NATIONAL QUALITY FORUM

Moderator: Sheila Crawford
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2:00 p.m. ET

Operator: Welcome to the conference. Please note today's call is being recorded. Please standby.

Adeela Khan: Hi everyone. This is Adeela Khan from NQF. I'm with here with colleagues, Elisa Munthali and Kaitlynn Robinson-Ector, as well as our consultant, Robyn Nishimi. Health and Well-Being Workgroup 2 call. We'll be going over the preliminary evaluations for the measures of the scientific workgroup today.

The way the call is going to be structured is that we'll introduce the measure, read off the measure description, and then have the lead discussants go over some of their comments which we've been able to compile and that are being projected on the webinar right now. We have four measures and I'd like to stick to about a 25-minute discussion for each measure. There is some wiggle room there, so let's try and stay on track.

Let's start off by doing a quick roll call. I'll read the names of the workgroup members first.

John Auerbach?

John Auerbach: Here.

Adeela Khan: Jane Chiang? Emilio Carrillo? Catherine Hill?

Catherine Hill: Here.

Adeela Khan: Patricia McKane?

Patricia McKane: Here.

Adeela Khan: Marcel Salive?

Marcel Salive: Here.

Adeela Khan: Jason Spangler?

Jason Spangler: Here.

Adeela Khan: And Caroline Gelman?

Caroline Gelman: Here.

Adeela Khan: OK. Are there any other committee members on the line whose name I didn't call?

Sarah Sampsel: Hi, it's Sarah Sampsel.

Adeela Khan: OK.

Thomas McInerny: And Tom McInerny.

Adeela Khan: OK.

Michael Baer: Mike Baer.

Ron Bialek: Ron here.

Adeela Khan: OK. All of today's measures have been developed by AHRQ and I just want to make sure that we have our developers on the call. So, Pamela Owens, and Patrick Romano, can you let us know that you're on the call?

Pamela Owens: Yes, this is Pam Owens from AHRQ and I'm on the call.

Adeela Khan: OK.

Patrick Romano: And this is Patrick Romano from UC Davis, also representing AHRQ.

Adeela Khan: OK, great. So, let's get started.

The first measure is 0272, diabetes, short term complications rate. The description for this measure is the number of discharges for diabetes short term complications per 100,000 age 18 years and older population and the metro area or county in a one year. And the lead discussants for this are John Auerbach and Jane Chiang.

So, John, why don't you go first.

John Auerbach: Sure, my pleasure.

This is – the rationale for this measure is that these are avoidable hospitalizations if diabetes is under control and that it is an ambulatory care sensitive measure. It measures outpatient care and other conditions that affect health and including poorly controlled glycemic status and the taking the medications, eating properly, controlling weight, et cetera.

And it is – if that happens because it is an appropriate measure because we know that better glycemic control can be achieved through such things as higher access to medical care and ambulatory setting, appropriate medication, glucose monitoring, et cetera.

The status on this is it has been an indicator that's been in used since November 2007, and so it's up for a review. There is mention that it could be combined with another indicator, that's the next one we're to talk about, which is the uncontrolled diabetes admission rate. And I made a little bit more about that or just wait until we get to that measure.

I think that it clearly has a demonstrated high priority as an indicator given the high percentage of the adult population estimated 11 percent and the high percentage of adult population that has pre-diabetes. And the AHRQ does a terrific job of making the case for that, pointing out that acute diabetic complications were the 7th leading cause of death and they accounted for this

particular diagnosis accounted for 36 percent of all diabetes hospitalizations that the cost exceeding a billion dollars.

And then there is evidence, although not as strong as one might like, that better care and more comprehensive care can reduce complications and hospitalizations, and that it talks about decreased complications occurring if patients are in a primary network, specialist, being care for by specialist like endocrinologist community health center sites or primary care, comprehensive primary care sites, and paper performance providers also seen to be locations and services that are associated with avoidance of this hospitalization.

The analyses that are presented are used healthcare cost and utilization stated patient database, and they show some disturbing indications that the hospitalizations for this diagnosis have been increasing at a fairly rapid clip, increasing from about 49 per hundred thousand, 65 per hundred thousand in just five years. And the rates are higher for males, for people who are low income, for residents of the spouse, and for Latinos as well as for those with behavioral health issues. And for reasons I don't quite understand, the rates are higher for younger patients rather than older, something that is inconsistent with the uncontrolled diabetes admission rates that we'll be talking about next.

And I think the report does a very nice job of talking about innovative approaches that have been shown to show promise in terms of reducing hospitalizations like group visits, mobile phone support and patient education.

In terms of the reliability and validity, the measure is well defined. It precisely specified, and so it can be implemented consistently within and across organizations and certainly allow for comparability. It has been and is in my spread use as a quality improvement measure and also available for public reporting by AHRQ, multiple state, and CMS has listed it as approved for voluntary use for Medicaid programs, so it is quite well established as a quality measure that's been used for both, as I indicated, improvement and public reporting.

I think that I would say that I – the progress towards achieving the goal of high quality has been demonstrated by the use of this measure. The measure does appear to meet the criteria of being superior to or as good as competing measures. Here, too, I would say that having a discussion about its use in conjunction with that of the uncontrolled diabetes admission, I think, is worth having more discussions about.

I had some minor points which I'll just quickly mention and then – in my presentation. This may be minor but just in terms of denominator issues, the numerator excludes all (obstetric) transfer cases but it didn't talk about the denominator reducing those. Those numbers are probably small, but it's inconsistent to exclude those from the denominator.

I was unable to find in the material the specifics on the rates by race and ethnicity. There was a reference to the disparities that exist by rates and ethnicity, but unlike the listing that was done by income and age and gender, et cetera, there just wasn't the listing by race and ethnicity. And I think it would be helpful to have that.

