program by the American Nurses Credentialing Center includes skill mix as a part of their magnet recognition program and pathways to excellent program as a criterion as to whether or not it's one of many whether you get designated or not.

And then the developer did solicit feedback from all of the NDNQI participating hospitals which now number approximately 1800. Got feedback from 324 and close to 70% reported that the staffing measures are either somewhat or very important to their hospital's quality improvement program.

So again it's the NDNQI database that is feeding our knowledge around use but the fact that four states are now using data in their accountability and public reporting programs I think is important to this discussion around use.

(Iona): So this is (Iona), the one comment I wanted to add to this is whether - and I don't know where the responsibility might lie but I think that the National Database for Quality Indicators ought to think about how to present a consumer-based report for example in which when you have hospitals that are more than two to three, four standard deviations below the mean how would that be communicated to the public so that they would understand that certain institutions what that level of mix is by institution.

(Lily Gelinas): Excellent point. That is an outstanding point.

((Crosstalk))

(Lily Gelinas): ...Star program.

(Emily Kramer): This is (Emily), I wanted to note too that we have been in conversation with CMS and in 2014 these two measures actually did pass the math for proposed use in the CMS in-patient quality reporting system and that we're still in discussions with them.

One of the reasons we have sort of waited, we were in between NQF review cycles at that point in time and so we were waiting for some updates and then also we've reframed the measure slightly to focus on a subset of units so that it's a little bit more representative.

But we are still in conversations with CMS. We're using at least the med surg version of this measure in CMS in-patient quality reporting system. So it is a proposed phase for that.

I think it made it through at least one level of rulemaking before we had more conversations about exactly how this measure should be used for that. So that's an ongoing thing and it may end up publicly reported at the national level that way as well.

(Yang Ling Yu): Yes this is (Yang Ling Yu). I don't know why my comments did not record at the end of the comment period I submitted but I definitely would like to see more of this data be made available so general, you know, to the general public.

And I also, you know, I am a little disappointed about it's a very good measure I'm just a little disappointed about the progress that made, you know,



the first endorsement 2005. We endorse 2015 but it's still only four state that has this public reporting program, semi-public reporting program.

So I would encourage in the future would be have more, you know, the hospitals participate especially in the NDNQI hospital tend to be larger hospital and pretty much disproportionately large number of teaching hospital and magnet facilities. So I would like to see more small rural hospital also be encouraged to participate in this measure, adopt the measure.

(Lily Gelinas): Thank you.

(Tracy Wang): And this is (Tracy Wang). I just have a follow-up question. So when - I'm curious just about 1800 hospitals are participating in the NDNQI. Can we assume that all 1800 of them are providing data for this different measure? I was just trying to get a sense of, like, how widely this is being used among all those who are eligible.

(Emily Kramer): So not - I don't know if 100% of hospitals report on this measure but I think it's about 90 or 95% report on this measure. This is the measure in NDNQI that the majority of hospitals do participate in is voluntary participation in all of the measures. So just (unintelligible) doesn't mean that they do (unintelligible) all measures but this is one where we have 90 to 95% participation.

(Tracy Wang): Got it thank you.

(Iona): Other questions? Go ahead.

(Missy): Yes hi this is (Missy) (unintelligible). To the measure developer is there a cost to participate in the NDNQI?

(Emily Kramer): Yes there is. It is a paid registry program so there is a fee associated with it.

(Missy): So just a follow-up question on this, can you give us (unintelligible) the cost because (unintelligible) content I think that might be a barrier to increased participation in the (unintelligible) from small rural (unintelligible) hospitals that they can only afford to participate in so many of these initiatives.

And then follow-up question is if CMS were really to adopt this measure would the only way the hospitals could report the data be through NDNQI? Could you address both of those separately?

(Emily Kramer): Sure yes so I don't know what the cost is. The - up until about 2014 this was registry was owned and operated by American Nurses Association. It is now part of (Krustaney Associates). So I don't have their cost and fee structure so I can't really answer that question. And I do understand that.

I do know that there have been an increase in the number of rural and critical access hospitals that participate in it but it certainly is not totally representative of the smaller hospital. So that is a potential barrier.

To answer to the second piece no the plan for if these were to be included in some kind of national public reporting because the measures are public we would expect that hospitals could submit their data directly and not go through NDNQI because again we don't want it to be that skewed or have that barrier.

This would be more publicly available and these measures as part of NQF the measure specifications are all public. That's another reason we tried to streamline the measure that would be submitted to CMS so that it would make it easier because correcting on all those hospitals and doing the same sort of

algorithms that we do to calculate the hospital measure can be tricky so we wanted to create a more streamlined measure for CMS to be using.

(Nicholas Matheson Prescaney): Yes this is (Nicholas Matheson Prescaney) I can just confirm that pricing has not significantly changed since the acquisition from the American Nurses Association.

(Iona): Any other questions before we vote? All right we'd like to vote.

