

NATIONAL QUALITY FORUM

Moderator: Sheila Crawford
March 24, 2014
12:00 p.m. ET

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

Reva Winkler: Good afternoon, everybody. This is Reva Winkler along with Vy Luong, Wunmi Isijola and Lindsey Tighe here at NQF. Thank you all very much for joining us on this call of this third workgroup.

Today, we're going to be talking about two measures, two very related measures. So, it's unlikely that we're going to need our whole two hours so feel free to use it if you want.

We have taken the preliminary comments that the workgroup members have submitted. And we've inserted them into the worksheets for both of these measures on SharePoint. So please free to take a look at the comments submitted by your colleague. So, I think we might as well go ahead and get started. So we'll start out with the first measure which is 642, Cardiac Rehab Patient Referral from an Inpatient Setting. And who's the lead discussant?

Female: Leslie Cho.

Reva Winkler: Leslie, are you on the line? Is Leslie here? Who's the second?

Female: Ellen. Ellen.

Reva Winkler: Who?

Ellen Hillegass: I'm the back up.

Reva Winkler: Great. Ellen.

Ellen Hillegass: Yes, I'm just (inaudible) ...

Reva Winkler: Do you like to talk about this measure?

Ellen Hillegass: Sure. I was just trying to pull up on SharePoint.

Reva Winkler: OK.

Ellen Hillegass: I did not pull that up to get the actual everyone else's input, so.

Reva Winkler: OK.

Ellen Hillegass: I was just working on that. Do you have it on your – oh, here we go. You have stuff here.

Female: Yes.

Ellen Hillegass: I guess, the first thing is I'm supposed to take the first question and talk to the group.

Reva Winkler: Yes, I think if you start with just a quick description of the measure and then we'll start out with the importance criteria starting out with evidence and your thoughts on that.

Ellen Hillegass: OK. So, primarily, this first measure is a process measure. And the process measure is measuring referral to cardiac rehab for individuals who have different diagnosis including bypass surgery, acute MI, stable angina, post valve surgery, angioplasty, and heart transplant.

And the referral is from an inpatient while the person is in inpatient setting. And referral to a cardiac rehab. And the measure is not the evidence provided was related to the evidence outcome of cardiac rehab. With an indirect links from referring to a cardiac rehab would mean that a patient would have good outcome from a cardiac rehab if they could get actually referred into a rehab.

So it's not a direct measure of cardiac rehab, it's an indirect measure of referring a patient to cardiac rehab and then cardiac rehab demonstrating good outcomes.

Is that correct from the workgroup, I mean, from everyone that's been working on this group? This is how you saw this?

Thomas Kottke: Yes, Tom Kottke here. Yes, I would agree, I mean, the rationale is if you don't get referred, you don't benefit from cardiac rehab and cardiac rehab has been shown to improve outcomes. So ...

Ellen Hillegass: Right.

Thomas Kottke: Yes.

Ellen Hillegass: OK. So then the question was related to the evidence. And the question was related to, does the evidence support the measure. And the first question was related to, if there a direct relationship between the measure and the outcome.

And my impression was is that there was an indirect relationship, it was not a direct measure of cardiac rehab outcome, but it was an indirect measure in that – at least if you got in the door of rehab, then you can have those outcomes. But the process was referring the patient to rehab. And so the evidence supported the outcome of cardiac rehab but didn't support the evidence of referring a patient.

And that's how I look at it. So I'd like to open it up to the group since I haven't look at all this feedback from everybody yet, how they all felt.

Leslie Cho: Hi, it's Leslie Cho. I reviewed the – right, I'm in charge of reviewing the inpatient one. And my biggest problem with the measure was just what you touched upon that I'm all for cardiac rehab, I know cardiac rehab does great things, I'm in charge of cardiac rehab at the Cleveland Clinic. But the lack of – I would like to see some hard data that if you have patients refer automatically that it does improve the actual enrollment, because that's really what's important. I don't want this measure to be something where, you know, we have like a dummy process where every single person gets a 100 percent

automatic enrollment but – I mean, automatic referral, but the enrollment still remains quite low.

So, is there a data – I don't know if the measure developers are on the phone with us, but is there a data that there is a substantial increase in the actual enrollment and participation when there's an automatic referral.

Reva Winkler: All right. So we have the measure developer with us?

Marjorie King: (Roloff), (Avas) are here. Randy, do you want to take that discussion with Sherry Grace data, or?

Randy Thomas: Yes, this is Randy Thomas, can you hear me?

Thomas Kottke: Yes.

Female: Yes, yes.

Randy Thomas: OK, great. Yes, just thanks for allowing us over the time. And thanks for considering the measures. The couple of points I just bring out, Sherry Grace from Canada has done a really nice job in a few papers, looking at systematic referral and enrollment patients in the cardiac rehabilitation, and has shown that when there's a systematic referral process in place in a hospital setting, that not only just referral increase, but enrollment also increases and her number show that if you have a couple of components when you have an automatic system in place and a liaison, or kind of a coach that helps the patient negotiate to a cardiac rehab center, then the referral – the enrollment rates or some of the range of about 70 percent to 80 percent.

The other line of evidence would be from registry data from the National Cardiovascular Data Registry from ACC and AHA, where we, I think, submitted the data to you that shows that over the last over years, there's been an steady increase in referral and there's – I don't think we include, there's a paper that's in process looking at enrollment and participation rehab which has also increased. So a gap, but there is evidence that it is increasing.

Leslie Cho: So, Reva ...

Ellen Hillegass: This is Ellen ...

Leslie Cho: ... Sherry Grace paper ..

Ellen Hillegass: Oh, sorry.

Leslie Hillegass: Sorry, go ahead, I'm sorry.

Ellen Hillegass: Oh, yes, this Ellen Hillegass. Randy, could you tell me if Grace – the Grace data requires both components, a referral ...

Randy Thomas: She looked at it at the ...

