Improving Diagnostic Quality and Safety/Reducing Diagnostic Error: Measurement Considerations Orientation Web Meeting

Moderator: Kim Patterson
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1:00 pm ET

(Desi): Good afternoon everyone. Thank you for joining. And we'd like to welcome you all to the Diagnostic Quality and Safety: Reducing Diagnostic Errors orientation call.

And at this moment I will turn it over to Jean-Luc who will lead us in an overview of our agenda for today.

Jean-Luc Tilly: Thanks, (Desi). Yes, hi, I'm Jean-Luc Tilly, senior project manager on this project.

So I mean, first, you know, welcome, thank you all for volunteering your time and your efforts for the next few months. We're really excited to have all of your expertise, your experience in diagnostic care. I know many of you (unintelligible) I'm sorry we're getting a little bit of an echo. Could you all mute your lines? Thank you.

So, many of you serve on the Diagnostic Quality and Accuracy project that NQF ran a couple of years ago that published its final report in 2017. So, some of you, welcome back. And we are really excited to continue the work that that committee started.

To that end, today, the orientation Web meeting. So, first, you know, for those of you who are new to NQF and as a refresher, in case you haven't been very closely following our activities the last couple of years, we'll give you kind of an overview of NQF and then an overview of the project we're doing here, you know, specifically, you know, looking back at the framework, so, to help us to (unintelligible) diagnostic quality and accuracy group a couple of years ago and, you know, conducting an environmental scan to look at different possible provisions of that.

And then, you know, the application of that framework and other kind of strategies to reduce diagnostic errors across four different use cases, which we'll speak to more about, (we'll have) an opportunity to discuss those as well.

And then, you know, finally we'll have an opportunity for public comment and the chance to share our SharePoint page with you and, you know, kind of touch-base on a few housekeeping items, and go over the schedule for the forthcoming meetings (unintelligible) the project.

So with that, maybe let's give a second for the project staff to introduce themselves. I'm Jean-Luc Tilly (unintelligible) Andrew.

Andrew Lyzenga: Hi. Andrew Lyzenga here. I'm a senior director in quality measurement department at NQF. I've been at NQF since about 2009 or so. I had worked across a pretty wide variety of our projects, focused a lot of my work on patient safety issues. Before I came to NQF, I had sort of a policy background

and worked on The Hill for a bit and (had) some professional healthcare associations.

Very excited to be working with you all.

(Desi): And hello, I'm (Desi) (unintelligible) I'm the process analyst on this project. And I'm excited to be working with you. I've been here at NQF for a little over three years. And this is my second framework. I actually was able to participate in the home and community-based services framework a few years back, and so I'm excited to dive in and (unintelligible).

Will turn over to (Jesse).

(Jesse): Yes. Hi everyone. (Jesse Pines). I've been a consultant to NQF since 2011 on a variety of projects, patient safety, emergency care, and health information technology. I feel very excited to be working on this. My background on the emergency physician health services researcher and I do this part-time to work clinically in ED. And I'm the head of innovation for a large physician group in my other workplace. But, yes, very excited to be working with everyone on this.

(Desi): Thanks, (Jesse). And at this time I'm going to take a quick roll call, just so that we know who is on the committee and who we actually have on the line. And we're just going to allow you an opportunity to briefly introduce yourself and just provide a little background, very briefly, as I call your name.

And so I'm going to start with our co-chairs, we have David Newman-Toker.

David Newman-Toker: Hello. I'm David Newman-Toker. I'm a neurologist by training. Worked at Johns Hopkins as a director of the Armstrong Institute Center for

Diagnostic Excellence, and currently serve as the president of the society to improve diagnosis medicine. And I thank everybody for their participation on the committee and NQF for the opportunity to co-chair this committee.

(Desi): Thank you, David. We have David Andrew. And I know he's planning on being on the call but he might be just a few moments late. So we'll keep gpoing.

(Flavio Casoy)?

I'll move forward to (Karen Cosby).

(Karen Cosby): Hi. I'm (Karen Cosby). I'm an emergency medicine physician who's been involved in the patient safety world in different capacities over the last couple of decades. I recently joined the Gordon and Betty Moore Foundation to help lead their diagnostic excellence initiative, primarily to lead measure development in diagnosis, which is obviously appropriate for the work of the NQF right now.

And I'm honored to be joining so many people that I've come to know over the years and worked together on this.

(Desi): Thank you, (Karen).

Sonali Desai?

Sonali Desai: Hi. Sonali Desai. I'm a rheumatologist at Brigham and Women's Hospital and I'm also the medical director for ambulatory patient safety and the medical director of quality for department of medicine. And I've been doing

some work on developing ambulatory safety nets to prevent missed and delayed diagnosis of cancer. And thank you for having me.

(Desi): Welcome. Jane Dickerson.

Jane Dickerson: Hi. My name is Jane Dickerson, I'm a medical director of chemistry laboratory at Seattle Children's Hospital, and faculty at the University of Washington, Department of Laboratory Medicine. I'm also the co-founder and clinical director of a group called PLUGS, a national organization that stands for patient-centric laboratory utilization guidance services, and we focus on improving the value of laboratory testing, especially as it relates to diagnostic errors related to labs. Thank you for having me.

(Desi): (Andrea Dehaku). Okay.

Mark Graber?

Mark Graber: Yes. Hi everybody, this is Mark Graber. I'm an internist. I live in Plymouth Massachusetts. I've been working on diagnostic here about 20 years now, the chief medical officer for the Society to Improve Diagnosis in Medicine. And as on the last working group where we addressed diagnostic errors with the NQF.

(Desi): Welcome back. Helen Haskell.

Helen Haskell: Hi. I'm Helen Haskell. I'm from Mothers Against Medical Error and Consumers Advancing Patient Safety, which are two patient-led organizations. And I am chair of the Patient Engagement Committee at the Society to Approve (Diagnosis in Medicine).

(Desi): Thank you. (Cindy Howe)?

(Cindy Howe): Hi. This is (Cindy Howe). I'm an infectious disease physician. And I do a bit of infection (unintelligible) sepsis and antibiotic stewardship a few years ago. Our hospital, as a community hospital, won a national Sepsis Hero Award from the Sepsis Alliance. And I'm also the physician chair for analytic stewardship collaborative with the New Jersey Hospital Association as their physician lead.

(Desi): Thank you. (John James)?

(John James): Yes. I'm from Houston, Texas. Hello everybody. My PhD is in pathology, but I made my living working primarily for government agencies, the last one of which was NASA where I worked as the chief toxicologist for 25 years.

More importantly, I'm a patient safety activist, which means I think the system needs to change dramatically to make care safer. And that's all a result of a lost son some years ago from many mistakes, one of which was a diagnostic error.

Glad to be part of this bunch. Thank you.

(Desi): Thank you, (John).

(Unintelligible)?

Man: Yes. Good afternoon. I'm currently director of quality reporting program over large integrated healthcare system in southeast Texas, and also have been involved extensively in electronic clinical quality measure testing and development and in addition to serving on multiple NQF technical expert

panels. By background, critical care nurse for a number of years, and then went into clinical informatics and quality and kind of integrate all of those. And I'm very happy to be on this panel.

(Desi): Thank you. Prashant Mahajan?

Prashant Mahajan: Yes, hi everybody. My name is Prashant Mahajan, I'm a pediatric emergency physician by training. And I'm currently the vice chair for the Department of Emergency Medicine at University of Michigan. I also served on the previous committee and we actually have two AHRQ grants specifically in this area of measuring diagnostic safety in the emergency room setting. I'm happy to be here.

(Desi): Welcome. Thank you.

Kathryn McDonald?

Kathryn McDonald: Hi everybody. This is Kathy. And I am at Stanford, health services researcher, health scientist (unintelligible) scientist type, involved with measurement and patient safety for many, many years, and probably most importantly to this group, I was also part of the last NQF efforts to look at measurement and diagnostic safety and quality, and was also part of the Institute of Medicine Committee on Improving Diagnosis. Looking forward to this entire process and what we'll produce.

(Desi): Thanks, Kathy. Lavinia Middleton?

Lavinia Middleton: Hi everybody. I'm Lavinia Middleton. I'm a pathologist by training. I'm currently serving as the deputy division head of quality and the director of quality operations with the Division of Pathology and Lab Medicine at

Indiana Cancer Center. And I am honored and humbled to be with such a great group of quality expert and patient advocacy leaders.

(Desi): Thank you. (Craig Norkless).

(Craig Norkless): Hi everybody, I'm (Craig Norkless), I'm a ER physician as well, so, good to hear a lot of us onboard here. Previous patient safety officer for a community hospital network in Arizona, Phoenix and Scottsdale. Five, building a sixth (unintelligible) network. And now I serve as the chief medical information officer and will be starting a fellowship in informatics. So I feel that this kind of work is very important in the future of medicine, emergency medicine (unintelligible). So, looking forward to participate.