I think this is a measure where it's probably worth awful thinking about what the ways that this can be – this hospitalization – the hospitalization diagnosis could be reduced by thinking about the social determinants as well as those that are more amenable to clinical care including such things as food access and in general poverty or cultural and linguistic barriers. And so, I think perhaps during the discussion, we could have that, we could talk about that as well.

And just a final thing I would say is this is – in the beginning there, there is a statement that this – if this diagnosed or the conditions that result in this diagnosis are not related to hospitalization. And there, I would just – the only uncertainty I have is in those instances where patients have been hospitalized for either this or uncontrolled diabetes in the past, I would – it is one of the indicators of I think appropriate hospital care that there was good discharge planning with regard to the issues that might arise. So, while I understand that it's primarily not about measuring hospitalization there, there may be some

aspect of particularly for rehospitalization that may be related to care in hospitals, and that just might be something for further discussion as well.

So, with that, I will close.

Adeela Khan: Thanks, John. Is Jane on the line? OK, does anyone else from the committee have anything to add?

Thomas Mclnerny: This is Tom. I did not go through the reliability, feasibility, usability, validity, those four. Reliability, validity, feasibility, and usability. You folks feel that it had high marks in all of those areas?

John Auerbach: This is John. I did. Yes.

Jason Spangler: This is Jason. I went through those. I felt they did as well.

Patricia McKane: This is Patty and I did as well.

Thomas Mclnerny: So, the …

(Crosstalk)

Thomas Mclnerny: And I think it's a great point you bring out about the readmission rates, and I know that Medicare, I think, is measuring 30-day readmission rates for some conditions. I don't know if this is one of them, but it would be – it might be sort of a subset of this measure would be to look at those readmission rates that were within 30 days versus over 30 days and sort of get a feeling for the discharge process and handoff.

John Auerbach: Yes.

Thomas Mclnerny: Excuse me.

Adeela Khan: Pam or – go ahead.

Jason Spangler: Sorry, this is Jason. And I had one question. And, John, I may have missed this. I don't if you addressed this or not. But it's not just for this measure but I think for all four that we're going to talk about today. You know, the coding

for all of these is through ICD-9, and I didn't see anything about since we're going to be transitioning eventually to ICD-10, I didn't know if that was something that they should be addressing or at least be mentioning or how, you know, how NQF would deal with that when the transition happens for measures like this that are so, you know, there, you know, the only way to measure it is based on the codes that are listed.

Elisa Munthali: Hi, Jason, this is Elisa. Yes, that was a good point to pick up. They should actually be addressing if they haven't converted already to ICD-10 a plan to do so. And we have guidance for developers that we've been sharing through the past year and a half. So, I don't know, Pam and Patrick, if you'd like to address that and we can work with you.

Pamela Owens: Sure. And that actually should have been all on the Excel spreadsheet, all of the ICD – it's been mapped to ICD-10 and actually Patrick and Ginger Cox who are actually leading the field at to conversion to ICD-10 did all that mapping for us. That mapping was up through for public comments beginning in December and it closed in January. We got no public comments that suggested any changes through any of the measures frankly but specifically to diabetes since that's what we're talking about right now.

If I will go back and check that Excel spreadsheet, but all the I9 codes and all the I10 codes were supposed to be in that Excel spreadsheet or Excel workbook, and I will go back and double check it.

Jason Spangler: Thanks for that I – go ahead. Sorry.

Pamela Owens: And from our standpoint, of course, we all know some things in place. Who knows what's going to happen, but by mandate by October 1st, 2014, all best programs for the QIs, all technical specifications are supposed to be updated with I10 and there is a plan in place.

Jason Spangler: So, I'm glad you – thanks for bringing that up. The reason I probably didn't see that is when I click on the Excel spreadsheet from the SharePoint, I can't get in there. It says the workbook that you selected cannot be opened. So, I wasn't – and I just – and I didn't – at least I didn't sent anything to you guys,

so I think this was Friday afternoon, I thought maybe you could try to find it next week, but just to let you know. So, I missed that. Sorry about that, but thanks for that clarification.

Pamela Owens: No problem. And NQF staff, if there's a problem with opening it, just let me know and I'll resend it.

Adeela Khan: OK, we'll look in to that. Thanks for letting us know.

Pam or Patrick, did you want to address any of the other comments that were made by the committee?

Pamela Owens: Patrick, I'll let you start.

Patrick Romano: OK, yes. I can – just a follow-up on a couple of questions. Thank you for excellent discussion.

So, with respect to the denominator, these measures are intended for application to populations. So, the denominators come from census data describing the resident population of a particular community. Typically, it's applied at the county level, the state level, or the MSA level, but it could be applied to other populations as well.

It has been difficult to exclude groups from that population. I think that your point is well taken that it would be sort epidemiologically more correct to exclude individuals who are pregnant or individuals who are residents of a long term care facility, but the problem is it's getting an accurate and reliable denominator estimate that could be used for exclusion.

So, we're hoping to comments and suggestions about how to improve that as an option if people are aware of ways to estimate that denominator better.

A couple of other quick follow-ups, with respect to the observation that the rates are higher in younger folks than in older folks, there's actually a straightforward reason for that which is that this is part of a family of diabetes related hospitalization indicators, as you know. And this one focuses on the

life threatening short term complications of ketoacidosis, hyperosmolarity, and so-called diabetic shock or insulin shock.

And so, these – particularly the first and the third of these are typically associated with type 1 diabetes which of course is more prevalent relatively in younger populations. So, the reason for that age distribution is just because these particular complications are more common in type 1 as opposed to what we'll be talking about next which is more common in type 2.