Ellen Hillegass: ... coach or did she only just require a referral?

Randy Thomas: Yes, she looked at it at the – either or and she found that the best combination would be to have both of those components, with either one of them being present, there was an increase as well.

Leslie Cho: What's the increase we're talking about?

Randy Thomas: The increase in referral and enrollment patients. So, if you have an automatic system in place throughout an increase, I forgot the exact number, there was a substantial and significant increase in referral and enrollment. If you had a coach in place, likewise, you had both of them, that was the optimal increase.

Marjorie King: This is Marjorie King. I can find it in about two minutes, I have it on the PowerPoint slide here in my office. And there's also been some evidence from the Mayo Clinic from Randy's group that incentives improve, not just the enrollment, but continued participation in cardiac rehab. Our groups or our workgroup's philosophy is that we need to get this referral measure down tested, specified, (benched), we're working on it, electronic specifications as well and then our next step clearly is the enrollment measure.

But we need to get this one right first, because you can't get – you can't participate in cardiac rehab unless you enrolled in cardiac – I'm sorry, unless you're – you can't participate unless you're enrolled and you can't enroll unless

you're referred so that's our big concentration right now in these two referral measures.

Steve Lichtman: Yes, I got the – I have the referral numbers actually, the enrollment numbers. Combined automatic in liaison, referral, resulted in a 85.8 percent referral rate, 73.5 percent enrollment, followed by automatic, only 70.2 percent referral, 60 percent enrollment, liaison only 59 percent referral, 50.6 percent enrollment compared with the usual referral which was 32 percent referral and 29 percent enrollment. So there's – and those response to how many strategies are used, but the strategies significantly and impact referral and enrollment.

Leslie Cho: So, are you referring to the – this is the Ontario Hospital data. This is the ...

Steve Lichtman: This is the base article Archives of Internal Medicine 2011. The second cardiac rehab referral strategies on utilization base.

Leslie Cho: OK.

Steve Lichtman: Yes, Ontario, Canada, that's correct. 2,635 (individuals).

Leslie Cho: Right, OK.

Steve Lichtman: So it's (big) study, 11 hospitals and a huge increase in both referral and enrollment.

Ellen Hillegass: But – this is Ellen. To compare this to this measure, we're not talking about coaching, so could you go back to the specific data for referral and enrollment.

Steve Lichtman: Yes, automatic only without the coaching.

Ellen Hillegass: But 59?

Steve Lichtman: What's that? Yes, automatic only with 72. – 70 percent referral, 60 percent enrollment ...

Ellen Hillegass: OK.

Steve Lichtman: ... you have two usual which was 32 percent referral, 29 percent enrollment.
So, virtually doubled in both categories.

Ellen Hillegass: OK.

Leslie Cho: So, is there a reason why – is there a reason why the thoracic surgery databases were not used and it was just more PCI related stuff that was used, just the ease of ...

Randy Thomas: If – are you asking for us to answer? The ...

Leslie Cho: Yes.

Randy Thomas: Yes, the answer, I would say, is that the STS database really doesn't include a referral measure for cardiac rehab, that's something we're working on. So we don't have good data. We have data locally from an example we looked at the Mayo Clinic data, we don't have national data on it.

Leslie Cho: OK.

Reva Winkler: Leslie or Ellen, anything more on evidence?

Leslie Cho: Well, I mean, I think for me the biggest problem I think was the referral to enrollment piece. And I agree with the developers that, you know, in order to get enrolled, you have to be referred and if we're doing a bad job referring then we can't be enrolling. But it did seem, you know, a little bit one step removed.

The other thing is that unlike Canada where there is, you know, a national insurance where cardiac rehab is covered. Here in the U.S. where cardiac, we have reimbursement is variable, you know, that's another thing too, so.

Marjorie King: Although – this is Marjorie King. Although, yes, it's variable but it's – at least we're in the Northeast here for us to have a patient not covered for some cardiac rehab, it's in the clinical practice guidelines and it's very difficult for insurance companies to say no to it. It's also in supportive measures.

Leslie Cho: So in, I mean ...

Thomas Kottke: Tom Kottke here, I'm – yes, I would agree and I'm not sure that coverage is relevant to the discussion.

Leslie Cho: Well, I think one thing is relevant – the one thing I do fear is, so let's say we have in 100 percent enrolled referral and, you know, and then once we're going to start – eventually the goal of this is to see enrollment increase. And at what point when we have such decimal enrollment, do we say, well, these enrollment is, you know, acceptable and this enrollment is, you know, because the goal is to get a lot of people enrolled, I think, is the goal.

I think, you know, referral is a process, but if the ultimate goal is enrollment, we're going to have to, at some point, think about what we consider an acceptable enrollment rate for, you know, practices.

Randy Thomas: So this is Randy Thomas again, I understand what you're saying. And I guess Marj mentioned initially when this group has put together and their original writing group was put together back in 2005. The goal was to keep things simple and to take first steps first. We all realize that enrollment and completion actually, you know, more important than enrollment as completion of cardiac rehabilitation, where the end goals.

But then we wanted to keep things as simple as we could to make sure we take the steps necessary to get to that endpoint. So, through – there was conscious decision made by the writing group, (John Spertus) and others, or (Neil Aldridge) part of that group with us, that we did, you know, talk about this and made a conscious decision to focus on the first step which would then be an important step toward the future steps.

I would say, I've participated with the Canadian group that is also developing their own performance measures, and they decided to go ahead based on pulmonary experience from the U.S. And would include an enrollment measure in the measures that they're developing. But they also have many others like wait time and some other things that are really relevant – as relevant to U.S.

But I guess, I'll just say that, you know, we hear what you're saying. We agree that enrollment is an important measure. We think the completion maybe the more important and that's we're heading toward that, but we want to make sure we get the referral piece down and referral as you probably can gather from your review of these measures. Referral is not so easy, but I'll make sure we get that down right.