(Desi): Thank you.

Shyam Prabhakaran.

Shyam Prabhakaran: Hi, this is Shyam Prabhakaran. I'm a stroke neurologist by training background. I chair neurology at University of Chicago. And a lot of interest in diagnostic error in acute stroke that pertains to the pre-hospital as well as the emergency room setting.

(Desi): Well done. (Ricardo Quinones)?

(Ricardo Quinones): Hi, my name is (Ricardo Quinones), I'm a pediatric hospitalist, division head, at, well, Pediatric Hospital Medicine at Texas Children's Hospital. Worked with NQF in the past as well as a member of their standing committee, pediatric standing committee, to evaluate measurement. And I work specifically with the American Academy of Pediatrics, with the Council

on Quality Improvement and Patient Safety, where we explore the issue of diagnostic errors. And very happy to have joined this esteemed group.

(Desi): Welcome. (Roberto Reed).

Okay. Hardeep Singh?

Hardeep Singh: H, this is Hardeep Singh. I'm a general internist and a patient safety researcher at the U.S. VA Center of Innovation and (unintelligible) Medicine. I have done a lot of work in measurement in improvement of diagnostic safety over the last few years. And this is my third panel with NQF. I chaired the House IT Safety Measurement Committee and I was a part of the last panel on diagnosis. Happy to be back.

(Desi): Thank you. (Coleen Stahl).

(Coleen Stahl): Hi, yes. I'm the assistant director for quality measures at the College of American Pathologists. So my background is primarily in quality measurement for government programs and for payments.

I, unlike many of you, was actually not on the previous panel. So I am new to this and I'm really excited to participate.

(Desi): Welcome. Michael Woodruff?

Michael Woodruff: Hey. It's Mike Woodruff. I'm an emergency physician by training and I am the medical director of our (unintelligible) patient experience at Intermountain Healthcare. And (unintelligible) quality, safety, risk management, and experience for both (unintelligible) across the system. Really honored and thankful to be a part of this.

(Desi): Welcome.

And (Ronald Wyatt).

(Ronald Wyatt): Hi, it's (Ron Wyatt). I am internist by training and chief quality and patient safety officer at the Cook County health system in Chicago, serve on the boards of the Strategy of Group Diagnosis Medicine, as well (unintelligible) patient safety (unintelligible) patient safety officer at (unintelligible) and have special interest in healthcare equity and disparity.

(Desi): Thank you and welcome.

(Ronald Wyatt): Thank you.

(Desi): And before I move forward to our federal liaisons, I just want to double-check to see if there are any other committee members who may have missed their name being called?

(Flavio Casoy): Yes, this is (Flavio Casoy), I joined a few minutes late. Sorry about that.

(Desi): No worries. Thank you, (Flavio). Would you like to give a brief introduction?

(Flavio Casoy): Sure. Hi everyone. Sorry I'm late. My name is (Flavio Casoy), I'm a psychiatrist. I work for the New York State Office (unintelligible). We're very interested in all sorts of quality outcome measures both at the provider level and also to assess a commercial and Medicaid payor.

(Desi): Thank you. Welcome. And was there anyone else who joined that may have missed their names being called?

Okay. With that, we'll move forward and recognize our federal liaison on the project. We have (Andrea Benning).

(Cliff): Yes. This is (Cliff) (unintelligible) standing in for Andrea. We are both from the division of healthcare quality promotion, the CDC remained responsible for (unintelligible) we have the National Healthcare Safety Network (unintelligible) has been involved in some previous NQF committees. Certainly our staff that (unintelligible) do. And we also work as closely with the Division of Laboratory Systems (unintelligible) who's been active in society for improving diagnosis.

(Desi): Thank you, (Cliff).

David Hunt?

David Hunt: Hi, yes, this is David, David Hunt from (OMC). I'm so glad, I hope you can hear me, I'm fading in and out on my own headset. But we're extremely excited about being involved with this work. We helped lead at (OMC) a previous project around diagnostic error and building the measurement framework that I think was very, very well-received and I'm hoping serves as a good foundation for continued work here.

(Desi): Awesome. Thank you.

And Marsha Smith?

Okay. With that…

Marsha Smith: Hi, this is Marsha. I'm actually off today, I got an appointment. But not sure what said, I just heard my name, and I'm on the call. I don't know what you want me to say.

(Desi): Oh, thank you, Marsha. That's fine.

Marsha Smith: Sorry.

(Desi): Appreciate you joining. Okay.

Marsha Smith: Thanks.

(Desi): With that, I'll turn it over to Jean-Luc who will review our meeting objectives for today.

Jean-Luc Tilly: Yes, that's right. Thank you. And so at this time, we just talked about the agenda that we'll - (Desi) will very quickly walk you through, sort of, you know, what the National Quality Forum is, what we do. We'll talk a little bit about, you know, the roles of the committee, the roles of NQF staff, what our charge is, you know, what we're hoping to accomplish with this project and what kinds of activities we'll need to get there. We'll review a little bit the timeline, an ambitious timeline that we hope to, you know, the timeframe in which we hope to fit in all those activities.

And then we'll turn to the work that's been done so far in this project. So, you know, while we were recruiting committee members, we were also leading NQF staff or conducting environmental scan to basically do our best to try and update the findings and recommendations of the previous committee (unintelligible) the diagnostic process and outcomes domain of that

framework, as well as the (unintelligible) themes to measure inventory, some of the prioritized measure concepts and so on. So we'll review the, you know, our approach to environmental scan, the findings to date, and, you know, get a little bit of input from you all on, you know, whether we've missed anything, you know, (unintelligible) pursue our efforts before wrapping it up. And then finally we'll just touch-base on a few housekeeping items in terms of being in touch with us throughout the course of this project, and let you all go.

So with that, I'll turn it over to (Desi) for an overview of NQF.

(Desi): So, very briefly, I'm just going to go over who NQF is, our mission, and some of the work that we engage in. So, many of you may know that we were established, NQF was established in 1999 and as a non-profit, non-partisan membership-based organization that brings together public and private sector stakeholders to reach consensus on healthcare performance measurement.

The goal of NQF is to make healthcare in the U.S. better, safer, and more affordable. And the mission is to lead national collaborations to improve health and healthcare quality (unintelligible) measurement.

So, on this slide, you'll notice the diagram, and I'll kind of walk you through it. NQF is a private, non-profit voluntary consensus standard setting organization, but we are a neutral convenor. NQF operates on the three-part mission to improve the quality of American healthcare. And they include building consensus on national priorities and goals for performance improvement and working in partnership to achieve them; endorsing national consensus standards for measuring and publicly reporting on performance; and promoting the attainment of national goals through education and outreach programs.

Now, NQF's governance and leadership is comprised of sports directors, board committees and partnerships such as the Consensus Standard Approval Committee, or you may have heard it referred to as CSAC, Leadership Network, and National Priorities Partnership or NPP. There are eight member councils and they're comprised of consumer health plans, health professionals, provider organizations, public community health agencies (unintelligible) quality measurement research and improvement, also known as QMRI, and supplier industry.

The goal of consensus standards and the purpose is to improve accountability and performance improvement. And so, although quality improvement is a part, it's as very important all quality improvement measures (unintelligible) endorsements.

And so, why do we need (unintelligible) standards? It's an opportunity to peer review these measures and often it's the first time that many of these measures have actually been reviewed by a (unintelligible) perspective. And there are also measures that have been in broad use that may not have made it through this process.

Well, here we'll go over, there are, in our endorsement process, it's an eight-step process that's typically requiring 9 to 12 months to complete, and measures must meet NQF standard evaluation criteria. Now, both criteria and (unintelligible) important to measure and report, scientific acceptability of measured properties, feasibility, usability and use, and the consideration of completing - competing on related measures.

Now, we have several standing committees, some of which include behavioral health, cardiovascular care coordination (unintelligible) resource use,

endocrine, primary care, health and wellbeing, musculoskeletal, and patient and family centered care, readmissions, renal safety, and surgery.

MAP is also known as the Measure Application Partnership. NQF created the MAP in response to the Affordable Care Act provision in 2010. And it convenes a private - both private and public sector organizations, with (a stake) in measurement improvement for federal health programs.

MAP also provides input to a HHS on the measures for public reporting, performance-based payment, and other programs. MAP also helps to encourage alignment across public programs and between public and private programs. And MAP also has provided feedback on Medicare programs (unintelligible) for adults and children in Medicaid health insurance exchanges and dual eligible (unintelligible) beneficiaries. MAP involves over - about 150 individuals and 90 organizations.

The National Quality Partners Action Team include the antimicrobial stewardship, which was new in 2015, maternity care, patient and family centered care, and readmissions. Other activities that NQF engages in is providing guidance on how to improvement measurement, which measurement - and which measurement gaps should actually be focused on.