So, I think …

John Auerbach: Can I just ask for clarification in that because within the – within the material we received, it also said that the difference between the first and the second of the measures we're discussing today is often just a coding artifact which implied that it wasn't a late significant population and condition. Is that not accurate?

Patrick Romano: Well, it is. I mean, it's just that, you know, hospital coders are asked to code to the highest level of specificity that's reported by the documentation in the medical record. But we know that sometimes coders may take a shortcut. And if it's not entirely clear how things are documented in the record, then they may choose to use a non-specific code instead of a more specific code.

So, these are the more specific codes for these very severe complications, but we do find some evidence empirically that there's some variation in coding practices across hospitals that gets washed out when you aggregate the indicators and look at them as a group but that doesn't change the fact that these particular complications are driven mostly by type 1.

John Auerbach: Thank you. Thanks.

Patrick Romano: Make sense hopefully.

John Auerbach: Yes, thank you.

Adeela Khan: OK. If no one has anymore comments of 0272, let's go on to the next measure. It's diabetes long term complication admission rate. We're looking

at the number of discharges for long term diabetes complications per 100,000 …

Emilio Carrillo: Catherine. Yes, this is Emilio Carrillo.

Adeela Khan: OK. Thank you …

Emilio Carrillo: Hi. I am late to the call, I'm sorry.

Adeela Khan: No problem.

Emilio Carrillo: Can I proceed?

Catherine Hill: Yes, please.

Emilio Carrillo: OK, thank you, Catherine, for stepping in. Well, as she mentioned, we are – this is a company measure that looks at long term complication admission rates, PQ13. It's an (ARC) measure, it does the (steward). And it's an outcome measure and it's based on administrative claims which brings with at a host of concerns, and I think we just talked about that in terms of establishing the denominator, but it is something that is shared by, I would say, most, if not all, of the other measures that are also based on administrative claims.

The level of analysis and population, and we'll talk a little bit about that as we do have some concern. And in terms of evidence, there's a very well established task between diabetes and long term complications associated with microvascular damage. There is the British UKPDS studies that are classic studies and many others that have been incorporated into guidelines including the American Diabetes Association guidelines or sort of the main set of guidance that would – that are used.

In terms of the rationale of the science of the measure, it's important to note that long standing, and I emphasize, long standing improvement in glycemic control can prevent or slow the progression of microvascular disease. So, this – the issue of long standing is something that I will address when we look at issues of reliability and validity.

Catherine is going to address some concerns that we have regarding the use of the principle diagnosis in diabetes as she'll go into that.

In terms on the performance gap, there is adequate representation by the developer. They look at HCUP data from '07 to '11. And there's robust distribution. They acknowledge and as there is a good set of literature reviews looking at ethnic and racial minority disparities and the long term complications to diabetes. There's at least 51 studies that have been cited by the developers. So, the – in terms of evidence and performance gap, we feel that generally the criteria has been met but if there are some questions that we're raising.

In terms of specification, right, in terms of high priority, let me say that this is well demonstrated. Backlash number of individuals, the leading (clause), the morbidity and mortality, and an understanding of the utilization of ambulatory and other conditions like diabetes long term complication is a very important component of population health and should definitely be considered as high priority.

In terms of specifications, the question of the denominator comes up again and, you know, how is the MSA composed. I mean, we know that there are MSAs that are blend of low income and high income areas and, you know, and as we've said, there's so much evidence of disparities that you could have, for example, in New York City, you know, you had 96th street on the east side and above that is East Harlem and below that is the upper east side. And if you blend that into one composition, you're not going to get any information of any value in terms of the care of the population in question.

So, the whole idea of the need for risk adjustment for racial ethnic indicators, I think, is something that we should discuss. In terms of reliability date, you know, the developers do a good analysis of signal to noise ratio. This is something that the AHRQ also commented on and there seems to be good support.

Again, the issue of the higher rate of diabetes in areas of, you know, high populations (inaudible) Black, Hispanic, and Native American population can certainly resolve in bias. The main issue that we have a consideration for this is the fact that, you know, we're dealing with long term complications. And these are complications that could take decades to develop. And we know that a fluid neighborhood, we know neighborhoods that are very, very poor, they get gentrified, we know neighborhoods that are more gentrified and become very poor. I mean, there's a lot of (flocks).

So, the data that we – when we look at this measure and we look at the long term complications, you know, we're basically are looking at incidents, you know, prevalence of microvascular complications that could have been developed over a long time under very different circumstances. So, the value of the measure to comment upon the present term which is our concern in using this measure becomes an issue.

And then in terms of feasibility, this is something that's certainly feasible at the level of public health departments, researchers, ACOs, patient homes, hospitals, and other entities that have access to the necessarily electronic and cognitive resources in terms of academics and people who are familiar with this area to conduct the studies.

And in terms of usability, again, as we mentioned under validity, there are concerns that, you know, what is this measure telling us? Is it telling us anything that's above the current state? Can we take action on this measure based on what happened many years ago? So, those are things that we'd like to get some discussion on, and Catherine is going to go into more detail and emphasize other things. Catherine?

Catherine Hill: Thank you. I think our biggest concern, overriding concern was the use of the primary diagnosis of diabetes based on some data that we reviewed that indicated that if used the primary diagnosis, you would come up with the round 688,000 applicable episodes. But if you look using the top seven diagnosis, you'd have 5.5 million. And so, that made us wonder if using only the primary diagnosis was really getting at the problem that we see with long term diabetes.

The lag time is the second big concern and that what you're getting is really a measure of a person's experience of healthcare over the last decade, the gentrification, the level of measurements being at the metropolitan statistical area level, the movement of people, you know, in terms of their moving from one area to another, all make us wonder if this is really going to produce something that we could take some action on.

Adeela Khan: OK. Was there anyone else from the committee who had anything to add?

