NATIONAL QUALITY FORUM

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REGIONALIZED EMERGENCY MEDICAL CARE SERVICES STEERING COMMITTEE

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MONDAY,
MAY 23, 2011

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The Steering Committee met in the Monticello Room in the Marriott Crystal City, 1999 Jefferson Davis Highway, Arlington, Virginia, at 9:00 a.m., Arthur Kellermann and Andrew R. Roszak, Co-Chairs, presiding.

PRESENT:

ARTHUR KELLERMANN, MD, Steering Committee Co-Chair, The RAND Corporation
ANDREW R. ROSZAK, JD, MPA, EMT-P, Steering Committee Co-Chair, Health Resources and Services Administration

BRENDAN CARR, MD, MA, MS, University of Pennsylvania School of Medicine
ARTHUR COOPER, MD, MS, Columbia School of Medicine
JOHN FILDES, MD, FACS, FCCM, UNLV Medical Center
KRISTI ANNE HENDERSON, DNP, NP-BC, FAEN, University of Mississippi Medical Center
HOWARD A. KIRKWOOD, JR., MS, JD, EMPT-P, EFO, National EMS Management Association
JOHN A. KUSSKE, MD, University of California-Irvine School of Medicine
THOMAS LOYACONO, MPA, NREM T-P, CMO, Chief EMS Operations Officer - City of Baton Rouge and Parish of East Baton Rouge
RONALD V. MAIER, MD, FACS, Harborview Medical Center

RICARDO MARTINEZ, MD, FACEP, Emory University School of Medicine
ALLEN McCULLOUGH, PhD, MS, MPA, MSN, Fayette County Public Safety
NICK G. NUDELL, BS, NREMT-P, FirstWatch Solutions, Inc.
JESSE M. PINES, MD, MBA, MSCE, The George Washington University Medical Center
KATHY J. RINNERT, MD, MPH, FACEP, University of Texas Southwestern Medical Center
MICHAEL R. SAYRE, MD, The Ohio State University
GARY WINGROVE, Mayo Clinic Medical Transport
JOSEPH WRIGHT, MD, MPH, FAAP, Children's National Medical Center
RICHARD ZANE, MD, FAAEM, Brigham and Women's Hospital
NQF STAFF:

HELEN BURSTIN, MD
ERIC COLCHAMIRO, MPA
LAURA RICHIE
SALLY TURBYVILLE, MA, MS
ALSO PRESENT:

TABINDA BURNEY, Office of the Assistant Secretary for Preparedness and Response
CHARLES CAIRNS, MD, FACEP, UNC-Chapel Hill
IAN CORBRIDGE, Health Resources and Services Administration
ANDREW GARRETT, Office of the Assistant Secretary for Preparedness and Response

KATE GOODRICH, Office of the Assistant Secretary for Planning and Evaluation
CYNTHIA HANSEN, Office of the Assistant Secretary for Preparedness and Response
MONICA LATHAM-DYE, Office of the Assistant Secretary for Preparedness and Response
GREGG MARGOLIS, Office of the Assistant

Secretary for Preparedness and Response
SUSAN McHENRY, NHTSA-Office of Emergency Medical Services

JOE MORRIS, DHS-Office of Health AffairsMIKE
RAPP, Centers for Medicare and
Medicaid Services
ADRIENNE ROBERTS, American Association
of Neurological Surgeons

DAVID RYKKEN, Office of the Assistant
Secretary for Preparedness and Response
CYNTHIA SINGH, MS, American College of
Emergency Physicians
NOAH SMITH, NHTSA-Office of Emergency
Medical Services
TINA TURGEL, RN, Health Resources and

Services Administration
JEFF WILLIAMS, MD, UNC-Chapel Hill

C-O-N-T-E-N-T-S

P-R-O-C-E-E-D-I-N-G-S

9:06 a.m.

CO-CHAIR KELLERMANN: I'm Art Kellermann. I am Co-Chair of this august group and this important process along with Andrew Roszak from HRSA and we want to welcome you to this event.

I'm going to start by passing things over to Helen for a moment, who is going to offer a few introductory comments, but we very much appreciate your coming here today. We very much appreciate your bringing your background, your experience, your disciplinary expertise and your knowledge of a complex and complementary literature as we go through the process today.

I'll have a few more remarks in a moment, but I wanted to hand things over to Helen and let her start and then Andrew and I will offer a couple of comments before we move into the agenda.

DR. BURSTIN: Great. Good

morning, everybody. Thanks for coming. I'm really pleased to see such a great crowd, including many of our federal colleagues, as well as our colleagues from UNC for a great kickoff Commission paper.