Carol Allred: This is Carol Allred. And I have a question – I'm going to be reviewing the other measure and I have the same question there. Why not focus more on how do we get the physicians to refer as opposed to the actual? Are they in cardiac rehab part?

Marjorie King: Well, that is what these measures are very much focused on, is getting the physicians to make the referral and including this measure in performance measure sets for treatment of MI or post – percutaneous intervention, angioplasty stent, that sort of thing. Including this measure in those measure sets, really, will get the physicians to refer indirectly when they see their numbers out of registries and they see, "OK, I treat this, I get the blood pressures down in this percent of patients and I refer to cardiac rehab in that percent of patients."

These measures were directed at changing provider behavior, it's a systematic way of changing the provider physician or non-physician provider behavior. This is Marjorie King, by the way, I'm on the writing group.

Karen Lui: This is Karen Lui. This is Karen. Along with, you know, efforts simultaneously to continue to educate the physicians that these are 1A guidelines and it is the appropriate practice of care for these patients. So that's – we're also doing that.

Carol Allred: I was looking for some evidence of that as I was going through evidence.

Thomas Kottke: Yes, I would (inaudible), I'd make it a standing order which we've done. And why ask the physician to reinvent the system if – with every patient, I mean, just my point.

Randy Thomas: Yes, that's exactly right. And I agree completely with what Tom said, and that's really what the gist of the measure is as Marj, I think, was saying that this is, you know, encouraging systematic referral of patients. So that if there's an automatic systematic approach to refrain patients and that's – I think we're answered your question, if not, please let us know. But we – it was focused – these were focused on getting to the physician a referral making it an automatic and systematic.

Reva Winkler: Is there any more conversation around evidence, or would you like to move onto 1B, the opportunity for improvement?

Leslie Cho: I don't have any more questions.

Reva Winkler: OK. Leslie or Ellen, comments around opportunity for improvement.

Leslie Cho: Well, I mean, I think, you know, I firmly believe in cardiac rehab and all the great things cardiac rehab does. So I think the room for improvement, I think, is clear and, you know, evident. So I think in terms of, you know, my – I think for the rest of these measures, the feasibility and all the stuff, I think they're all great. And I think the measure developers – the compelling evidence for the need for improvement in cardiac rehab is well, you know, put up – it's well sat out by measure developers.

Reva Winkler: OK ...

Ellen Hillegass: And this is Ellen. I go along with Leslie. I agree that everything demonstrates the need for cardiac rehab, and demonstrates usability, feasibility, et cetera. So there's – I don't think there's any doubt in any of our minds about the need for cardiac rehab. I guess we're all sitting here wondering, "Is this the best measure?" And I think I still hear this on Leslie's voice because is there anything else if we think outside the box to try and get these patients enrolled in cardiac rehab.

And, you know, so, I think that's why we're all sitting here questioning because we see that there is a need, we see it's feasible, we see there's a true gap in care. We understand it's a high priority, it's a very costly coronary

disease and et cetera. But I think the question still goes back to, is there any other way to improve this whole referral process or to get them enrolled.

Marjorie King: Ellen, this is Marj. I think we're all – every single one of us is on the same page. We need an enrollment measure. But if we didn't also have a referral measure, we wouldn't know where the problem was. We wouldn't know if the problem ...

Leslie Cho: Do you think ...

Marjorie King: ... was it the provider level or at the patient level. And we wouldn't know where to focus our efforts.

So clearly, an enrollment measure has to happen and a completion measure has to happen. Completion is probably the easiest measure, because we can measure that within cardiac rehab programs. But the – figuring out who was referred and then who was enrolled is not simple. But we need to get that enrollment measure – that referral measure down first.

Male: Yes.

(Crosstalk)

Marjorie King: So I would encourage you not to throw out this, maybe it was a (bath) wash.

Leslie Cho: No, no, no, I agree, I agree. I just want to, you know, put our Cleveland Clinic experience out there. When I took over, we actually made bypass and PCI an automatic referral to rehab. And that was one of the key things we did across the end of – across the main campus and the enterprise. And actually, our enrollment really took a minimum improvement, minimum improvement. And so I think that we should – I mean my gut sense is that I think you're right, we have to, you know, do this in order to do the other thing.

But I still am afraid that the referral – the automatic referral will become an automatic referral, in fact, do you remember when we used to require them to have a heart failure education handout? And they got the heart failure education handout, it was all checked. But the patients were getting all these

papers without really understanding what it was, what was the true intention of those things. You see my ...

Marjorie King: Yes, I see you ...

Randy Thomas: Yes.

Marjorie King: And the – the other thing in our measure if you read it deeply, is we really have that communication piece in there to try to mix the measure, have a little more meat, you know, that the program needs to communicate with – I'm sorry, that the referring hospital or provider needs to communicate with the accept – accepting cardiac rehab program as well as with the patients in order to facilitate communication to increase the likelihood of enrollment, so ...

Steve Lichtman: Yes, I – yes, this is Steve Lichtman, I'm sorry, I didn't introduce myself before. March brings out a really important point that when you look at the full measure, an automated referral system that just provides a piece of paper to the patient is not satisfied to referral measure.

The measure requires the communication element, and that's really the key because without communication, you're absolutely correct. The piece of paper is not going to get so many into cardiac rehab along with their other 20 pieces of paper, they get on discharge, you have to open a heart surgery or whatever it might be.

So, when you look at the measure, it's a whole which includes the communication piece, really the (inaudible) significant tool with the physicians to be educated and not just to refer to cardiac rehab. But also, how to refer to cardiac rehab and Karen brought that up before. And I think that's key for us to appreciate in this measure. It's not just a piece of paper ...

Leslie Cho: But where is the communication – I'm sorry if I missed it, but where is the communication piece in the measure?