Thomas Mclnerny: Hi, Tom again. You know, I think that's a very good point. The problem, let's say, you know, take somebody who lives in Utah and there's been intermountain healthcare. And if they've been in intermountain healthcare for 20 or 30 years, I would suspect they would be – they would have an excellent – a much better management of their diabetes and much lower long term complications versus somebody who perhaps moved to Utah three or four years ago and then enroll in intermountain healthcare. And prior to being intermountain healthcare, they were not in the system that really did a good job of keeping their blood glucose levels and the hemoglobin A1cs within the recommended parameters.

Catherine Hill: I know we are seeing (technical) resources in our contracting that many of our insurance companies that we deal with to do and ACO kind of contract have at least 10 to 20 percent turn in their population. And so, you know, that due to employers of course changing people and changing employers and residencies and those kinds of things.

Adeela Khan: Did Pam or Patrick want to say anything?

Pamela Owens: Well, I'll let Patrick do the majority of the answering. I just want to clarify the meaning of our principal diagnosis on inpatient discharge record versus secondary diagnosis. It only partially gets at what you're talking about though. And that is the HCUP data is based on billing records and the Uniform Bill 2004. It is the same record that CMS uses but they do it from a claims perspective. In other words, it's a bill that's been adjudicated and paid, and so it's just a little bit different in terms of where is that in the process.

But the Uniform Bill is guided by standards directed by the National Uniform Billing Committee that's guided – it comes out of CDC actually. And that it's a multi-panel committee that makes decisions about what the standards of what each of the data elements are within the Uniform Bill.

That being said, the principal diagnosis which I think through this discussion has been called primary diagnosis or maybe you might know it as the first listed diagnosis, but the principal diagnosis had a distinct meaning, and that is, after all is set and done with respect to the hospitalization and they have up to 30 days to determine what the principal diagnosis, this is the reason for the hospitalization, the principal reason for the hospitalization. All of the secondary diagnoses are comorbidities, complications, or others things that have caused and would be related to resource use from a facility perspective.

And so, just to keep in mind that it has a distinct meaning relative to the other conditions and one of the reasons that principal condition is used. But, Patrick, you may want to say more just from a clinical perspective as well as some of the other issues that they're getting at. And, you – the other thing we can allude to is some of the additional work that we were doing with small area estimates.

Patrick Romano: Right, this is Patrick. I'll just add a couple of things. So, yes, I think Pam is, in some place, well. I mean, there's 25 years of work with indicators of this type going back to the work of (John Billing) and other investigators that, basically, it's consistently focused on the principal diagnosis because of the particular meaning that it has. So, if we want to identify potentially avoidable or preventable hospitalizations, then people have historically focused on the principal diagnosis which is defined as why somebody was admitted to the hospital for treatment.

So, that fundamental definition of the principal diagnosis is central to the purpose of these indicators. And, of course, because the principal diagnosis is the primary factor that drives billing, it's also subject to audit and it's been demonstrated to be one of the most accurate data elements on the claim because of the fact that there are severe financial penalties to misreporting the principal diagnosis.

In terms of just a couple of other comments, yes, just to emphasize that it's a really important point about the turn and the turnover. Unfortunately, there's no solution to that, but I think AHRQ is clear that this indicator in intended for application to populations, typically geographically defined populations. And what you proposed is certainly one of the explanations. In other words, if an area finds that it has a high rate or if the local public health agency finds that a particular community has a high rate, it may be that one of the reasons for that is that there's been, you know, a move into that community of people who've had poor access to care in the past. So, this is certainly one of the hypotheses that would have to be explored. You know, whether you view as a confounder or not really depends on what the purpose that you use and the indicator is.

And so, I think that (ARHQ) has really promoted the use to understand what's going on in population health.

Male: But to what extent how valid is it to point to the current status. I mean, if you're doing research and looking back a community over 20 years, but if you want to know about the current state, you know, the first measure of this is shorten complications, I think it has a lot more relevance to answering those questions.

Patrick Romano: But the issue is that the current state is something that has to be fixed. So, if the current state has shown a deterioration, if it looks bad, then presumably there needs to be some attention to that problem from public health …

Male: But the current state is reflecting what happened 20 years ago. I mean, what you're measuring is the result of poor access long time ago.

Patrick Romano: Can I have …

Male: Now that the current state is more reflected by the sort term complication measure.

Patrick Romano: Right. That problem still has to be addressed. I has to be recognized and addressed if there's a need from more health resources in that community, if

there's a need for more federally qualified health centers or an improved infrastructure for health service in that community because of the increasing rate of hospitalization for diabetes long term complications, then that needs to be recognized by the agencies and organizations that involve in that community.

John Auerbach: And there is – I have a concern about the fact that the first measure we're talking about is – as you've described it, it's primarily a measure of type 1 diabetes where the second measure is primarily, I think, a measure of type 2 diabetes. And there – type 1 and type 2 are so different in terms of, well, certainly causation. I think this type 1 is, you know, is an immune deficiency disease, it's not for care maybe correlated with social determinants of health but the diagnosis isn't.

(Crosstalk)

Male: … classifications also relevant for type 2. I mean, the (cellulite) and the ophthalmoplegia, the wound healing, I mean, those are things that happen in the short term and are surely a part of this diabetes type 2.

John Auerbach: Well, part of what I was going to say though is the type 2 diabetes, what we're measuring is partly a reflection of the – not simply care but some of the other social determinants of health that lead to obesity and that are about access of healthy foods. And so, I feel like there is – from a planning perspective, the population based response to type 1 and type 2 are not exactly the same for that reason. And so, I just get a little bit worried about looking at one as the measure for the other. I think type 1 is maybe five …

Male: Do you have good – is there a good data that short term complication measure is primarily capturing type 1 diabetes? I mean, I'm not – I'm maybe just not familiar with it. Do you data? Is there data to support that?