I think this will be a great discussion. I just wanted to briefly get just a couple of comments about frameworks, because we don't -- we do do frameworks at NQF. It's one of our endorsed standards.

We endorse frameworks, preferred practices and measures. And I want to set the context here. Basically, two kinds of frameworks that we tend to do. We tend to either do frameworks when it is a completely new area of measurement and we think it's useful to set up almost a tree of domains and sub-domains that people then begin to populate with the needed measures or practices, as they see fit.

A couple of examples of that. We recently did some work on cultural competency

and a framework for that, that clearly identified the key domains and sub-domains where we hope measures will emerge.

The second kind of framework, and I think this one sort of fits in both camps a bit is when there is a new area of measurement, where it's not so much an issue of identifying the key domains and sub-domains in the measurement gaps, but really thinking through a set of principles about how this measurement area may move forward.

So, for example, we did a measurement framework just a couple years back looking at an episode of care framework and how you would begin to align cost and quality together to get value.

And the thought is that there may be opportunities in this project to think both about measure gaps, but also there might be some interesting principles as we have had some of the discussions on the telephone about, for example, when can you take measures

that were developed for the healthcare system at the provider level and think about opportunities to have that flex up and down.

There are certain principles just as an example you might pick to select which kinds of measures would be most likely to be appropriate to flex up and down. So issues like that.

You've got a great team with you today. On our side, they have got -- they really know how to do this stuff, but also we're really pleased to have all this input from this group, our federal partners and I'll turn it back over to Art.

CO-CHAIR KELLERMANN: Thank you. A couple of quick housekeeping measures. You will notice we have these really cute microphones. They have a button. When you push the button, you get a little glowing red light, that tells you that you are active and you can speak.

The reason for this is not because

this room isn't small enough that our voices could carry, but so that they can capture this for posterity, because when you offer particularly pithy or compelling comment and we are going oh, I wish I had written that down, it will be on tape if you will push the little button.

It's equally important when you stop. So I may from time to time have to remind some of you over the course of the day to hit your little red button or unhit your little red button.

Second, I really do want to encourage everybody to be candid and forthcoming with your comments. The goal of this process is to make this document, make this the best possible start in a very important arena of work, which is to develop quality measures for regionalized assistance of emergency care.

We have a very solid beginning. I know we can make it even better. And all of

you around the table, I know, will have good thoughts, good ideas. This is not an occasion to be shy. Please, speak up. Please, contribute. This is a collective process and the goal is to have the best possible document that we can collectively put together. And so that's also very important.

The third request I would offer, unlike me, at the moment, please, be brief. When you offer comments, try to be succinct. Andy and I from time-to-time might ask you to, please, wrap up your comments, only because we want to have as much give and take around the table as possible.

If one of your colleagues has made a terribly compelling point and you know it is a great point and you really feel like if you could only have five minutes to say it again we would really get it, it's okay to say I agree with Dr. Maier and that will capture your sentiments perfectly.

But again, the goal is to be

dynamic, move forward, work through the information and come out of this with the best possible product. And again, I want to thank all of you for your time, your journeys for those of you who came from a long way and most importantly for your knowledge and your experience and your insights as we go through the day. Andrew?

CO-CHAIR ROSZAK: I agree with Dr. Kellermann. Thank you very much everyone for attending. This is a very important process. Thank you, particularly, to the NQF staff, Eric and Sally, and numerous others who have worked on this and the UNC who has started us off on the right track.

So I really appreciate everyone's time and effort. We do have a jam-packed agenda, as you have all noted. So I would like to go ahead and move into it and get started, if we could, please.

I believe we are going to do the disclosure of interests. And go ahead, Sally.

MS. TURBYVILLE: Okay. As all of you may recall, we did request that you complete a written disclosure of interest form some time ago. Today, we ask that you orally disclose any interest that you consider relevant to your participation on the Committee and that you believe your fellow Committee Members should be aware of.

We do not ask you to summarize your entire CV or everything that you may have revealed, but things that you may consider particularly relevant to the service on this Committee.

We suggest that you disclose grants that you have received in the last two years as well as consulting or speaking relationships that you may have within an organization.

I also want to remind you that you serve on this Committee as an individual, not as a representative of your employer or any other group with which you may be affiliated,

including the group that may have nominated you.

So what we are going to do is while you do your brief introductions, then, please, also follow that up with a disclosure of interest that you think is important and relevant to this Committee and that you want your Committee Members to be aware of.

So we can go ahead and perhaps just start with Andy and then move around the table.

CO-CHAIR ROSZAK: All right. Thank you. My name is Andrew Roszak. I guess I should disclose that I work at the United States Department of Health and Human Services for the Health Services and Resources Administration. I'm their Senior Policy Advisor in the Office of the Administrator for Special Health Affairs.