Randy Thomas: Yes, the – we can pull out the exact location maybe if Karen or Marj can look. But basically, there are three components to referral and this is really kind of reflection of Sherry Grace's work and (Philetus') work and others. So, one

component is, this show there is an order for referral, that second piece is – there has to be the – this has to be communicated to the patient. And then the third piece is that there has to be communication to the receiving program. So those are the three components that are written into the – to the measures. And – because we agree completely if it's only if there's any mention of referral, yes, that's probably helpful, but it's not the same – it doesn't have the same key to it. Because if you make sure there's a connection to the outpatient program, it'll be even stronger when we get the enrollment measure. No question about it. But this is an important first step.

Steve Lichtman: Yes, and I think I've found what I'm – what we're referring to. It's in S.6, I think it's an S.6 numerated detail. A referral is to find as an official communication between the healthcare provider and the patients who recommend and carry out a referral or to (inaudible).

This includes a written or electronic communication between the healthcare provider or healthcare system and the cardiac rehab program, and includes the patient's enrollment information for the program. And it goes on for more, but I don't want to read the whole thing.

Leslie Cho: But see – but that's – it is, I mean, I mean, I guess one can read that in many ways, you know what I mean.

Thomas Kottke: Tom Kottke here. It's obvious that getting patients to enroll or be referred to enroll and participate in complete cardiac rehab is a multistep process. And I think asking the question, which step is most important or which isn't very productive, Leslie, your experience at Cleveland says while it's, you know, its not referral, it's not the problem in Cleveland. Referral was the problem here in Minneapolis, in Saint Paul.

And, all of those steps have to be satisfied to complete the transaction. And we need this one step, even though it's not going to satisfy the whole transaction.

Reva Winkler: This is Reva again. I guess, I'd like to hear your thoughts on that data on the disparities, that was presented.

Leslie or Ellen, did you have any thoughts on that?

Leslie Cho: Well, no. I mean, there's lots of data about women and women getting less – getting to cardiac rehab less. There's lots of reasons and – but, I mean, I don't really might – I don't really have a problem with the evidence that was presented.

Reva Winkler: Yes. I was looking at the one – another part of the performance gap which could be in disparity.

Leslie Cho: Oh, you mean that woman are getting less cardiac rehab, minorities get less cardiac rehab, you mean this thing?

Reva Winkler: Yes. And has this measure – and ask the developers. Is this measure have any capacity to stratify for those disparities?

Randy Thomas: You know, as it's laid out right now, we did not specify the – had to be reported my disparities. But, its, you know, we would hope that – centers look at their referral data and see that they're not at the, you know, high levels of referral that they'll be looking at the – within their own patient population to figure out where their gaps are occurring. It's certainly amenable to, you know, to using disparity cut down or a breakdown. But, we did not specify that. Again, we want to keep this really simple.

Ellen Hillegass: This is Ellen. I saw the result of gaps in diagnosis. And I think the most amount of data you provided was related to coronary disease, stable angina, MI and bypass, knowing that the other diagnosis are newer to the national coverage determination. But I also wonder if there are gaps and diagnosis. I wonder if the valve surgery, the transplant are all being referred at an equal rate.

Randy Thomas: Yes, there's not – a great question, I know there's many studies, we have a paper that we published recently on combined CABG and valve surgery. And we found that other referral rates are fairly similar to other surgical patients.

But the one group that we think is probably more difficult to entertain and probably is getting referred even less often, would be chronic stable angina patients. And that's part of the biggest gap that I would see by diagnosis.

Marjorie King: Although that information was included in the (sway) of paper.

Randy Thomas: Yes, that's true.

Female: Not really.

Randy Thomas: But it didn't look at the valve only. There is a very little in valve and we have a paper that's actually in process. Again, valve only patients but, the valve group is not well studied and then the transplant group has not been well studied either.

Steve Lichtman: And I also think – this is Steve again. One of the overlying arcs of this is that the performance measure itself applies to everything we've spoken about, whether (inaudible) minorities, valve, PCI.

I think getting those populations in more on the education and more on the, you know, their illegible. We can do this, it serves everybody. But the measure itself really doesn't discriminate among diagnosis or anything else. It's applicable for all population.

I don't think – if you look at in reverse order, the measure would not preclude or include one group over the other, more of an education, I believe, that the physician want to get in with every eligible patients and that's the measure.

Carol Allred: Hey, this is Carol Allred. And I just have to speak up because I've been doing women for so long. And when you look up on literature search on referrals, there was a certain difference in referrals of some of those minority groups. Women less educated, the older Medicare patients, people in some of the Southern States, the referrals weren't as great.

So, I think stratifying that and letting some education go forward to the – in physicians would be a wonderful thing, and I'm always in favor of that.

Steve Lichtman: Right, educational (stake).

Karen Lui: And there has – this is Karen. There has been some good data looking at the disparity, particularly, with women populations by (Theresa Becky) and (Bonnie Anderson).

Female: Yes.

Karen Lui: ... you know, that's off what was asked for in this. But, the point is that we had the opportunity to look at disparities because of the, you know, with the utilization of the referrals and measures, so.

Female: Right, and you could ...

Karen Lui: ... suggestion another one of those good next step, yes.

Female: Yes.

Female: OK.

Steve Lichtman: Yes, and this – and Marj and I actually wrote a little review paper on women in referral to cardiac rehab. And one of the education opportunities for physicians is that the barriers to enrollment, not referral, but the barriers to enrollment are different among women and among men, and I'm sure among other groups.

So, I do – as you stated, the education piece (inaudible), the education component is key. But the way I look at it is you got to get everybody referred first. And then, there are other barriers to enrollment.

Female: Yes. And I agree with that hard to believe. But, there isn't – there are some papers that talked about the referral process for those groups being less. And I think that's an area that stratify in the data could well help highlight.

Reva Winkler: OK, this is Reva. Does everybody feel you've had an opportunity to cover and discuss all of the sub-criteria of important to measure and report, anything more in evidence, performance gap or priority?

I think it's been a very robust discussion but, if not, perhaps, Leslie and Ellen, we can move to scientific acceptability of the measure properties, the specifications and the testing for reliability and validity.