(Crosstalk)

Jane Chiang: This is Jane Chiang and I'm with the American Diabetes Association. I'm just trying to understand your conversation. So, are you saying that you're trying to get measures of performance, is that outcome measures? What are you

asking for? Because whatever you're talking about, there is data to support what you're saying. But what are you asking?

Male: Well, type 1 diabetes, the codes, the disease codes that apply to the short term complication measure, are those conditions that are primarily seen in type 1 to the exclusivity of type 2? And do we have any evidence to that effect? Because we're assuming here that measure 0272 is capturing type 1 and 0274 is capturing type 2, and I'm questioning that, but I don't have – I haven't seen the data.

Jane Chiang: Yes. Here's kind of the state of where diabetes is. So, people – traditionally, type 1 has been kids younger and they've been more acute, and then type 2 has been older and you see a lot more the complications, the chronic complications. The problem is there's a blurring of the diseases. And so, I'm getting kids who are getting diagnosed with type 2 earlier and we're getting adults who are diagnosed diagnose with type 1 later.

So, if you're asking for type 1 in, let's say, DKA are there codes to show those – that people are billing correctly, is that what's you're asking for?

Male: No, no, DKA also occurs in type 2 not just in type 1 …

Jane Chiang: It occurs. So, but I'm just saying that there is a blurring of lines, and so a lot of that information that was traditionally, like all these tenants that we're traditionally affiliated with one disease or another, it hasn't been the case.

Male: Right. We totally agree, I mean, I think that we cannot make that distinction that one measure is predominantly type 1 and the other one is already type 2.

Jane Chiang: Yes, I think there's data to support that, and I agree with that. And to say once that there's a clear line of distinction, that's actually not true anymore.

Male: So, what I would say though it's a little bit (inaudible) because I think 95 percent of diabetes cases are type 2, and …

Jane Chiang: That is correct.

Male: And yet under the 0272, the fact that there – the likelihood of hospitalization is greater, the younger you are makes it seem like it might – as I understood the earlier explanation, the earlier explanation for why hospitalization rates would be higher for younger for that measure was because of the assumption that it was the larger percentage of type 1 because when we look at the uncontrolled diabetes admission rates, that is the opposite is true. The – which is more common I think in type 2 diabetes which is the older you are, the more likely that you're going to be hospitalized.

Jane Chiang: So, I think what we found is that, yes, kids with type 1 tend to be more, you know, they're the populations with DKA. But if you look at the population as a whole, most of those people who are getting admitted for DKA for diabetes because the vast majority are type 2, most of them are the type 2 population and the adult population because, you're right, it's 95 percent of the population. So, it's actually – if you look at numbers, it's a very small number of kids who get admitted for DKA. And we have those numbers to support that.

Male: So, I'm just saying, I think that this data around age is confusing given that information.

Patrick Romano: This is Patrick Romano. Just to clarify a couple of things. I didn't mean to imply that there was a clear distinction between type 1 and type 2, so I apologize if my remarks came off that way. In fact, we fully recognize that there's a blurring at the line between type 1 and type 2. And there are some type – there are quite a few type 1 people who are admitted for long term complications as well as type 2 people who are admitted for short term complications.

But just with reference, to the age issue, the DKA presentation is a presentation that's more commonly seen in younger adults. The indicator does exclude kids, so this is – this particular indicator is only 18 and over. We can present, you know, some additional stratification if you're interested looking at type 1 and type 2 separately at least as they are labeled and reported. But again, because of the issues that have ready been raised, I can't vouch for the accuracy of that distinction. Sometimes, there's even some confusion on the

part of those of us who practice clinical medicine about whether a particular patient is type 1 or type 2.

The other thing I want to say in general is that – so these indicators have been adjusted just for the age and gender composition of the communities historically. NQF has discouraged developers from adjusting for socioeconomic characteristics. However, there's a separate process that is ongoing through NQF to provide guidance to the community related to potential adjustment and measures versus economic variables. We have explored that, you know, through some pilot work, if you will, or empirical work. There's no question that socioeconomic factors do play a role in the population rate of all of these diabetic indicators. So, there may be some change coming in the future as NQF reconsiders its guidance to the measure developer community.

And I'm not sure, Pam or others from NQF, may want to address that further.

Pamela Owens: Yes, this is Owens. There is a public report up that talks about risk adjustment in socioeconomic status. I think there are some recommendations in there, but again the recommendations and it's out for public comments, so no determination has yet been made. And so, as submitted, it still falls under the rubric of not adjusting for socioeconomic status for Department of Health.

Elisa Munthali: Yes. So, just to reiterate, this is Elisa from NQF. What Pam and Patrick have just mentioned, the report is on our website for our public comment. We'd welcome your comments, but as Pam just stated, we are under our current guidance which in the past wasn't to risk adjust but to stratify for the socioeconomic status. And so, we're still trying to work through these issues and we should have final recommendation by sometime in June or July.

Adeela Khan: OK, were there any more comments on this measure?

Female: I guess – this is – can I just – would it be helpful for you us to run the numbers of type 1 versus type 2 or now with this explanation, it's not as salient because we certainly can drill down to the extent that the ICD-9 codes are, you know,

indicative of one of versus the other, although, you know, as Patrick said and as Jane mentioned, it's always so clear which it is.

Female: Yes, and I think if could just say one more thing about diabetes, when I was trained, it was very clear what type 1 and type 2 was. And we really have moved away from these stereotypes because we're realizing it's very, very blurry. I actually had a patient who had – who's going to get bariatric surgery for type 2 diabetes and type 2 diabetes, it turns out she didn't have it, she had type 1. But everyone made the assumption she had type 2 because she was obese. And I think because she had all the antibodies and no one even thought about checking it in her.