CO-CHAIR KELLERMANN: Art Kellermann. For the last year, I have been working for The RAND Corporation and currently

direct RAND Health. Current funding includes contracts with the Agency for Healthcare Research and Quality and HHS, ASPR, but RAND Health, obviously, does work with a number of federal, state and local agencies and foundations.

I have also done work in the past with CDC and NIH. I have no industry ties to speak of. I am co-patent holder on a use patent for progesterone and traumatic brain injury and that is at an experimental level in clinical trials and not available for marketing or for inappropriate promotion.

So you will not be hearing me advocate that during this meeting.

DR. MAIER: Well, I'm Ron Maier. I'm a General Surgeon, Trauma Surgeon, Chief of Surgery at Harborview Medical Center, which is the Level 1 Trauma Center for one-quarter of the land mass of America, as we like to say, including Alaska and part of Montana. It's easy.

I'm a Professor of Surgery at the University of Washington. I have been there my whole career, 30 plus years, which gives me the background and interest in today's topic. I have, a major component of my time is spent with the Glue Grant, which is a consortium grant from NIGMS looking at the genomic response to injury severity over time, working with Stanford, Harvard and the consortium in that effort.

I have been the recent Chair of the Board of Directors of the Trauma Center Association of America, which is a somewhat dissimilar source of collection of volunteer trauma centers who collaborate trying to put together information, primarily at the CEO level for financial stability and strength of the trauma centers in their various institutions. It should not be a conflict for this group.

And then, I guess, last I should throw in my son just graduated last year and

got an outrageously paying job at Covidien, but I don't think I'll be bringing up anything for Covidien while we are here today.

DR. WRIGHT: Joseph Wright. I am Senior Vice President at Children's National Medical Center here in the District of Columbia and I'm a Pediatric Emergency Physician by training. I've been there 20 years and am a Professor of Pediatrics Emergency Medicine and Health Policy at the George Washington University Schools of Medicine and Public Health.

In terms of relationships that I need to disclose, I am the principal investigator at the Emergency Medical Services for Children National Resource Center and have been a continuously funded grantee in the EMSC Program for 15 years.

I also serve on the American Academy of Pediatrics Committee on Pediatric Emergency Medicine. And I am also a member of the National EMS Advisory Council. No

industry ties and I think that's it.

DR. CARR: Thanks very much. My name is Brendan Carr. I'm from the University of Pennsylvania. The disclosures that I think are pertinent are that I ran a conference for the Society for Academic Emergency Medicine a year ago about regionalized emergency care systems. I was Co-Chair of that conference and also co-PI of two Arthur T. grants, one from NINDS and one from AHRQ to fund that conference.

The conference was co-funded by ACEP-SAM and the Emergency Department Practice Management Association. In addition to that, we, along with my partner, Charlie Branas. At Penn, we hold two research grants, one from the Agency for Healthcare Research and Quality to study stroke systems of care and the other from the CDC to study trauma systems of care. But no disclosures of note from industry.

DR. FILDES: Good morning. My name is John Fildes. I'm an acute care

surgeon from Nevada. I'm a Professor of Surgery at the University, Vice Chairman, Program Director for General Surgical Training, Surgical Critical Care, Trauma Burns and Acute Care Surgery. And that's my day job.

I have had grants related to that that come from the Department of Defense in Fluid Warming in the Austere Environments and also Informatics Grants from Transportation and Injury.

I have a second job, which is that I'm the Medical Director of Trauma Programs for the American College of Surgeons. The American College of Surgeons Committee on Trauma holds grants from the CDC. And under grants from HRSA, I wrote the Open Source, Open Code National Trauma Data Bank and its Dictionary, which is a NEMSIS-compliant information system.

And I think that's enough for one day. Thank you.

MR. COOPER: Art Cooper. I'm a Pediatric General and Trauma Surgeon from New York City. Professor of Surgery at Columbia and a Director of Trauma in Pediatric Surgical Services at Harlem Hospital, one of our Level 1 Trauma Centers in New York City.

I have been deeply involved with the Emergency Medical Services for Children Program also for 15, 20 years working primarily with my colleagues at New York University and Bellevue Hospital in terms of that effort.

Most recently, we have been working with the New York City Department of Health and Mental Hygiene on several disaster preparedness projects that are funded both by CDC and HRSA. I also have some small grants from the New York State Governor's Traffic Safety Committee for injury prevention purposes.

I, too, am a member of the National EMS Advisory Committee in addition to

several New York State advisory committees. And my primary professional involvement of late has been through the American College of Surgeons Committee on Trauma and the AMA National Disaster Life Support Executive Committee.