Leslie, your thoughts?

Leslie Cho: Well, I think it's a very valid measure and I think though it's, you know, I think in terms of validity and reliability, I think it's extremely reliable because you're going to use EMR. You're going to, you know, use the PCI and CABG diagnosis inpatient. And then, be able to see how many of the patients were referred.

The stable angina patient, you know, that's kind of a tricky one because most of them will not be hospitalized. But, patients who come in with on stable angina or patients who come in with PCI or bypass, for sure, you're going to catch all of them.

So I think it's extremely valid and reliable, and feasible.

Reva Winkler: Did you have any thoughts about the specific reliability testing and the testing results that the developers presented?

Leslie Cho: No, I think those are all on the mark and good.

Reva Winkler: Ellen, any thoughts from you?

Ellen Hillegass: As far as the reliability, when the question was related to the data, it seems like the majority of the data provided was from the PCI data. And it seemed like there was limited data on others.

And I understand the difference with not having as many chronic stable angina patients. But it just the data was a little bit limited in other populations. As long as the data for the one population carries over to the other, then it seem reliable.

Marjorie King: Yes. And – this is Marj. One of the – and I'm sorry if I wasn't allowed to barge in here. But, that was the reason that we have both the inpatient measure and the outpatient measure is that, most patients with chronic stable

angina are being followed in an outpatient setting. And, those patients would be picked up within the PINNACLE data registry as opposed to the other registries that ACC/AHA do which is they actually get with guidelines for MI and the PCPI registry for PCPI. And yes, we're pursuing the STS registry. We'll be – we're working on that right now, but it's not part of that registry yet.

Reva Winkler: This is Reva. I just wanted to clarify that this measure was tested at the hospital level in three different samples, either the hospital or with the registry, or with the two registries at the data element level as well as at the measure score level. So, testing in both levels is particularly good. The one thing I want to clarify with the developers is it looks like the testing was done at the hospital or facility level of analysis rather than at, say, individual practitioners or groups, is my assumption correct?

Randy Thomas: Yes, that's correct.

Reva Winkler: OK. So then what we have is this would be a measure endorse at the facility or hospital level. OK. Any thoughts from anybody else on the workgroup about the science – their reliability testing? Then are there any comments around the validity evaluation which was done primarily through face validity, or any questions about how well the specifications match the evidence that was provided.

Leslie or Ellen, anything on that?

Leslie Cho: No. I have just a quick question about the denominator issue, you know how the exclusion criteria. So, in terms of patient, 60 minutes away from cardiac – near cardiac rehab center, if they got discharge to, you know, a long-term care facility, you know, if they had overwhelming medical condition that could not make them going to rehab.

Are you going to also – what about patients who are self pay, or like community hospital – I mean, for county hospitals specifically thinking about for patients who are indigent, who cannot – who don't have coverage?

Randy Thomas: You know the, you know, I have to look at the wording again. And certainly, there is flexibility in what would be considered in those exclusion criteria, but

the lack of insurance covered would be an acceptable one from my perspective, and I think the rest of the report would agree.

I think one thing that'll be evolving overtime as you, Leslie, and others around the country are looking for new ways to extend cardiac rehabilitation to people who are far away from a center with, you know, new technologies, that's going to change this measure a bit. And we're not quite there, we want to make sure that people who can come to a center are being referred, but the, you know, the new technologies are going to help us evolve this measure overtime.

Ellen Hillegass: Well – and Leslie, along with that same line, this is Ellen, I did have some concerns about the 60 minutes of travel time. And I know you have to set a guideline and there was something in there related about 60 minutes and I can't remember off the top of my head. But I do know when you're talking about some of these older populations, 60 minutes is quite a long distance if they're not even the one driving, except they were lying on other people. So, I was concerned about the exclusion of the 60 minute, you know, travel time.

Marjorie King: Ellen.

Ellen Hillegass: Go ahead.

Marjorie King: This is Marj. We actually – when we submitted this for endorsement, we had time limit in endorsement and then we needed to just submit it. It feels like about a year ago, might have been 18 months ago. In that application, we explained rationale for the 60 minutes and it was based on the brand, I sway it – sway of data that showed that the real drop off in enrollment in cardiac rehab was at a certain amount of miles, and we've sort of figured out how many miles per hour the average person drives, et cetera, et cetera, it came up with 60 minutes. That 60 miles was based on the (sway) of data, and that was the only data we had to based it on – based on what correlates with likelihood of a patient actually enrolling in cardiac rehab.

I mean, we're open to changing that if you want to change, but that was based on data. And that was explained in the last measure submission.

Ellen Hillegass: Yes. And then the other thing I wanted to make a comment about was the numerator. Statement where it goes into may include other options such as home-based approaches. And – but I didn't see any data or evidence that talk about other home-based approaches or such as hoping for the future kind of option ...

Randy Thomas: Yes, this is Randy Thomas. I'm sorry, I'm going to have to sign off after making this comment and giving a Webinar just a couple of minutes. This is exactly right. That was to leave some flexibility for the non-traditional programming. We don't have data for non-traditional programming, but we wanted to make sure that we didn't make it look like we were excluding non-traditional programming. But the – so in the data, we have our referred traditional programs.

Ellen Hillegass: OK.

Leslie Cho: That's all I have.

Reva Winkler: OK. Any other thoughts from any of the other workgroup members on the sub-criteria for scientific acceptability? Anything about exclusions or the testing specifications? OK.

Female: No.

Reva Winkler: All righty, I know that both of you touched a little bit on the left criterion, criteria, feasibility, usability and use. Was there anything more you wanted to add?

Female: No.

Reva Winkler: OK. Anything from any of the other workgroup members?

OK. So any other thoughts on this measure because it sounds like we pretty much covered everything. If not, we can go onto the next measure which is extremely similar. 643 is essentially a referral to cardiac rehab from the outpatient setting. So perhaps, we don't need to repeat the things we've talked

about that apply to both, but we could talk about the areas where they might be different and the need for two measures. So who's our lead discussant?