So, I think when we move forward and we have these discussions about diabetes because it comes up a lot, I would encourage you really to think – to go away from the past stereotypes.

And also, the other thing is we're realizing that people with type 1 diabetes are living much longer. And so over half the people with type 1 diabetes are now adults. And that's how we have to think about. And I think the population, it used to be like 2 to 3 percent had type 2 who are kids and that's also changing. So, paradigms are shifting, and so I would ask that you keep an open mind because it's very different from how it's traditionally been seen.

Thomas McInerny: And this is Tom. I think, you know, if we'll be looking to use this measure as a an indication ambulatory care sensitive condition by health plan, would it be possible to add sort of another risk adjustment factor as to how long the patient was enrolled and that (trigger) health plan because of that turning issue, I think that would be an important adjustment to make.

Male: I fully agree with that, it's a good point.

Female: And to be honest with you, that is exactly how CMS has adopted the measure.

Thomas McInerny: Good, thank you.

John Auerbach: So, I – this is John. I do think that there – going back to the type 1, type 2 discussion we just had, it is – it's tricky, and the thing that I think is tricky

when we're thinking about this is related to a population health measure is that I think by – correct me if I'm wrong – but I think, by and large, the type 1 diabetes prevalence indicators are – or incidence indicators aren't changing year to year whereas type 2 diabetes is – has increases so dramatically over the last few years and it's still increasing and increasing faster in, say, communities of color and poor communities that it gets confusing about whether what we're seeing in some of these indicators has increased incidents in prevalence versus something related to care.

And so, that's – it's just another reflection on the complications of the – this particular indicator. I don't think there is another chronic disease that we're seeing with the same kind of slope of increase annual diagnosis year after year as we've seen with diabetes, so with type 2 diabetes over the last few decades.

Adeela Khan: OK. Thanks everyone for those conversation. Lets go on to the next measure. It's going to be 0285, the rate of lower extremity amputation among patients with diabetes. The description for this measure is the number of discharges for lower extremity amputation among patients with diabetes per 100,000 population age 18 and older in a metro area or county in a one year time period. And the lead discussants for this are Patricia McKane and Caroline Gelman.

So, why don't we have Patricia go first.

Patricia McKane: OK. Caroline kind of discussed this, and I thought Caroline was going to go first.

Caroline Gelman: Yes.

Adeela Khan: OK, all right.

Caroline Gelman: This is Caroline. That's fine. So, I was just going to briefly present the outcome measure for people. And as you just said, it's an outcome measure of number of discharges within any listed ICD-9 CM procedure codes for the lower extremity amputation and any listed ICD-9 CM codes diabetes patient ages 18 and older per 100,000 population in the metro area or county in a one year time period.

A solid argument is made that if you adequate diabetes management screening by definition, that will prevent lower extremity amputation linked to diabetes. So, this measure allows for comparison across regions to assess where preventive education outpatient care and management of diabetes and access to care is better and where it is lacking since high quality education management in early intervention has been shown to result in lower rates of amputation linked to diabetes.

As reported in various studies are presented by the authors and in addition guidelines for diabetic care also focus on prevention and early intervention in order to reduce the incidence of lower extremity amputation.

In terms of performance gap, one question that I had for all the instruments is that since aid seems to be so strongly related to the rate of amputation in this case for this instrument, but in terms of the rate of short term complications, long complications and uncontrolled diabetes, I'm wondering if an order to fully assess the differences once these in the case of this measure in center median income by zip code type of metropolitan area and geographic location. Given that different groups and geographically does have different age patterns, if we wouldn't get better data, if it was reworked to show each of these comparisons within each age category. I don't if that's possible.

The other thing that was also mention already is that while there seems to be demographic data available in the HCUP SID, it's not clear if this includes data on race and ethnicity and if that were available given what we know about the rates of complications from diabetes and access to diabetes care based on race and ethnicity that would also, I think, give good information for us to work from.

In terms of the priority, as everyone has said, it's a very high priority area given the large and growing number of persons affected. The status is a leading cause of morbidity and mortality in the US and a high healthcare disability and economic cost.

In terms of 0285, the measure is well defined and precisely specified. There is adequate reliability, adequate validity against this feasibility because it's based on readily available data from the US census and the HCUP SID. It's very feasible and the measure seems to be currently used by various state level healthcare, access information agencies, and organizations.

I know Patty has some other questions, but one question I wanted to raise which was also raise by John and which I think is related to the discussion we just had whether we're looking at type 1 diabetes or type 2 diabetes is, since one of the things we're able to tell by these measures is the quality of preventive education outpatient care and management across regions is there might be a way of combining some or all of these measures to get a composite measure about what is available. Particularly, as a social worker, I'm concerned about the gaps that we see and the lack of access and education and preventive care of certain groups in the population.

So, those are some of my comments and questions, and I'll turn it over to Patty.

Patricia McKane: Thanks, many of the comments that people were talking about were the other measures are pretty much in the same questions that I've had in my mind and I've been reading through the comments that were provided by others as well. And one of the – I do agree as looking at, you know, the (inaudible) but I did have a question and I don't if this is the appropriate place or not but county boundaries are artificial and we can map high-risk neighborhood or census blocks. And I was wondering when you're looking at – when the status collected in your reporting by county, how are basing the county of residence?

Are you basing that off a geocoded address or you're basing it off a ZIP code?

Female: Yes. That's off of the zip code in terms of on each (inaudible) data.

Patricia McKane: OK. Because we switched to geocoding and we find that that provides us some more precise estimate particularly when we're trying to geocode into going to census blocks and all that. So, that was just and I know that's an administrative issue or system issue. But – so that's one limitation maybe that,

you know, when we're trying particularly looking at small segments of the population and trying to identify pocket particularly from a public health point of view.