We also have measures framework such as this project (unintelligible) the guidance documents that includes health - HIT and patient safety, home and community-based services, population health (overall), and low-volume providers.

NQF, CMS and (AHIP) measure alignment is something that we also - MAP has actually helped associate with, and measurement science.

So with that, I know that's a lot of information, but I will pause here and hand it over to Andrew.

Andrew Lyzenga: Yes. I just wanted to add, thanks so much, (Desi), I'd just kind of like to mention at the outset of these projects, NQF is maybe most often associated with the consensus development process which is, you know, the process we go through to endorse performance measures. And that is - does sort of comprise the specific process. Measures are evaluated against a set of standardized criteria, you know, making sure they're evidence-based, that they're scientifically rigorous, feasible to use and useful for the purpose that they're intended for, and so on.

And that is a separate process than these other project types, I should say, including the one that we are doing right now, and the previous diagnostic quality and safety projects. To the extent that we, you know, recommended measure concepts or measures or sort of measurement areas, prioritization as part of that project, and to the extent that we do that through this project, those measures or measure concepts should be considered NQF endorsed measures of concepts. I know there can be some sort of confusion about that at times, but I just wanted to emphasize that, you know, that when we make recommendations as part of the process, we're not endorsing measures. And the measures that, you know, emerge out of this, you know, should not be considered to be NQF endorsed measures.

I just wanted to sort of chime in with that. We can go ahead, Jean-Luc.

Jean-Luc Tilly: Yes. Great. Right. I think we could just move right along into the project objectives.

There are three main objectives really, which I (unintelligible) a little bit. But, so the first theme, the environmental scan. So here we are looking to basically revisit the frameworks that came out of the diagnostic quality and accuracy project (unintelligible) that accompany that framework, as well as the measures inventory, the prioritized measure concept, and the high-priority areas for future measure development. All of those we are looking to revise, you know, specifically focusing on those elements that intersect with the diagnostic process and outcomes domain of that framework. And, you know, when we get into that specific framework, we'll kind of (unintelligible).

Next, with the kind of updated set of information to work with, we want to kind of put two sort of implementation oriented (unintelligible) products. So the first would be these four use cases. These are all (unintelligible) in that diagnostic process and outcomes domain. We'll identify a, you know, hopefully a relatively common high-end type diagnostic care (unintelligible) of some kind, identify the cost of that error, propose a - what, you know, (unintelligible) some background obviously, some (unintelligible) resolution there. I'm sorry, I'm still hearing a little bit of (unintelligible) possible to mute your line, that would helpful.

And so, finally, so, after (unintelligible) the resolution of (unintelligible) is then, you know, outline as many (unintelligible) specific populations (unintelligible) considerations as possible, you know, to make sure that the information coming out of the use case is rarely applicable to someone who might want to adopt these principles around spending and, you know, ideally see that (unintelligible) diagnostic care are producing significantly (unintelligible).

And then finally, to advance recommendations for reducing diagnostic error and improving safety in a variety of (unintelligible) setting. So, you know,

(unintelligible) either have some relationship to the use cases, you know, especially (unintelligible) they're really being back to being an application of that conceptual framework. But, you know, this (unintelligible) sort of a separate kind of product.

And so with that, maybe we'll just quickly go over the timeline and then we can pause for (unintelligible) all that.

So, you know, we're getting off a pretty quick start here with the (unintelligible) Web meeting for this orientation and environmental scan (unintelligible) Web meeting, and then the Web meeting 2 next week where we hope to continue a little bit with the environmental scan, you know, with that target publication date for that on October 28th. But then also on that second Web meeting to, you know, to begin the process really of outlining our strategy around developing these use cases and identifying the recommendations.

And then after that, really, over the course of what will be just about exactly a year from now, we will meet for that sixth time, you know, spaced out relatively evenly, you know, in December, and then again in January, March, May, June, and then finally in September, to basically work on these use cases mostly and recommendations. So, to, you know, go through them in phases, so, probably tackle the first two, you know, upfront and then kind of the next two afterwards, maybe with some lessons learned there, you know, and then also kind of talk about how that relates back to measurement clients, we'll also have an opportunity for public comments that we'll be incorporating them. And we'll look to publish all of that on October 7th in 2020.

So with that, I think…

(Jesse): Jean-Luc?

Jean-Luc Tilly: Yes.

(Jesse): Can I just chime in? This is (Jesse) here. Just wanted to sort of maybe talk in a little bit more detail to hear just about use cases and sort of what that means, and then also give our co-chairs just, you know, maybe a brief opportunity to comment.

So, you know, really sort of the bulk of this is developing these use cases. And what Jean-Luc has said is, you know, the structure of these use cases is basically, you know, the first thing we're going to have to do is sort of choose the use cases, and I'm going to, you know, let David Newman-Toker talk a little bit about sort of how we might do that. So, once we've chosen the use cases, basically we're going to see, you know, during some background on a particular type of error, you know, we're not going to be choosing, you know, sort of, you know, these are going to be the sort of big categories but not, you know, sort of not too big, not too small. So (unintelligible) will be only, you know, one type of error and one type of clinical setting for one particular condition, you know, within one particular EHR. It'll be sort of general enough that it's not going to be, you know, on all transitions of care.

So the, you know, the example to think about would be, you know, would be, you know, missed findings on, let's say, a radiology study coming out of the emergency department. It would be let's say sort of a type of error. So, you know, let's say someone has a - came in the emergency department, has a chest x-ray done, has a pulmonary nodule that we've maybe not seen on that visit, and then later on there's sort of unrecognized communicated with the patient, and then later becomes something serious, like a lung cancer.

So again this, you know, this is just, you know, this is not necessarily the one that you would pick, but this would be sort of an (unintelligible) where we would sort of talk through some of the background for that sort of typology of use case, you know, some of the literature frequency, etcetera, go through a few clinical (vignettes), and then come up with some, you know, sort of general recommendations around, you know, where we would take the existing framework which Andrew is going to talk about in a few minutes here, and sort of apply the framework to this particular type of error, in this particular condition, so - and sort of come up with not necessarily one thing that a system could do, but - and how that might be measured, but come up with maybe, you know, several potential approaches that could be deployed to try to, you know, prevent the error from occurring in the first place or to mitigate the effects on patient outcomes later on.

So (unintelligible) maybe, Dave, you could add a little bit more flavor to that in terms of our discussion yesterday.

David Newman-Toker: Sure. Thanks, (Jesse). I think, you know, my sense from the conversation that the co-chair said yesterday with the NQF staff and sort of in terms of the purpose here is really to leverage these use cases. It's kind of like a bridge between the measurement framework that was developed with the prior group that many of you are involved with, and move us toward some sort of actionable implementation of kind of both the measurement framework itself but sort of in context of specific clinical problems that could then ultimately leverage their way into the space of things we actually monitor in clinical practice, things we actually incentivize through payment programs or otherwise in the eventual future. But this is sort of an intermediate step between where we were before and where we want to head to.

Obviously it's not going to be trivially simple to get consensus around that approach and there are obviously many different directions with this to take, but hopefully this group can agree on a process and a sort of set of guidelines for how we would identify and think about these use cases, and I'm happy to talk about that more towards the end on whenever is convenient for the NQF staff in terms of sort of a proposal that we can discuss and hopefully come to consensus about how we're going to pick the use cases so that we can move on to the business of fleshing out the use cases, which is the primary objective of this committee.

(Jesse): Right. Thank you.

Man: Thanks, David.

Jean-Luc Tilly: Yes, excellent. Were there any questions from anyone else from the committee about that particular approach?

All right. Excellent. We will then quickly move on to talk about the roles and responsibilities of the committee.

So the roles of the committee, so, really you all are the experts, you all have a lot of knowledge that we do not. So we look to you for guidance, for input, for continued direction on the, you know, basically how we're going to put together these deliverables -- the environmental scan, you know, the development, and eventually the resolution of these use cases and the recommendations for the application of that framework.

You know, and as part of that, obviously, you know, we're going to look to you to review the meeting materials and, you know, to the extent you can, participate in the meetings and Web meetings, and, you know, from time to

time, we may send you other things, you know, offline that maybe is necessary to (collect), kind of (vote) on something through a kind of survey or through some kind of tool to (unintelligible) to catch your all's input on things. So, you know, to the extent that you can, you know, just give your time and effort to make these deliverables possible.

Turning to the co-chairs now. So, you know, we'll look to you to work with us, with NQF staff, to facilitate these committee meetings, but then also participate, you know, (unintelligible) expertise as committee members, you know, to serve as guides of the committee discussion, you know, keeping closely to the scope.

When we eventually start to disseminate these findings and, you know, present them to our consensus (unintelligible) our approval committee, which we discussed earlier (unintelligible) events, and the committee (access) meetings, you know, and to just work with us, you know, offline and during the meetings to anticipate and answer the questions.