Thomas Kottke: Tom Kottke.

Reva Winkler: Oh, hey, Tom. How are you?

Thomas Kottke: Good, good. Well, how are you? Right, the – I would consider that we much talked about this. And I think this will – I mean, this measure will reveal even more Leslie's observation that referral is not enough. And all right, so – but we need to have referral and some measure in order to go back that layer to find out what the other barriers are.

The need – it's huge only around 10 percent of patients who have not – who would qualify but have not had cardiac – or would qualify for cardiac rehab because in event do get it. The benefit is there, they've demonstrated reliability of – on testing, retest of chart abstraction. And so, I don't see that there's a lot of other discussion that we haven't had with 642.

Reva Winkler: Tom, this is Reva. How would you describe the real difference is in the two population?

Thomas Kottke: Well, these are – I mean, the – I would say, these are people who have escaped from the system. You know, and these are going to become more and more frequent because, I mean, for example, we're doing the same day discharge with STEMIs here. I mean, if they come and they're early in the morning, put a stent in and they don't have left and triggered this function and they're stable, they may go home that evening which is, you know, which is just shocking and we're doing the same day discharge for unstable anginas. And those people are unlikely, you know, or I believe are less likely to enroll even if referred. And so, there needs to be a second wave of referral and that's from the outpatient setting.

I mean, it's basically the same patients but patients who have escaped from the system and have not gone through cardiac rehab. And that's not meant to be (majority) off about the patients, it's just, you know, for some reason they haven't enrolled.

Leslie Cho: The other patient population I was thinking is maybe the heart failure because the current CMS, you know, prove heart failure ...

Thomas Kottke: Yes.

Leslie Cho: ... for cardiac rehab and you have to have stable heart failure medication, whatever all that means, for six months in order to, you know, get in to cardiac rehab. So, maybe it's that population also that, you know, this measure can sort of address.

Thomas Kottke: Yes. I would expect that the case mix will be different on this measure than (62).

Reva Winkler: Do we have someone from the developer do – would the patients that Leslie was referring to with heart failure, would they be captured in this measure?

(Crosstalk)

Marjorie King: Yes, this is Marjorie again, and Karen can add the regulatory issues, I can add the clinical issues. Yes, and I can keep saying to Randy, we need to add a heart failure to this measure and then he keeps reminding me, "Yes, Marj, but first we have to collect the data to show that the measure is – can be used that we have to collective – the validity and reliability measure data in order to resubmit it to you all. Having the diagnosis of heart failure but, yes, this measure is useful.

I've seen three in several different groups. The groups that do not have referred from an inpatient's setting, the group where the custom in the community is for the doctors in the offices, the cardiologist in the offices, to make the referral. That's the custom in our community here. We get our referrals from the outpatient setting, most of them. Or, for the chronic – more chronic patients like the heart failure or the chronic stable angina patients.

And so, this measure was not only developed as a kind of mapped up measure, but also for communities where most of the referrals are done from the physician's offices or clinics. And also where the chronic stable angina, and

in the future, it will be for the heart failure patients. We just have to collect that data first.

Steve Lichtman: Yes, this is Steve Lichtman, and I work with Marjorie and Ellen Hillegass or I mean, it's clearly not a mapped up measure, there is – in our community, I do the direct intakes of the patients enrolling. And 90 percent – 95 percent of the patients are referred from the outpatient setting. We get very, very few inpatient referrals here in our community to ensure we're not totally unique in the United States.

So, while it is a measure that will pass others, as stated, I also think it's a measure that will catch referrals that are necessarily important and significant.

Marjorie King: And the process changes that you have to derive in a physician's office are different than the process changes that you have to derive in a hospital. Although, as EMRs aren't become more embedded in physician practice as one could think of why you could do an order that would generate the facts that would – or make it likely for a patient to enroll, but a lot of process changes have to occur.

Karen Lui: And this is Karen. I would add, I guess it's actually fortunate in hindsight that we did develop both measures. You know, we did not know that the heart failure measure would come down from Medicare with a six-week waiting time that actually came from some heart failure action. Entry criteria in CMS just stuck with that rather than with real world, probably, application.

However, we can live with that and the all the more important for that automatic referral in the hospital and then the liaison referral in that six-week gap while we might bring the patient and begin teaching whatever before we can officially enroll in the exercise aspect of the early outpatient. But it's – that this group, particularly, that will – the outpatient measure will be relying on that one.

Female: Right.

Ellen Hillegass: And this is Ellen. For clarification, your data is very low compared to the inpatient which is understandable knowing the (beast). But there's a concern

about implementation of this since not everyone is EMR. And you don't actually have a formal mechanism for implementation really.

Marjorie King: Well, I'm not quite sure I understand what you're getting at. Although, we are beginning to test these measures for electronic specifications are – or (inaudible) here was our reliability and validity measures were tested with people either looking in EMRs or looking in paper records. And I think one of these things you're talking about is a problem across many, many performance measures and that EMRs dumped well into registries.

And again, I maybe misunderstanding your question. I don't know if Steve, if you can shed any light on this.

Steve Lichtman: Yes. Yes. I actually interpreted a little differently. And Ellen, please tell me if I'm incorrect. I interpreted the question as in the inpatient setting. One of the processes to improve referral and an enrollment would be to implement automatic referrals which are more difficult than implementing the outpatient setting. Is that your question or am I wrong?

Ellen Hillegass: No. I guess, when we are asked for, if the testing (were) adequate to generalize for widespread implementation. Your data is very low. And so, could it be wide spreadly – could it be widespread implemented? Could this occur in multiple different settings in the outpatient versus a hospital setting as a little easier to implement something?

Karen Lui: And Ellen, let me – this is Karen. Let me say, I – you're right and I think we're optimistic that now that the outpatient referral measure is included in the PQRS program, which just rolled out in 2012. We will be able to get our hands on more data and to, you know, address what you've observed.