We have limited dollars and where do we need to – where do we need to go. You know, I do see this as, you know, basically a measure that maybe and I'm not sure how this works but anyhow, because they're capturing people who have had little interaction with the healthcare system or people that, you know, (inaudible) reading to all of the assessment wondering about, you know, the issues of homelessness and other social determinants of health issues.

And just from the stats point of view, I think I use the term validity a little bit differently. So, this is kind of flipping my brain around trying to go through that and I did read most of the appendix that you provided to try to get a grip on that but I was wondering about – I do have some statistical questions that I sort of sprinkled all throughout this. And at some point maybe someone can sit down and explain that a little bit more in depth about, you know, why there's no analysis but (inaudible) factors that are excluded or missing.

So, and I think I'm not sure – I think the denominator question that myself and somebody else mentioned about trying to limit and this is limit (inaudible) people with diabetics and from what I understand from something to do in our state is that it's very difficult to know with accuracy the two prevalence. Particularly, since so many people don't know they have it.

So, like, you know, I understand it's the population measure and that's why that the dominator is written in the way that it is and trying to think if there's anything else. So, you know, it's – and there's some of the reporting, it is in use and I didn't see if there was any plan, you know. I was looking at the – looking for, you know, any, you know, plans to use for it in the future. I didn't see that so I didn't know if this is measure that if, you know, what, you know, what actual performance has done, you know, has been useful as, you know, our people using that on, you know, finding that useful.

Adeela Khan: Has anyone else from the committee who had any comments to add?

Marcel Salive: Hi. This is Marcel. I also had looked at this one and just on the last couple of points, I would agree and I had put in a comment about the denominator. And I see that in the fine print of this write-up that it does say it could be diabetes patients but it seems like it isn't. And so, the title, you know, seems to suggest that it is the diabetes patients but then the write-up says no, it's really not, it's just population which is fine.

But, you know, then, I think they need you to change the title or something else but finally, in terms of usefulness it's one of the views which I think has a healthy people 20-20 objective to actually reduce the data flow or extremity amputations in people with diabetes. And so, it's not consistent with that objective at all if you use population data. They, in that healthy people, they use diabetes patients as the denominator.

So, I think it would be nice to figure out if you could harmonize with the healthy people objective because that at least gets a lot of public health scrutiny, I think.

Adeela Khan: Patrick or Pam?

Pamela Owens: So, just to clarify what was meant by patients with diabetes. So, it's in an and statement in the numerator in terms of lower extremity amputation and they have a diagnosis of diabetes. So, it has – both has to be present in the numerator and yes, the denominator as specified is the population denominator. That's being CMS as part of in their Medicaid programs and their dual eligible program have been exploring the issue and they've looked at the validity and reliability of doing similar to what they did on the previous measure which is looking at the beneficiary population.

So, it's among those with diabetes because of course on the claims data you can get more information about, you know, their outpatient care and have they been seen for other things than just that inpatient hospitalization. So, I'm not sure which part of the form you're speaking of, whether it was just in the title or at the anecdote or the note that said you could use the population – that you could diabetes in the denominator.

The other thing that AHRQ has been exploring but then it gets this notion of, you know, what type of diabetes is that, et cetera, is using some of the CDC data and to see if you could get small area population denominator. So, looking at the prevalence of diabetes in particular counties, for instance and of course, you know, your issue, the previous reviewer's issue about census block that's really intriguing to me because it's something, you know, maybe we could explore on HCUP, is it possible to put this at the census block by using geocoding.

You know, this is great feedback for us in terms of our ways of doing that. But all that to be said, one of the things we're looking at is can you get a small area of population, a small area of prevalence for the denominator but that CDC – I mean, that CMS has already adapted it to look at the beneficiary population for the denominator.

And Patrick, you might have more to say but I wanted to clarify the title and why it said lower extremity amputation among patients with diabetes, right? It's because there's an and statement. Patrick? Are you on mute?

Patrick Romano: I'm sorry. Yes, I was. But I don't really have anything to add. I think that, you know, the disparities issues are definitely critical issues for this indicator as well as for others. And, you know, historically, I think part of why this indicator is used is precisely to identify and expose disparity, which hopefully results in some discussion at local community level, at the state level and perhaps some efforts to address the public health resources to serve those communities better.

But, I think Pam as far as the adjustment or the diabetes prevalence that's currently not in the AHRQ software. Would that be something that's under consideration for future release?

Pamela Owens: Right. Right. So, there's – thank you for asking. Yes. We have some ongoing work to see if we can get, you know, at the county level what the prevalence of the diabetes is. It's, you know, we presented at several statistical conferences to see if it's feasible to do this without having the

claims data for instance that (markets) might have or CMS might have or some of the plans or payers might have as an alternative to the denominator. We are not ready to put that out to the public yet because we're still trying to see if it's possible.

Adeela Khan: OK. I don't hear anymore comments. So, let's …

Male: (Inaudible). One more. I think one general comment and I think this really should apply to all of our measures, to all of our teams that when we have our face-to-face meeting in the end of April, I think it would be important to see how folks go through the algorithms, looking at the validity and reliability and usability and feasibility as we help find – to help us to make our determinations about which of these measures we would like to endorse and I think folks have done a great job of setting out the algorithms and that this may help us when we see whether things are judged to be high, medium or low in reliability and validity, et cetera, that may help us when we do our determinations in their face-to-face meeting.

Adeela Khan: Thank you. All right, let's move on to our last measure, 0638, Uncontrolled Diabetes Admission Rate. The description for this measure is the number of discharges for uncontrolled diabetes per 100,000 population, age 18 years and older in the metro area or county in one time – in a one-year time period and we have Marcel and Jason. So Marcel, if you'd like to go first?