The NQF staff, you know, really we commit to do everything we can to make this project possible. So, you know, that means organizing these meetings, preparing draft materials for you all to react to, you know, helping facilitate communication between all the different community members and external stakeholders, you know, especially when we're thinking about the public comment periods or other kinds of involvement (unintelligible) helpful. You know, eventually we are responsible for (unintelligible) publishing this final report that will reflect your hard work.

Finally, then, the role for (unintelligible) and the public at large, you know, we will be disseminating this work just as widely as we can to all (unintelligible) members and, you know, (unintelligible) from time to time

members of the public may attend the Web meetings and participate during the public comment period. And, you know, will review our draft reports and give us feedback and we'll have an opportunity to consider.

So, are there any questions about the roles as we go forward together over the next year or so?

All right. Well, with that, I think I'll turn it over to Andrew to talk about the framework.

Andrew Lyzenga: Great. Thanks, Jean-Luc. So, yes, we thought it would be useful to sort of give you an introduction or a refresher for those of you on the committee who were on the prior committee, given that, you know, as part of this work, we'd like to, you know, make any revisions or modifications to the framework as needed or as appropriate. And then also that we'll be using the framework or at least the diagnostic process and outcomes domain as sort of the basis for our use cases as sort of framework for those use cases as well.

So you can sort of see on this slide a high-level view of the framework, how we tried to represent it visually. You can see there at the center of that kind of target our patients and families and caregivers and sort of the ultimate goal being reducing diagnostic harms to patients. Families and caregivers are sort of at the center of that, you know, around that ultimate goal, because they are closest sort of to the issues.

And as part of that, you know, again this framework was intended to sort of serve as a conceptual model for measurement, and so we tried to sort of think about what aspects of measurement might be applicable to diagnosis and diagnostic quality and safety, so that, you know, certainly when we're measuring quality and safety, you want to get that patient's voice, you want to

get some, you know, aspect of patient experience, and also to look at the extent to which patients are being engaged in their care and in the diagnostic process especially. We know that patient engagement and involvement of patients and their families and their caregivers in the diagnostic process is extremely important. They know their bodies and themselves and are sort of, you know, part of the - should be considered part of the diagnostic team really.

Moving outward, we'll see that sort of second or third ring maybe is the diagnostic process. And that has a number of sub-domains, but you can see on the sort of right side. This was based largely on the national academy of medicine's committee's conceptual model of the diagnostic process, with some drawing also on - with some concepts from the literature including (unintelligible) safer DX framework.

So that sort of comprises the process of, you know, gathering information from patients and, you know, (cuts) and so on, as well as the sort of questions of diagnostic efficiency, diagnostic accuracy, and so forth. And I'll talk a little bit more about these concepts in a moment.

Moving outward from there, that final circle is meant to represent sort of the structures and external environment and factors that sort of support quality of diagnosis and safety of diagnosis and the diagnostic process, include sort of organizational activities to improve diagnostic quality, access to care, and diagnostic services for patients, issues related to the diagnostic (unintelligible).

And then you see on the left, there are a number of themes that emerged. Again I'll talk a little bit about that, but didn't fit neatly into any of the three specific domains or all of them, and so we view them as sort of cross-cutting

themes or even domains in some sense. And I'll talk a little bit about - more about those in a moment as well.

As Jean-Luc mentioned, we're focusing this project mostly on the diagnostic process and outcomes domain specifically or we'd like to be that to be sort of the primary focus of our work as we try to develop these use cases. The diagnostic process domain, again, based on the national academy's model of the diagnostic process, the subdomains here are information gathering and documentation. So, trying to ensure that the correct information and that it's, you know, documented in a way that is useful for diagnosis and useful for, you know, communicating across providers and settings and so on.

And the next sort of sub-domain is information integration. Once you have that information, once you've gathered and sort of communicating it between the various providers who are involved in the diagnostic team and the diagnostic providers, or the process, that (unintelligible) include provider, the provider communication, provider, you know, the broader system, communication, care transition, consultations, referrals, hand-offs, and so on.

Next we have information interpretation. That includes things like decision support for diagnosis, issues related to cognitive processing and, you know, cognitive bias, these sorts of things that have an impact on diagnosis.

And then after that we have the sub-domain of diagnostic efficiency. That includes timeliness of diagnosis, efficiency of diagnosis, appropriate use of resources and tests in a diagnostic process. And then diagnostic accuracy, which include what, you know, we may sort of often think of as diagnostic errors, many of the sort of outcomes we might be looking at, including delays in diagnosis, misdiagnoses or delayed diagnoses.

We included follow-up as a separate sub-domain. This sort of emphasizes importance, that includes, you know, timely follow-up of lab results, critical test results from, you know, radiology or other testing processes, follow-up of consultation notes or referrals and other diagnostic findings.

Again, these sort of cross-cutting themes emerged from the prior committee's discussions. Again, didn't quite fit neatly into any of the specific domains or, you know, get across all of them. Patient engagement has been one of the domains that again wanted to emphasize that as an extremely important aspect of quality in the diagnostic process.

Electronic health records, you know, sort of emphasizing that those ought to be capable of recording diagnoses and important and useful diagnostic information or reporting information in a way that is useful for diagnosis, and that they ought to be interoperable across settings and providers and vendors.

Transitions of care, you know, ineffective transitioning can be a major source of diagnostic error, can lose information that's critical to the diagnostic process and lead to delays or misdiagnoses. Communication, again, sort of cross-cutting theme. Making sure that, you know, providers (unintelligible) systems, communication between providers and the patients and their families and caregivers is, you know, high quality and appropriate, and that any communication is done within iCore and health literacy and cultural (unintelligible).

The committee also talks a little bit about education and credentialing. Some of these, you know, are - were placed in this sort of cross-cutting theme category because they're sometimes not necessarily the - or measurement may not be the most appropriate sort of tool to address these issues. But the committee did really feel that they were important and wanted to address

them. So, education and credentialing, you know, they wanted to really emphasize that diagnosis should be included as a form of component of education and credentialing, that (unintelligible) take on a more prominent role in how physicians and healthcare professionals are trained and educated.

And then of course, the external environment has a major impact on, you know, the whole healthcare system. And there's, you know, really to be able to achieve improvements in quality, there is a need to align incentives like payments or, you know, public reporting to promote timely and correct diagnosis, to encourage a (legal) environment that promotes learning and discussion of potential errors and errors in care.

So maybe I will just pause there for a moment to see if there are any questions about the framework for the cross-cutting themes.

((Crosstalk))

Man: Go ahead.

David Hunt: Oh. This is David Hunt, (OMC). I just wanted to ask, did the - did everyone on the - in the group also get the copy of the final report? Because I think that Andrew did an excellent job, but I think that summarizes things very well, particularly the executive summary on the previous work.

Andrew Lyzenga: Sure, yes. I believe we've made it available on the SharePoint site, the committee SharePoint site. If we haven't, we'll certainly put it there, and (Desi) will talk a little bit later on in the call about that and the SharePoint site and the way that we, you know, we'll try to share information with the committee and give you resources that you might need.

But agree, absolutely, David, that would be a great point to emphasize that the committee members should try to review if you can the final report from that previous project, just to get a sense of what that discussion was like and the findings and to get a little bit more of a richer sense of what we did and what our findings were. So, thanks for that.

Was there another question or a comment?

(Mike): Yes. This is (Mike). I just wanted to ask, was there anything about over-diagnosis, any in that framework? Seems to me (unintelligible) kind of balancing concept as we think about measuring diagnostic care.

Andrew Lyzenga: Yes, it certainly was something that we talked about. And I think it would fall sort of in that diagnostic efficiency sub-domain. It is - we talked about that as we suggest sort of a balancing aspect to, you know, some of this, you know, problems that are typically associated with diagnosis, that'd be sort of under-diagnosis or missed or delayed diagnoses. Certainly that is an issue we want to keep in mind, you know, making sure that there are not, you know, unnecessary tests being done or, you know, diagnosed - inappropriate diagnoses, that they lead to, you know, unnecessary or inappropriate care. Certainly that's something that I think we should bear in mind as part of this project as well and incorporate into our discussions and considerations. Appreciate that.

David Newman-Toker: This is Dave Newman-Toker. I'll just quickly add to that. I think this idea of balancing measures is a really important idea that, you know, if we're looking at measures of quality and safety that are focused intrinsically around the idea of preventing missed and delayed and wrong diagnoses, we also have to have the counterbalance around diagnostic test overuse and things of that nature in mind. I think that's a critical piece of this. Whether we get

into the particulars of the sort of the technical meaning of over-diagnosis and the epidemiologic considerations, maybe a little bit further afield from where this group is headed. But the notion of balancing, doing too little and doing too much I think is a critically important thing that we should bear in mind as a committee as we go.