Carol Allred: This is Carol, and I looked at this measure, too. And I had a concern about the data. My concern was that, in an outpatient setting, there are so many different EMRs and they don't communicate with one another. And so, how do you find out whether the automatic referral is happening or the data is getting reported properly, if someone has to manually sit there and pluck off the information off their EMR in order to report it. You've got a lot of room

for error and quite frankly in a basic practice, it would be hard for them to dedicate the time to do that.

Marjorie King: I would imagine that it would be one of the measures that you would set up on your dashboard, like you might set up blood pressure or any other measure. It's the amount of working with the HRs, but I don't know that this problem is unique to our measure. I may be just a girl scout here, but if – when I was at the – recently at the PCPI, MAPCPI, meaning, it was one of the themes of the registry groups was the problem with getting EMRs to talk to registries in the EMR to talk to each other, but I'm not sure it's unique to our measure.

Carol Allred: It is not unique to your measure, but it certainly will affect the data that you're getting.

Marjorie King: Correct.

Leslie Cho: So I have a practical question. It's Leslie, sorry.

Female: I'm sorry.

Leslie Cho: I have a practical question and that is, let's say a patient A get a PCI and get automatic referral from his inpatient. And goes in season, his private cardiologist somewhere, he's got a referral.

Female: Right.

Leslie Cho: And yet, because he saw this, you know, his new – his regular cardiologist in the office, he's not going to be referred. How is this going to – is, you know, whose – where is the check so that, you know, you know what I'm saying?

Marjorie King: Right. It's the measure ...

(Crosstalk)

Marjorie King: ... is an exclusion. It's an – so, in other words, if you – obviously when you're in the office, I've worked in – worked in office practice. When you're in the office, you say to patient, "Did you get a referral to outpatient cardiac rehab?"

And, "Yes, I did. I'm going tomorrow." Then that patient is not counted. That patient is excluded.

Leslie Cho: So I know, but when you're going through the EMR, you're looking at the EMR record.

Marjorie King: Right. OK.

Leslie Cho: And you're a busy clinician, you forgot to document. You know, I – this patient is going to cardiac rehab in XYZ tomorrow.

Marjorie King: Right, right.

Leslie Cho: And they're now add it in the chart, it has nothing on there. How is anyone going to know that this guy was referred when he was an inpatient?

Marjorie King: Right. So you will learn quickly, like you do with all your other measures to quickly document it. It will put cardiac rehab friend of mine. Remember, the next ...

Leslie Cho: I think that that's not the right answer.

Marjorie King: So ...

Thomas Kottke: Why is – why is – I don't have time to give good care. I mean, it's acceptable.

Leslie Cho: But the thing is, is that, you know, part of these measures – I mean, you know, we're all physicians. We all run a very busy practice to all of us. And so, in some respect, we have to help the physicians out a little bit, too. You know what I mean?

Marjorie King: Right, but ...

Thomas Kottke: But if we accept the premise that referrals to cardiac rehab, conservatively, according to the data we've looked at in terms of 1A, 1B whatever it might be, incurs a 20 percent, 25 percent, 30 percent mortality benefit down the road, equal to many of the interventional technique, equal to or exceeding many of

the medications being used, and I'm speaking to (inaudible), I'm a PhD not an MD, so you get highest there.

But if we accept that and I don't know who said it on the call, but somebody just said, you know, we have to accept that as something physicians were not excuse from excluding, because they're busy and this measure will bring it to the forefront ...

Leslie Cho: Oh, but that's not my ...

(Crosstalk)

Leslie Cho: ... none of us are arguing or discussing the merits of the great and wonderful merits of cardiac rehab we have, I am all for cardiac rehab. I guess, what I'm asking is just a practical aspect of this measure. I am not denying the benefits of cardiac rehab so we don't even have to put through that data again. But what I'm asking is, if a patient gets referred in inpatient and he – and so that is a 100 percent from that, then now he goes to his outside physician and there is no document because these two EMRs don't talk, I don't want the practicing physician to get penalize.

And – but what is the – since the measure developers, I understand the intent of it for people who'd somehow didn't get inpatient referral. But let's think about the opposite, people who did get inpatient referral and then goes to see a – their regular doctor.

Marjorie King: It would probably be very similar to the flow in your office practice that has – that at least in the office practice where I work, was that the push and put the patient in the room would ask the question, "Are you smoking? Yes or no?"

Male: Yes.

Marjorie King: Check the box. Did – have you been referred to a program, yes or no? Check a box. These are systems and processes that you could work with your office staff to have done upfront, the post MI, are they on an ACE, you know, are they taking aspirin, I mean, we used to always get to write down aspirin in the office until the people who put the patients in the room had that as a check

box, and we remembered and you could do the same sort of thing for cardiac rehab, did you get referred to cardiac rehab, yes, no. This is about driving process changes in physicians' offices in order to get patients a service which has significant improved outcome, so that – the measure is to drive system changes to something that is tightly linked to improved patient outcomes.

Steve Lichtman: But also to directly address Leslie's concern, and I hear that you don't want the outpatient physician penalized and I totally agree with that. Let's take worst-case scenario. Patient was referred for outpatient cardiac rehab, somehow was not noted at the – in the EMR or the EMRs don't communicate. And the outpatient physician refers them because they don't think they were referred, that physician is not going to be penalized and there's nothing wrong with the patient hearing it twice.

Marjorie King: Right. It's in the measures – the measure ...

Steve Lichtman: In the measure.

Marjorie King: ... is adapt that – don't penalize him because he's been referred already, that's in the measure. That's the way the measure is written.

Steve Lichtman: Correct.

Leslie Cho: So but if he does ...

Thomas Kottke: So when the – when the document says, "Oh, I'm going to refer you to cardiac rehab", the patient is going to say, "Oh, I've already been referred in, doc" (inaudible) ...