Marcel Salive: OK, thank you. Yes, that was a good description of it. I think this is another one that's an – patient/ambulatory (condition) so it's – I think this is the one or maybe they're all I guess combined in some kind of composite measure. I was not too clear on how it was – This one is – I think this is the diabetes. So they should be able to be kept out of the hospital for just diabetes without any of the other complications that gets some sort of the rationale for an end. The evidence for that was presented. I thought there was moderate evidence. The write-up based it – it's based on guidelines for diabetes care basically, as far as that goes.

(Inaudible) and it does seem to be – I think it was slightly declining over the last few years using that HCUP data from 2007 to 2011 and it has some

performance gaps and certainly, as was mentioned a couple of times before it has an age association higher above age 45 and increasing with age – in the higher age groups above that.

Comment I guess by the developer about racial and ethnic differences and I did not see the data on that either. I'm not quite sure where it is. Obviously, quite high priority and was mentioned that it was very costly one time when it was looked at I think in 2000. So I think, you know, certainly the high priority we've discussed at length already.

Patients they think it's like analogous to what was said that it's very well specified, very few exclusions and recently was updated to use the proper recent census age adjustments. The liability testing was done using HCUP data again and provides in five a reasonable assurance, I think, of reliability and that signal to noise method was described as having moderate reliability for the risk adjusted rate.

Construct validity was presented, (inaudible) against structural quality measures and that other validity correlations with – in particular the past performance so just sort of the year-to year correlations. I don't notice novel threats to validity.

Usability is certainly quite feasible. It's based on billing data and sometimes claims data. We've discussed the ICD-9 coding issue, electronic claims, data as the denominator and usability, it's used in numerous public reports including our CMS states so those are my comments. Jason?

Jason Spangler: Yes. I think I would agree with everything you said, Marcel. My comments were very similar. Again, I think it was addressed by AHRQ about the ICD thing which we'll have to look into and just another note, I think this is mentioned on – I thought this is on all the measures but again I would reiterate, the racial and ethnic disparities are noted in all of this but there's no quantitative data as Marcel mentioned on this and I don't think on any of the other ones. It would just be really nice to have that information because I would think it exists and from what I've read it does exist but it'll be nice to

have actual numbers around that but otherwise, I agree with everything that Marcel said.

Adeela Khan: Are there any other committee members who'd like to make any comment?

Jason Spangler: Actually, sorry, this is Jason again. I have one question that goes related to what Marcel was mentioning in the beginning. I know that there was a mention about pairing this with the short-term complications one, I think that's 272 and is there – I'd love to hear from the AHRQ folks about was there a thought of having a composite of all four of these?

Pamela Owens: Patrick, I'll let you answer this since you have actually a longer history with the project than I do.

Patrick Romano Yes, you know, there was a thought about it. It's a very good question. I can't say that I don't recall any specific effort to propose that your composite, it does make a lot of sense. I think we did some empirical work related to a cross indicator of PQI composite that would have included not just the diabetes, not just these four, but also other adult-related PQIs as well and that actually looks promising and performed well but the diabetes group was not specified as a specific composite but it would I think make sense to do so.

It is really important, especially for this measure that it not be viewed in isolation because this measure is really sort of what's left over after the other things that we've talked about today.

So the fact that the rate of this indicator is decreasing over time is not really reassuring because I think what's happening is that people are getting appropriately coded with the complications that they have and so they're ending up in the short-term or long-term complications group and not on this group of uncontrolled without complications. So it is important that people view these indicators together and that would be a potential argument for constructing composite.

Jason Spangler: Thanks, Patrick.

Thomas McInerny: Hi, Tom here. I agree, I could see perhaps choosing a composite with the two short-term measures together and maybe a composite with the two long-term measures. I don't think you could put all of four of them together, I think that would get really a little bit too complex would be my opinion anyway.

Marcel Salive: Marcel, I agree with you too.

Male: Yes. I agree as well.

Adeela Khan: OK. Elisa, you would like to?

Elisa Munthali: Sorry and just to let the committee know, although the measures have been presented to us as individual, separate measures understanding that there are some linkages between the two, what the committee can do during the in-person meeting when you're presenting your recommendations on these measures is good for the recommendations at the next time they come up review you would like AHRQ to see if they can construct the composite of the four.

Adeela Khan: Are there any more comments on the measure? On any of the four measures?

OK. At this time, (Amy), can we please open the line for public or member comment?

Operator: At this time, if you'd like to ask a question or have a comment, please press star one on your telephone keypad. We'll pause for just a moment to compile the Q&A roster.

There're no public comments or questions at this time.

Adeela Khan: Thank you. We'd like to thank everyone for joining us today, the committee members and the developers. As far as next steps though, we're going to be compiling today some discussion in to one workgroup summary that we'll be passing out to the committee members prior to the input of the meeting. So everything we've discussed today will be given to you in a concise manner.

If you haven't already submitted your reviews we would ask that you do so that they're included in the meeting materials and we have our last workgroup call actually on April 2nd so this coming Wednesday and we're going to be going over the six dental measures that were submitted to us by the American Dental Association. So again, just thank you to everyone who was able to join us today and we look forward to meeting everyone on April.

Just as a side note, everyone should've gotten a logistics e-mail for their travel from our meetings department. If you haven't please just shoot me an e-mail and let me know and lastly, Pam, I just looked at our SharePoint site. If you could please send all of the Excel, again just e-mail them to me, we'll replace the ones that are on the SharePoint site right now. It does seem to be that there is a problem with them.

Pamela Owens: OK. No problem. Thanks.

Adeela Khan: OK. Yes. Thank you very much everybody.

Male: Thank you.

Male: Bye.

Male: Thanks.

Male: Bye.

Male: Bye.

END