(Teero): Okay we're opening up voting for the use of measure 02-04. You may now submit your votes. Option A is pass, option B is no pass. You may submit your votes for the use of measure 02-04, option A pass, option B no pass.

Looking for just a few more votes. Okay two more. If there's anyone that's having issues with your votes you can either verbally tell us what your vote is or submit it via the chat.

(Charlotte): So this is (Charlotte) I'm having trouble again and I'll give it a pass.

(Teero): Okay thank you (Charlotte). Anyone else? That was (unintelligible) 15, we need one more vote to meet quorum.

(Iona): Looks like we may have lost quorum.

(Teero): Yes.

Woman: Yes looks like it.

(Andrew): So we'll include this vote in our post-call survey. Maybe we can just finish up our discussion see if anybody wants to talk about the, you know, overall endorsement vote but we'll hold that, the actual vote after the call.

And then it sounds like we may need to schedule another call to get through Number 205.

(Iona): Looks like it to me.

(Ed): Yes I'm afraid so.

(Iona): (Lily) do you have any other questions or observations about this one?  
Anything that was not heard?

(Lily Gelinas): No I think in terms of usability I agreed with the committee overall assessment that the preliminary rating for usability was high. And in terms of the competing measures discussion with 02-05 that there's no competing measure because 02-04 is actually the ratio of the RN hours in total nursing hours element and is the numerator for measure 02-05. There were no other competing measures.

(Iona): Any other questions and then maybe if there are no questions do we have any public comment? (Missy) did you have your hand up? Did we get your comment?

(Missy): Yes I already - I had two questions I already asked.

(Iona): Okay.

(Missy): (Unintelligible) that.

(Iona): All right no worries. I just saw the note.

(Lily Gelinas): (Iona) I have question for the NQF staff.

(Iona): Go ahead.

(Lily Gelinas): The original endorsement of skill mix and nursing hours per patient day were part of the NQF National Voluntary Consensus Standards for a nursing sensitive care project and the original endorsement was 2004. And then I understand that measure set because it was endorsed as a set, was broken apart when we looked at falls and urinary catheter associated UTI, et cetera, as individual measures.

But I think for public disclosure those that are looking at these measures need to understand that the evidence-based, the usability and the outcomes data that is tracked with it have been occurring for over 15 years. So I was just curious where do we capture when we talk about endorsement and then re-endorsement and maintenance, where do we capture some of that initial really good work by NQF.

(Andrew): Is that a question for NQF?

(Lily Gelinas): Yes so how do we, you know, how is that disclosed to the public that NQF has actually been part of the process around these measures for 15 years.

(Andrew): I don't know if there's any sort of formal way we really sort of disclose that. It's, you know, the case for a number of our measures that they've been endorsed for many years...

(Lily Gelinas): Exactly.

(Andrew): ...and have gone through several cycles of maintenance. We could, you know, we try to at least give some context around that in our reports usually to, you know, communicate that it's a maintenance measure and it's coming up for re-endorsement and that sort of thing.

And we can put a little bit into the narrative around the measure and mention it potentially. We can - we'll discuss that in here.

(Lily Gelinas): That would be great because I'm referring, I'm on my measure worksheet, it's Page 2 and it says if endorsement maintenance the original endorsement date was August 5, 2009, is actually before that. So when you see an original endorsement date it makes you think that was a brand-new measure in 2009.

(Andrew): Yes when it gets back to those, you know, '04, '05, '06 years that it was a very sort of different process because I think...

(Lily Gelinas): Process right.

(Andrew): ...some of our, you know, historical - I don't know. It - the tracking gets a little bit lost. I don't even think we even actually have the same numbering system at that time we didn't give measures numbers so it's, there's a little bit of a disconnect there but that's a good point. We could maybe mention that it was actually endorsed even prior to the - it becoming officially number 02-04 or 02-05.

(Lily Gelinas): I think that would be helpful for those who don't understand nurse staffing, nursing skill mix, nursing hours per patient day to see how long it's been on the national or at the national forefront.

(Andrew): Okay.

(Lily Gelinas): Thank you.

(Lily Gelinas): (Iona) I don't know where we want to proceed from here since we lost quorum.

(Teero): Sure so this is (Teero) just again are there any member or public comments from anybody on the public? Feel free to just unmute your line and speak.

Okay all right so we will continue on. So I think on the back end here our project team will regroup and try to find a time to review that last measure 02-05 relatively quickly in the next week. And we'll reach out to the committee and the developer of course and get back to you as soon as possible.

So we will finalize that but also as mentioned we will send out a Survey Monkey on the voting for 02-04 where we stopped so that you can submit your votes to finalize the review of that measure.

Okay does anyone have any questions?

(Ed): I want to thank everybody for their patience.

(Iona): Yes thank you.

(Ed): And their excellent comments.

Man: Thank you.

Man: Yes thank you.

Man: All right thank you all.

Woman: All right guys (unintelligible).

Woman: Bye.

Woman: Bye.

((Crosstalk))

END