Steve Lichtman: Right. And if they don't, no harm done.

Thomas Kottke: ... and I think the office system suggestion is there. I mean, I just, you know, for cardiologists who are able to figure out how to stent lesions that don't need stenting, I think they can figure out how to check a box that's says a patient already (inaudible).

Carol Allred: Yes, this is Carol. And I have to say from the patient's standpoint, if I were referred to cardiac rehab from the inpatient standpoint and I go to my regular

cardiologist and he never mentioned so I might decide that this isn't a really important thing for me to do, because my own cardiologist didn't bring it up. So I'm thinking educating the cardiologist to always reinforce the importance of that is a good part of this measure.

Steve Lichtman: Yes.

Marjorie King: You know what Carol, it actually, that makes a lot of sense to me, that's a good point.

Carol Allred: Yes.

Reva Winkler: OK, all right then.

OK, folks. We pretty had a thorough discussion about these measures, is there anything else anybody wants to raise about them?

Carol Allred: Well, this is Carol again. I have to bring up the stratifying the data for disparities, and you're going to hear me do this all the time. This one is really important ...

Thomas Kottke: Yes, I ...

Carol Allred: ... to the people that need to be gotten, too.

Thomas Kottke: Yes, I agree. And I think that's the role of the cardiac rehab advocates to publish those data and, I mean, what we've done with disparities here is collect the (race) and ethnicity data, and make conscious efforts to close those gaps. And I think the folks that published in cardiac rehab will probably push that forward. It's important to push forward and I ...

Steve Lichtman: Right.

Thomas Kottke: ... would hope they'd push it forward.

Carol Allred: Yes. I saw more information from some of the journals of cardiac rehab survey showing the disparities than I did from some of the other studies that were presented.

Marjorie King: Right. I think it's such a – it's more Marjorie King again. We clearly get that. And our cardiac rehab program registry clearly wants – is tracking that. I think we get confused between stratifying and risk adjusting. We're making the point, we don't feel this measure needs to be risk adjusted, because everybody should be referred. We are very much in favor of using data collected from these measures to figure out where the gaps are.

And I think it's just I don't understand the statistical terminology or – and the NQF terminology behind that, is that if – did I get that or do I have that concept wrong?

Reva Winkler: Well, this is Reva, and I think stratification is commonly used when you breakdown group by whatever characteristic, and look at the results for those different groups and it is distinctly different from risk adjustment where you're actually taking it – those factors into account and adjusting the actual result.

Marjorie King: Right. And we would have absolutely no problem with adjusting any submission or anything on our submission there to say, "Yes, sure, of course, we're going to stratify it." And we, in fact, did stratify the way that we presented data to you about how the referrals sort out with respect to age and sex and ...

Steve Lichtman: Yes, we presented stratified demographic data.

Marjorie King: Yes, we did and race, that's all in there in the – what which validity or reliability. So, basically, the registry data, it's all in there.

Male: Right.

Reva Winkler: OK. Any other thoughts from any other workgroup members?

All right. One thing we do want to do – I don't know if there's anyone else listening in, but an opportunity for public comment from anybody who may have called in with an interest in hearing the discussion.

Operator, we do have all lines open, isn't that correct?

Operator: Yes, all the lines are open.

Reva Winkler: OK.

Marjorie King: I would ask ...

Reva Winkler: Go ahead.

Marjorie King: ... if anyone from ACC staff has anything they want to add.

Reva Winkler: I'm not hearing anything. It sounds like there's no comment?

(Jansen): Reva, this is (Jansen), ACC staff.

Reva Winkler: Hi, (Jansen), hey.

(Jansen): How are you? The only thing I – the only thing I would add is just in terms of operation, this might be ignorance on my part. But, would it be helpful also to resubmit the previous data that we submit – sent to your team a year ago to the CSAC? When we were reviewing the time-limited endorsement, we sent a packet of data that does clarify a few points that was brought up earlier.

Reva Winkler: It probably – we could put it as an addition to this ...

(Jansen): Yes.

Reva Winkler: ... if you were.

(Jansen): OK.

Reva Winkler: Anything else from anybody else?

Carol Allred: I had one question about the reliability testing. You talked about the test sites being described as six outpatient practices, but it look to me like those sites were hospitals, is there is a dichotomy there? Because there would a difference in the reliability from a hospital and from the outpatient setting, perhaps.

Marjorie King: Actually, Steve or (Jansen) could probably answer that best, but – because they were – that was with through our CR3 measure. We did test – we used different sites to test the inpatient measure versus the outpatient measure. And we clearly had physician practices or group practices in the outpatient measure, but I don't remember anything more specific to either you, (Jansen) or Steve, remember?

Steve Lichtman: They were clearly physician practices (by) an outpatient setting. Anymore than that, I would have to (inaudible) actual ...

(Jansen): Yes, the Dr. Lichtman and Dr. King's point, I think there were seven outpatients and six inpatients; off the top of my head, I don't recall all of them. But we can definitely list those and send them to you guys.

Steve Lichtman: Yes.

Carol Allred: OK, I just want to be sure they were tested on outpatient practices.

(Crosstalk)

(Jansen): No, (inaudible) definitely were, definitely were but great point.

Carol Allred: OK. But you described it as hospital sites, and I didn't know if that was confused between the two measures or not.

Marjorie King: It's possible, it was a typo.

Steve Lichtman: Yes.

Marjorie King: If you caught something ...

Steve Lichtman: But they (inaudible).

Carol Allred: OK.

Reva Winkler: All right. So the last – anything last for anybody and we can give you back to some of the rest of your hour?

All right. Well, to the workgroup members and to our developers, we look forward to our meeting in April.

If there's – if you have any questions along the way, feel free to get in touch with us. Otherwise, thank you very much for joining us today and have a good afternoon.

Male: Thank you.

Male: Thank you.

Female: Thank you so much.

Male: Thank you.

Female: Take care, everybody.

Female: Thank you.

END