Andrew Lyzenga: Thanks, David. All right. So if there aren't any more questions or comments, just talk a little bit about, in addition to, you know, developing this framework for measurement, the previous committee also discussed a number of concepts that they thought might be useful for including diagnostic quality and safety, sort of putting forward these, you know, many of them at kind of an early conceptual stage, sort of with the intent of providing guidance to the measure development communities to sort of carry these broader concepts forward and specify them for particular instances or cases of care or conditions. So I'll just go through a little bit just to show you some of the examples of, you know, the kinds of, you know, measurement concepts that the committee thought might be useful to these sort of sub-domains.

Information gathering and documentation. You know, some of these are broad and some are a little bit specific. It's kind of more of a broad principle that clinical documentation should support quality in the diagnostic process and be clear, complete and accurate. That could be sort of operationalized in a number of ways, including maybe sort of structural measures around the capabilities of electronic health records to capture things like a differential diagnosis or a chief complaint, or other, you know, measures of documentation and, you know, diagnostic process.

In the area of information integration, the committee sort of discussed, you know, again, fairly broad concepts of diagnosis reconciliation, similar to how we look at medication reconciliation when a patient visits a provider, sort of

looking at their history and what medications they may be on, make sure that they, you know, have a complete list and that you aren't giving them anything that may be contraindicated or could potentially lead to an event, in the same way that the committee thought, you know, maybe there could be (an element) of measures around that sort of concept of reconciling diagnoses at each patient visit or, you know, across providers and settings.

In the area of information interpretation, we could have measures, for example, of, you know, use of decision support or availability of decision support and, you know, integrated into electronic health record, maybe whether those - that decision support includes certain pathways for diagnosis for common symptoms and so forth.

In terms of diagnostic efficiency, and this goes to the question or comment we just heard, the committee thought, you know, you could maybe develop some measures around appropriate (unintelligible) you know, again addressing those sort of balancing issues of underuse and overuse, you know, getting more specific to operationalize that as something like, you know, a percentage of patients with a particular symptom or disease who are tested inappropriately and that, you know, would depend on the disease or condition, sort of what that, you know, inappropriate testing might be.

In terms of diagnostic accuracy, this is sort of a, (informally), the tough nut to crack, is, you know, a lot of challenges involved in measuring diagnostic error and diagnostic outcomes. The committee, you know, sort of brainstorm about ways to maybe capture outcome - diagnostic outcomes or errors and care. One possible thought might be, you know, measuring the de-escalation or early, you know, care de-escalation, you know, moving someone from the ICU ward associated, whether the diagnosis change, which might indicate that

there was an incorrect diagnosis or lack of an accurate diagnosis early on in the care process.

In addition to sort of, you know, brainstorming, you know, sort of long list of concepts and measures, the committee wanted to emphasize a few areas that they thought were particularly important. We sort of broke these into a couple of buckets. Those being you know, areas where I measured development might be more feasible in the near term or even immediately and then areas where measure development is probably a little bit longer, how in the future sort of more ambitious or aspirational in nature. Some of the areas they thought, you know, were feasible in the near term and also important were timing at the test results follow up, patient access to information, diagnostic quality improvement activities and then measurement, the route related to handoff across, you know, care transitions.

Terms of those sort of more aspirational areas of measurement. Maybe, you know, the course wanted to move more toward measuring value, not outcome. Also, trying to find ways of measuring and assessing patients understanding of diagnosis. Really trying to in an effort to include improve patient engagement and their own safety. Maybe measuring, you know, the adequacy of communication with patient. This can be might be a difficult task to define exactly what adequate communication means in any given instance, but, you know, again, but that would be an important area for future measure development. And then they talked about the importance of improving the diagnostic workload of clinicians or sort of assessing that as a part of looking at the safety of the diagnostic process as a whole ensuring that providers have adequate time and opportunity to gather, synthesize and interpret information that, you know, is needed as part of the diagnostic process.

As part of the environmental scan, we sort of, you know, looked at these areas of measurement prior to areas of measurement and the diagnostic process and outcomes domain genre. We'll talk a bit little bit more about that and what our findings were from the environmental scan. Couldn't say that sort of upfront, they were, you know, you didn't find a lot that wouldn't be that couldn't be initially that, you know, any significant or substantial changes would be needed in to the framework or the cross cutting themes or sort of priority, prioritize measure concept. But I'll let (John) sort of talk a little bit more about the findings now and you can have a little bit of a discussion with the committee after that.

Man 1: Yes, thanks (Andrew). So, just, you know, rest the outset our research questions really were focused on, you know, assessing what if anything, was new since the previous environmental scan has been conducted. You know it -- which was mostly over the like the 2016, 2017 period. So, you know, what new measures might be available to assess diagnostic process and outcome.

You know, are there any new emerging high-quality measurement areas that, I think (Ken) alluded to and you know, what concepts when it comes to address those, you know, was it -- was there anything in the literature in this area that might suggest to us that there were elements of the diagnostic process and outcomes domain of the framework that should be revised. (Unintelligible) Are new elements to add and are they cross-cutting themes that were proposed in 2017 years that are still relevant and are inappropriate. So, to do this, we looked through, you know, a few different sources. So, you know, a PubMed search using some terms will go over in a second and I'll just kind of looking through the grey literature to see what kinds of, you know reports other publications, we could find the most relevant here. And then we also looked through into us measure inventory, as well as a new measure inventory as a theme of the CM methods measure information tool that we use to sort of

replace some of the sources that were no longer being maintained like HR keys metric clearing house. So with that, we had a few different kind of keywords that, you know, really sort of using the same keywords is, as I've been using in the previous search and implementing our time frame just to capture new articles published and in this space, we found something in the 60 to 70 range and kind of look through those in you know, (Andrew) will talk about the specific findings there, too.

So, you know, you'll see this is a pretty familiar terms. You know, related back to, you know, just trying to capture really anything to do with diagnostic errors and diagnostic accuracy.

Yes, go ahead.

Andrew Lyzenga: Sorry. I was - I think you're going to ask the question, go ahead.

Man 1: Yes, right. So, the question is, you know, are there kind of keywords that we should be including in our search for or are there, you know, particular reports are like kind of seminal publications that we should be paying attention to. And you know, and of course, if it's helpful to kind of revisit that conversation after you've gone through some of the other literature review findings, that's an option as well.

David Newman-Toker: I'll just start us off because -- this is David Newman-Toker again, and we've done a number of literature searches ourselves as part of this sort of bigger project we've been working around the epidemiology of diagnostic error related harms in US. And what we found was that the terms you used weren't sufficient to find some of the relevant information about cancer related misdiagnosis. And that when we use the term diagnostic intervals, we found

other stuff, I don't know whether you'll find specific measure concepts but you may want to add that to your list of things, diagnostic intervals.

Man 1: Okay.

David Newman-Toker: It relates to this issue of delay and cancer diagnosis that a lot of literature is described that way without using words like delay or missed.

Kathy McDonald: I think it's also easy – this is Kathy, it's also easy in the searches to miss diagnostic problems that arise from complications. So, it's not the first diagnosis but, you know, there's a complication after a procedure or there's a complication or there's adverse events related to a drug and as possible if there's measures in that space that we should be finding and thinking about what a search would pick that up. I would wonder about.

Hardeep Singh: This is Hardeep Singh, I had a quick question. Are you sort of focusing on anything specific with these keywords that you're trying to look at more measurement related literature? Or is it just broadly in the area. What are you trying to get to with the keyword search?

Man 1: Largely measurement, but also just I suppose, anything that might be relevant to sort of the broader issue of improving diagnostic quality and safety. Especially as it sort of relates to our framework and domain there in, you know, the idea I suppose, is to, you know, try to draw out any information that might be helpful. For as again we go forward in developing the use cases. So, you can sort of keep that in mind, I suppose, as a frame for the purpose of the environmental scan, so anything that you are aware of that will be, you know, useful along those lines. It doesn't have to be exactly keywords, you know, this sort of concepts that we may want to think about or look into, or that sort of things would be very much appreciated.

Hardeep Singh: Sure, so I would say, you know, obviously, I they may -- there must be a reason for you to then put measurement related themes into the keywords is that some sort of reasons for that?

Man 1: Yes, well, actually, I think it's we sort of done a number of searches, you know, involving those keywords and some others are different combinations. And we have done some searches as we've been looking for measures specifically that they include measurement related terms like measure or performance measure, quality, or quality measure, outcome, process, that those sorts of terms sort of in combination with there's other search terms, since we have sort of executed some searches, including measurements specific terms but to also to get a broader sense of, you know, what has emerged in the literature, within the past two years or most recent project.

Hardeep Singh: The only reason I got to bring this up is, you know, what sort of new is sort of this emerging data science approaches to, you know, enhancing measures and I'm wondering if some words like, you know, algorithms or related terms that get into sort of more the more specific area would you know, methods would be useful. The other thing you asked is what are the reports might be good to look at. I'll encourage you to look at some work from the (unintelligible) on primary care patient safety. OECD has also had a report on amatory safety just because I think a lot of the things, we're going to talk about are related amatory last year. So those two are the reports that are coming to mind. I'm thinking there's couple of other reports that are from the major organizations like that, which you know, might be useful to look at.

Man 1: Great. Yes, that's extremely helpful. We'll certainly look into that. If you have any, you know, specific.

Hardeep Singh: Yes, I think I can send you a couple of reference, sort of some of these online.

Man 1: Sure, sure. And will obviously go around, you know, search and, you know, along those lines, but if you got a direct link, you know, (unintelligible).

John James: This is John James. I'd like to propose another search term perhaps. Something that has to do with a second opinion feedback. And the reason that sticks in my head is it's something that patients I think could very much contribute to, especially in an outpatient setting. I can't tell you the number of people who have come to me and said, you know, the first primary care doctor I went to, didn't get it right. The second one did and whatever they did work, but is there a feedback mechanism? So maybe just second opinion, would be a good search term.

Man 1: Okay. Yes, it's helpful. Thank you.

Colleen Skau: This is Colleen. I don't know if these would appear yet in the measures inventory tool or not. But one of the macro grants at CMS org a couple of years ago was specifically to design a set of pathology and topology related measures. They are not part of the PPP yet, but they are in development and the measures are publicly available just as something to consider, you know, what areas are already sort of, in development, have measures in development.

Man 1: Okay, great, great. Yes, appreciate that.

Man 2: Hi, this is (unintelligible). Just a few thoughts. And, you know, I haven't had a chance to look at all the previous committees work. So, I don't know wat was discussed and from this perspective, but you know, there's really out of thinking as we're going through this discussion, there's three key stakeholders in this whole process of the diagnosis. And one, like at our organization, we

have clinical documentation improvement specialists that are doing concurrent review of clinicians' notes, to then give them queries to say, hey, you haven't considered this diagnosis, or this problem. That's one.

Then we have an automated computer coding assistant that also can suggest diagnosis to the clinicians. And then at the end, we have our coding department that really is the ones that generate the code that's going to go to any payer. And that's what will drive a lot of the billing in DRG. So, they're there -- they do a lot of quality improvement in that domain. But it's more operational quality improvement around diagnostic accuracy, like in a relator reliability testing email between the different domains or different key stakeholders, things like that.

So, you might not find that in, you know, like pub med, but if you go like a schema and nose and hands and those organizations, they have a lot of that

more operational kind of studies around diagnostic accuracy in my computer assisted coding and so forth. So, I just kind of wanted to put it out there because it's really a different way of looking at it. It's when they look at it, it's really from the perspective of billing. But it can also change the diagnosis. In the end and I deal with this all the time, because a lot of times in the quality world when saying the patient safety indicator comes out and then the clinician will review the chart and say, No, that's actually that's not right. That's not what I meant in this documentation. And sometimes you have to recode and actually rebuild that.

Man 1: Okay. Yes, it's interesting, certainly something we may reach back out to you to sort of follow up on them but that gives us some leads as well, we'll certainly look, we may have looked a little bit at a human and him already, but we'll go back and make sure we're doing a sort of dig into those resources.

So, thank you for that. Any other thoughts or suggestions or comments? If not, we'll talk a little bit about what our sort of preliminary findings have been to date. Won't spend too much time on this. You know, what will be tried to put together a report for you to take a look at it as well and provide some input. But anyway, as part of our you -- a few things, you know , that we thought we might highlight is some, you know, been some recent work on trigger tools including the face with the extra tool framework, which is intended to enable health systems to sort of implement new trigger tools to identify and measure diagnostic errors. Some been some sort of studies, intervention to reduce diagnostic errors that may, you know, have some interesting practices or useful interventions.

Again, you know, found some information related to patient offers near the hearing relevant to that question. patient experience and patient engagement, finding that many patients, you know, really were not satisfied with the response of institutions. They were reporting a diagnostic errors and many were not reporting errors at all. The implications for you know, including clinician communications, provider, the patient, communication generally. The issue of diagnostic or cognitive bias in role in leading to diagnostic error, you know, a number of articles to run underscoring the importance of that. We talked a bit about that in the previous project. One of those things that's very difficult to address good measurement. A hard thing to kind of get your hands around in a quantitative way. May be something that we want to spend a little more time on as part of this project given that we're sort of looking a little bit more at ways to avoid, you know, diagnostic error and maybe some strategies to sort of mitigate likely sources of bias or common types of bias.

In terms of new major concepts that we found, sort of inherently have emerged since the last report, the sort of a breakdown of where those fell in the sub domain, we can provide you with an actual list of those measures. So,

you can take a look at that, if you like. The bulk of them focused on diagnostic efficiency or accuracy, information gathering documentation.

Just a few, you know, to show you some examples of what we found in terms of accuracy, measure, maybe to evaluation and management. This is really a sort of a concept that emerged from a project, another project and PR project related to trauma care. So, we thought some of those were relevant to the question of diagnostic safety and diagnostic accuracy. That I think those first two local merged concepts emerge from that. And then, in terms of diagnostic accuracy, again, with something like rate of myocardial infarction among patients who have presenting problems with shortness of breath, so given a set of symptoms that are likely to indicate MI, you know, what was the rate of mis diagnosis among those patients. Just, you know, show you what we have in terms of our overall measure inventory, including those measures, here's a sort of a give you a sense of where the measures and measure concepts we've identified, you know, as part of the previous parts of projects and this one, as you might expect, you know, a lot of them related to information gathering and documentation. Being a relatively nascent area of measurement, you know, that tends to be the case in our experience that began was it sort of low hanging fruit of things like documentation and, you know, sort of process-oriented measures like that.

In terms of you know, what we thought, you know, was the implications of sort of what we found so far is that there were, as I suggested earlier on, you know, we didn't find anything that we think implicates any major updates for our product, diagnostic process and outcome, sub domain, you know, maybe some information that that sort of basically helps to support the previous findings or helps to, you know, add a sort of richer view of the issues that we identified before. You know, including, for example, incorporating patient narrative into the information gathering process, you know, some

recommendations around the best sort of best practices in terms of diagnostic key, sort of a framework for, you know, how the team should be constituted and how communication should occur within them, and so on. Again, information related to bias, maybe some potential strategies for countering cognitive bias can trigger tools we found some information, you know, sort of developed developments related to the use of trigger tools and again, maybe something we want to incorporate into sort of our thinking around these use cases. Whether they should involve the use of trigger tools and you know, maybe incorporated into electronic health systems and number of issues related to radiology and follow up on radiology tests as well.

Again, the cross cutting themes, no major updates, really just information that we thought sort of, you know, supported the previous finding out that in in detail, again, just to say that we didn't think that any of the information we found really required us to make any substantive changes to the framework or

the cross cutting themes. But maybe we will open it up now, just to see if you have any thoughts on whether the framework, as it exists right now, still seems relevant and appropriate to you, based on your experience and expertise or you know, this cross cutting theme remain sort of the, you know, important and relevant and then maybe some, you know, also the prioritize measurement areas. If you think those are still sort of an accurate representation of what you know, important measurement areas are you going to diagnostic quality and safety or if you think there are other areas of measuring that maybe we ought to emphasize or highlight or if there's any information you think that would be useful in updating the diagnostic process and outcome domain of the framework. Anything you would that comes to mind immediately that you that you think information, you know, that you think might lead us to update or amend or, you know, revise the framework as it stands now. And will give you more opportunity to give us input or feedback on this as well, but we

thought we'd give you your sort of initial reactions or thoughts can meet it updates to the cross-cutting themes or prioritize measurement areas.

(David Hunt): This is (David), I just want to make sure that we also make sure we leave some time for discussion around the process by which we'll be choosing the use cases, because that's such an important part of the framing here. In terms of the other thing to remember about the framework is that we may find that the framework looks good for now. But then when we dive into the use cases, we realized there are things that we need to adjust as we get more concrete about its application. So, thoughts from people just for the next couple of minutes, make sure we leave some time for the use case discussion.

Man 1: Sure, yes (David).

Hardeep Singh: This is Hardeep again, I have a bigger picture question and then maybe we could be a bridge between this discussion and the next one. Could you tell us a little bit more and maybe just not me not understanding, but I'm just trying to figure out, can we be a little bit clear on sort of what is it that we want to achieve with this new report that we didn't achieve with the prior report in terms of, you know, either the audience or what do we want them to do differently? Are we focusing more on measurement concepts that are now sort of illustrated better through these use cases, or are we focused more on actions? And are we focused more on sort of detecting events of interest that new things that are going wrong? Are we interested more on contributing factors? A little bit about that? Or are we focused on some actions and interventions that we want people to do? So, I think global discussion will may help us sort of think through better not only these things that you're proposing as cross cutting themes, but also sort of what kind of use cases would be useful.

Man 1: Yes, yes. Thanks for that question. I mean, to some extent, I think all of the above. I know the previous project was focused largely on questions of measurement, you know, detecting and identifying errors and you know, ways to measure the quality of the diagnostic process. I think that you know, the report that comes out of this, you know, will be focused mainly on the use cases and recommendations around sort of measurement related to that or measurement generally, a diagnostic error.

And we, you know, want to use the framework as sort of a starting off point, I suppose, as sort of a conceptual model to just get us started with those use cases, sort of organizing our thinking. But that again was intended really as a framework for measurement.

So, we'll need to do a little bit of, of course. I guess the extrapolation from those areas that we found important for measurement and look to how we can sort of identify actions that can be taken to avoid diagnostic errors or improve the diagnostic process and mitigate harm from diagnostic errors, potentially.

Measurement, I think we would say it should be part of that. So, you know, for, you know, these use cases, you know, we'll want to sort of identify maybe a key or common type of error or sort of a specific error.

And then we would want to look, you know, for example, at how you might detect those types of errors through measurement. Or how you might detect, you know, flaws in the process or sort of error errors in the diagnostic process that might lead to those types of diagnostic errors or events. But then also, what are those actions you can take, or processes you can put in place that you would reduce the occurrence of those types of errors. So, sort of looking at a whole thing sort of holistically to some degree.

Man 2: Sure, that's really helpful. Could you also then specify, do you think the audience is going to be more like everybody who's involved, every stakeholder, including sort of patients, health systems, clinicians, everybody, teams.

Man 1: I mean, certainly, we'd like this to be useful to our audiences and informative to audiences. Maybe that the use cases are sort of, you know, mainly targeted toward the provider and health professional community.

We would hope that maybe they might be, you know, we might sort of design them in a way that they could be picked up by a wider health system and sort of used as a way to guide, you know, their, you know, their processes and interventions. And to address if they're, you know, maybe having a problem with a particular type of diagnostic error that we look at. They could pick it up and sort of use it as a playbook of sorts to, you know, to address the problem within their own institution.

I think certainly we'd like this to be, to the extent possible, sort of know an actionable report that will allow, you know, providers to use our recommendations and actually sort of do things, diagnostic errors and, you know, adverse events that might result.

Is that helpful?

Man 2: Yes, absolutely. Thank you. Thanks again.

Man 1: No problem.

(Kathy Macdonald): I think the question of the process around these cases, this is (Kathy Macdonald), my first question was, yes, who's going to use those cases?

What users of these cases do we have to think of? So, you answered that. I don't know if we need to expand discussion about that. I mean, I could see that being a reasonable choice, but I can also see arguments for expanding.

I thought about who would use these cases and (unintelligible) the selection of these cases are, and how they're formed.

Man 1: Right, right. Sure.

Man 2: Maybe one thing we could do. I know, (unintelligible) you've got a couple of slides about sort of, you know, a little bit of background on maybe choosing the use cases since you're not going to be available on the next call if you wanted to see the address that. And then maybe sort of take us through some of the background work you've done on sort of the high level.

Man 1: Sure.

Man 2: We could - if we could think about use cases.

Man 1: Yes, and I think I think that's great. I think its good timing and may spark some additional discussion about who's using the use case. So, it's our charge that we've got four use cases that we need to develop.

And on the chair call with the entire staff yesterday, we talked about this idea of - I tried to get as much court coverage as possible out of the four cases so that they wouldn't be all on the same thing. Or that they wouldn't all be too narrowly construed, that they didn't represent sort of the breadth of the problem associated with diagnostic error. And they could each serve it as sort of an archetype for thinking about what a group of problems or diseases or processes that were represented.

So, we put together a list of some of the sort of dimensions that we might think about wanting to represent. We may or may not be able to represent every one of these dimensions, but I suspect that if we're careful about how we craft the use cases, we could probably actually represent many or most of them.

And then ultimately pick scenarios that are clinically sensible, you know, relevant to public health, and have at least maybe some evidence to support measures and solutions.

Before we move onto any other slide, I want to stop here and just get people's reflections on whether this notion of trying to get as much court coverage out of just four use cases as possible, is something that is a desired endpoint and goal for choosing to use cases.

Nobody has any opinion at all. Good idea, bad idea.

Man 3: We can use silence as incentive; nobody has any comment.

(David Hunt): Hi, this is (David Hunt). I think that it is probably a good idea. But I agree with you. I think that the overriding watchword in committees such as this is quiet means that everyone agrees.

Man 1: Okay, we're…

(David Hunt): But everyone agrees.

Man 1: All right, great, so I'll just move to the next slide. This is some work that many of you are familiar with. It was published a couple of months ago. It

was sponsored by the site in for diagnostic medicine and sort of focused on this issue of as a first step towards a big national estimate of the epidemiology of serious harms from diagnostic error.

We looked at a large malpractice claims database, the critical benchmarking system, with (Dana Siegel) and her colleagues at Harvard and dividing up the diseases into these sort of three big buckets of vascular events, infections, and cancer. We found that 75% of the serious harms are attributable to these, what we sort of called the big three.

And if you look at the top five diseases in each category, they represent about 50% of the serious harms. There's about 50% of the problem disability; about 50% of the problem is death. And although claims data are not perfectly representative of clinical data, we actually did some comparisons looking specifically at this issue.

And in fact, although cancer cases are overrepresented in claims data relative to vascular events and infections, that overall, even in clinical case cases, these numbers roughly apply.

That is about 3/4 of the problems of serious harms from diagnostic error are attributable to diseases in these three big buckets with the common things being that this list of diseases.

So that's just some context for thinking about kind of where we might go to find some of the conditions or diseases that we're looking out for. And the lists there in roughly the population health level order, not just the claims order. Next slide.

So, here's a suggestion. I think the key thing for me, as we talked about this yesterday, is that we don't have the luxury of having an in-person meeting. We don't have the opportunity to, you know, sit down and pop out into breakout groups. And we do have a pretty ambitious goal of getting through all four of these use cases in a handful of web-based meetings. I think there's going to have to be a little bit of asynchronous work that's done offline.

But we probably don't want to spend the first six months picking the cases. I think we need to kind of get at it a little bit sooner than that over the next couple of months so that by our December meeting, we're well into the process of developing the use cases.

Here is a proposal that tries to sort of get at this issue of crosscutting court coverage, it's one option. But I figured it was easier for people to reflect on an option than to sort of start from scratch and sort of make (de novo) suggestions.

Does this concept of, you know, picking something in the inpatient domain, something from the (E-D), something from primary care, so that specialty care or something that kind of hits different kinds of diseases and different sorts of diagnostic error problems and different potential solutions. Not that everything is perfectly listed out there, but just to kind of get the discussion flowing.

Do people like this kind of a framework for starting to pick some use cases?

(Javier): This is (Javier), you know, one thing that, you know, to consider is, you know, individuals of (unintelligible) disorder or serious mental illness have a much higher burden of medical and surgical illness and use. And often have a much

more difficult time to engage in, are often sort of misdiagnosed or not diagnosed, and have sort of worse outcomes.

So, I wonder if we can incorporate in these cases sort of through the complexity of, you know, badly diagnosed individuals with substance use for mental health conditions. Or individuals who do have these conditions and aren't diagnosed at all, because they know these conditions simply are, you know, are much more stigmatized than everything else.

Man 1: I think that's great. We can definitely put that as sort of part of the, you know, template or whatever we develop for these use cases, you know, to include these sort of modifying factors. Particularly when there's almost a second diagnostic issue, right. There's a diagnostic issue that's related to substance or mental health disorders that is playing into whatever the other clinical symptoms are, and that's being missed.

I think that's a great idea for us to sort of leverage that complexity into one or more of these use cases. Other thoughts?

(Cindy): Hi, it's (Cindy). I was wondering if maybe that could be brought in now to social determinants of health to be a little bit more inclusive beyond what was already stated?

Man 1: Sure. Great idea. Other thoughts or comments?

(Colleen): This is (Colleen). I don’t know if this would fit in number four or not, but thinking about chronic conditions and changes to chronic conditions and sort of how like when is re-diagnosis or additional diagnosis needed and how chronic conditions affect diagnosis both of the condition and then also of

subsequent illnesses that may or may not be related to them. I don't know if that's captured in number four regarding uncertainty or not.

Man 1: Yes, I think that's a great question. Something that we could definitely – certainly - that's something that factors particularly into the, you know, if one and two are a little bit more acute in their structure, and three and four a little more subacute and chronic in their structure, certainly the multiple co-morbidities problem that's intrinsic in primary care and related disciplines, certainly should factor into the thinking around those use cases.

So, definitely, we'll put that on the list of things to wrap into this construct. Other thoughts?

(Helen): This is (Helen). And I think you have this here, and I may have missed something in the conversation as well, but one of my concerns is with the protocols and measures sort of making people afraid to use critical reasoning and not looking for the exception. And I don't know if there's any way to make recommendations around that, but I think it's really critical. I see a lot of cases in that, particularly in the ethics.

Man 1: Certainly, there is a great idea and a great concept element that we should elaborate, which is we certainly, you know, to the extent that anything, whatever tools we intervene with, whether it's checklists or protocols or decision support or anything else. If those turned us into thoughtless automatons in various and sundry ways, that may make things worse, not better.

So, we certainly don't want that to be the case either. We want our decision aides to help us think better rather than help us stop thinking.

(Helen): Well, my concern, I think, is that you know, the idea of statistically likely, you know, horses, not zebras. When a zebra appears, people are just unable to even look for it. That's the issue. And they don't necessarily need to be such rare things, just not encouraged by the protocol.

Man 1: I think that's great. I think one of the fundamental constructs that you're getting out here, (Helen), is that we don't miss diseases when the patient presents with, you know, classic, typical symptoms and it all fits the pattern. You know, we don't miss strokes when people are hemiplegic and can't talk. We miss strokes when they come in with dizziness or isolated headaches, and they look like something else.

And we are more likely to miss them when it's a young person coming in with that than an old person because we think of strokes as an old person's disease. So, this stuff is sort of out of sight and out of mind. The stuff that doesn't quite fit the pattern, the stuff that sounds like it's off the beaten path or it's a zebra, not a horse. Those are the things that we tend to miss.

And whatever solutions we construct and whatever use cases around measurement and/or solutions we construct, need to take that fundamental premise into account. Since that's the kind of that's the core of when we miss things. It's when it's not front and center.

(Helen): Yes. Thank you.

Man 1: Other thoughts. So, if I look have the last slide, I think I that I have here a suggested process if this potentially works for people. The idea that maybe the NQF staff would put together what we might call a use case template for case construction.

Perhaps we'd have one leader that was assigned to work, you know, offline by email and phone with two to four other individuals from the committee who were interested in a particular use case development. And a mechanism for people to sort of start presenting those ideas and then iterating from there.

Do people like that idea of, you know, sort of giving it up a little bit and having people do some independent work, given our lack of ability to come together in person and the relatively modest number of web-based meetings?

Man 3: Yes, we do.

(Cindy): Yes.

Man 1: Okay, there are - I know there's certainly some people with - I know about half of you on the call very well. The other half, I'm pleased to be working with you.

Man 2: The good half and the bad half. Is that what you're saying.

Man 1: And so, I already know about some…

(Kathy): The ones he knows are the bad half.

Man 2: That's right. I didn't want…

Man 1: Certainly, when it comes to you, (Kathy), that's the case. But in terms of kind of gift-giving those assignments do people want to, you know, offer themselves up to particular case topic areas as either members or potential leaders. Or there should we just kind of divvy that up a little bit? Do people

want to send in their proclivities to - into our staff, and we can kind of compose the teams that way?

(Cindy): Well, it's (Cindy), as an infectious disease doc, I would be interested in the key setting number one.

Man 1: Okay.

(Cindy): Either as a leader or member, whichever is needed.

Man 1: Okay, thank you, (Cindy).

(Joe): This is (Joe). Do you want to just send out a thing like, you know, it might say you can pick your first-second preference? If you want to be, you know, part of the leaders, or just be part of the group. There may be some people that want to cross over to, you know, that, you know, depending how your distribution is, when you get your answers back, you know, for yourself.

Man 1: Sure.

(Joe): I might be interested in infection and the vascular one.

Man 1: Okay. So, in terms of - I think that's fine and you folks, will that work for you in terms of just sort of take taking, you know, just sort of poll and letting people submit back their proclivities? I think we should ideally have you know, each of these groups have about four to six people roughly so that they don't, you know, that there's enough diversity of people have different perspectives. But also, there are so many people that it becomes impossible to manage.

So certainly if, you know, 10 people really want to do their cancer, and primary care, thing that may need to be sort of toned down and people need to sort of move themselves around to different groups. But will that work folks?

(Joe): Yes, absolutely. I think that's a good approach. And we can certainly put together a sort of a survey or, you know, assessment to see who's interested in what. And yes, get a sense of sort of how that's distributed and kind of work forward from there.

Man 1: Great.

(Kathy): Okay…

((Crosstalk))

(Kathy): … updated slides. The ones that have - older ones I found.

Man 1: You don't have these yet because they're hot off the presses. We just had this conversation late yesterday afternoon, and the (unintelligible) asked me to present something today - this morning. So, we're just getting this, you know, we'll get it out to you, certainly. Especially with the list of the four things so that people can have their, you know, options in front of them as they make their preference assignments.

Are there any final questions, if not, I'll turn it back to the NQF staff to close us out. Any final questions on the use case thing before we move on? Okay, thanks, everybody.

(Kathy): Thank you.

Man 1: That was really a really useful sort of way of framing this up and putting the fun. I think a really productive path forward to. So, we really appreciate that. We will be sending a survey out to the committee, and you get a sense of who's interested in working on what. If there aren't any objections, will at least tentatively sort of move forward with that plan and approach.

So, thanks again. I really appreciate that.

Man 2: Sure.

(Cindy): Thank you, appreciate that. So, we have a few more moments. And I just want to take a few moments just to give you a brief overview of SharePoint. So, each of you, as committee members, should have received your credentials to have access to the committee SharePoint page, the Diagnostic Care Project.

And so, with that, I just want to point out a few things that you will notice when you log into your dashboard. And so, we have on the committee home page; you will actually see that underneath a diagnostic error name, you will notice there is a section for general documents. And in that general document section, right now, this will grow as the project grows.

However, right now, we do have a copy of our final roster, which also can be located on your project on the NQF website for (producing) Diagnostic Errors Project page. And you also have a copy of the previous report from Diagnostic Accuracy that (Andrew) referenced earlier. So, you do have access to that report now.

So, when you want to - when you come into the SharePoint site, you can simply click on either the document, and it will open up for you. And you'll be able to view either of those documents.

I also wanted to point out to you that there is a committee calendar, and in this calendar, you will notice all of the events that will be upcoming. Right now, we have your first immediate appointment, your first immediate meetings, which will reflect today's call as well as our call that it's going to be held next week because it is the most urgent.

We will be polling our co-chairs and confirming the time for those future meetings, and make sure that we are able to send out updated calendar invites to the committee. I also want to point out here under the meeting section, the meeting titled - you can find the title of each of the meetings as they happen.

The project team will actually update that area with the meeting slides and any other relevant materials that you'll need to view to help you. It'll walk you through the meeting. It'll help you prepare for that meeting.

And so, what you will also find after this meeting, where the project team will work to comprise a meeting summary. And there will also be a recording of the meeting that we will also post to the SharePoint site that you can access if you need that for future reference. And so, they will be held - they'll be housed under each meeting.

So, today we'll have the committee orientation call. So, all the documents from today, including the new slides that (David) (unintelligible) (Ewan Cooker) presented for us, we'll actually add those slides to this section as well.

And as we prepare for our next meeting, you will notice that there will be more than one meeting where you'll be able to have access to that. I do have on here the staff contact list where you can actually access all of the staff and know-how to reach us outside of the Diagnostic Error Project link.

And under the committee link tab, you'll notice that the Reducing Diagnostic Error Project web page, and this will take you directly to the NQF web site where you can find events and relative materials, and the roster will be posted here as well.

So, I just wanted to share that with you. And if there is anyone who has not received the credentials or if you need assistance with, maybe you've misplaced them. You can contact info@qualityforum.org, and someone at NQF will be able to help you with that.

So very briefly, just reviewing our next step. As I mentioned, our meeting is going to be next week, next Wednesday, we will have our web meeting number two. And we will prepare for the committee to present additional feedback and review of the environmental scan.

Our next meeting will be in December, the 11th, and the web meeting before in January, and the list follows. And we just wanted to make sure that you have a list of these dates.

You should have received calendar holds - you actually will receive calendar holds for the additional meetings outside of the actual the 9th meeting, after we finalized the times this week. Okay?

And as always, you can feel free to contact the project team at diagnosticcare@qualityforum.org. And these are also the links included for your convenience for the project page and your SharePoint committee page.

And with that, I'll turn it over to (Andrew) if we have any final comment, our co-chair?

Man 1: No final comments from me, I don't know if our co-chairs have any words before we leave.

Andrew Lyzenga: No, just that it's a great pleasure to be working with all of you and really look forward to doing great work together over the next year. Thank you for your participation.

Man 1: Yes, we reiterate that we really do appreciate you - all the time and effort, and, you know, volunteers. So, you know, your time is very much appreciated as part of this. And we look forward to working with you over the next year as well.

All right. If no other comments or questions, I think we're nearing the end of our time. So, we will let you go and look forward to speaking with you all next week.

(Cindy): Thank you.

(Helen): Thank you.

Andrew Lyzenga: Bye everybody (unintelligible) time.

END