MR. KIRKWOOD: Good morning. I'm Skip Kirkwood. I'm the Chief of the Wake County EMS Division in Raleigh, North Carolina. I currently serve as President of the National EMS Management Association and I'm a senior consultant with Fitch and Associates in Kansas City. A paramedic, recovering attorney and no industry interest to disclose.

MR. WINGROVE: Good morning. I'm Gary Wingrove. I work for the Mayo Clinic's Ambulance Company. I'm a member of the National EMS Advisory Council. I did some work in NHTSA's Performance Measures Project and also convened a group that looked at some consensus measures and did some testing with

NEMSIS data.

I'm a recovering former State EMS Director and no industry interest to disclose.

DR. MARTINEZ: I'm Ricardo Martinez. I am currently faculty in Emergency Medicine over at Emory School of Medicine in emergency medicine. And I work clinically at Grady. The other roles I have is I'm on the ACEP Federal Government Affairs Committee. I was Co-Chair with Dr. Carr on the Consensus Conference about changing from Regionalization to Integrated Networks of Care.

I'm the senior physician for the National Football League for Super Bowl and yes, I can get tickets, so 23 years doing that. And until recently, was President of the East Division of the Schumacher Group that was an emergency medicine company.

DR. ZANE: Good morning. I'm Rich Zane. I'm the Vice Chair of Emergency Medicine at Brigham and Women's Hospital, Associate Professor at Harvard Medical School

and I'm the Medical Director for EMS and Preparedness for Partners Healthcare, which is a large network of hospitals in Boston.

I have funding from the DoD, AHRQ and HHS for preparedness work. I have no conflict of interest and I'm the Medical Director for the New England Patriots.

MS. HENDERSON: Hello. I'm Kristi Henderson from the University of Mississippi where I am the Chief Advanced Practice Officer there and have been a Nurse Practitioner in the Emergency Department there for many years. I am Assistant Professor at the School of Nursing there and am on the Health IT Committee as well as the Director of the statewide telemedicine program there.

I do have funding from FCC and USDA.

DR. RINNERT: Good morning. I'm Kathy Rinnert. I'm an Emergency Physician in Texas. I have an Associate Professorship in Emergency Medicine at the University of Texas

in Dallas. I have been involved in emergency care for almost 30 years now, although everyone says you look too young to have been doing it for that long.

I have been working with the Arkansas Department of Health in Missouri and Department of Health and Senior Services for a number of years and helping them develop their statewide trauma accreditation programs. And I have also been working with the American College of Surgeons Committee on Trauma for trauma consultations, which assist states in developing trauma systems in their jurisdictions.

I have no industry funding or grant funding to declare.

MR. NUDELL: Good morning. I'm Nick Nudell from Encinitas, California. And I work for FirstWatch Solutions. We do a lot of biosurveillance and 911 data surveillance, a lot of our customers are CDC-funded customers. We do a lot of CDC-funded work.

I have also previously served on a committee funded by CDC, the TIDE Committee where we worked on triage systems. And I'm a paramedic. And I have also done a lot of consulting work for states and systems who are funded by flex grants or local state grants. Otherwise, I have no declarations.

MR. McCULLOUGH: Hello. I'm Allen McCullough. I'm a Public Safety Director for Fayette County, which is a Metro County in and around Atlanta. In that capacity, I'm over the seven departments of public safety. I'm also an Emergency Nurse Practitioner. I work part-time at one of our urgent care centers and also one of our family free clinics.

I'm Chair of Education for the American Heart Association, also involved with EMS Section 4 International Association of Fire Chiefs. I have been involved with the National Registry and the Board of Directors. I have been for about seven years.

And I'm actively involved in the

EMS education teaching at the paramedic and critical care level for about 30 years and no conflict of interest.

DR. KUSSKE: Good morning. I'm John Kusske. I'm the Interim Chairman of Neurosurgery at the University of California-Irvine. My third time around as Chairman. I have no industry disclosures to make, at this time.

I have been involved in emergency care in California for about 30 years helping to set up the trauma systems in the state. And I have been involved with the National Neurosurgery for many years regarding EMTALA and emergency care.

I am presently the Chairman of the Board of the Institute of Medical Quality, which is a portion of the CMA, which deals with quality issues in the State of California. And I was the member of the EMTALA Tag and was Chairman of the On-Call Committee for physicians in the United States.

MR. LOYACONO: Good morning. I'm Tommy Loyacono. I am a paramedic, currently the Chief Operations Officer for the City of Baton Rouge, Louisiana. I have been actively involved in pre-hospital EMS for about 37 years.

I currently sit on the Board of Directors of the National Registry of EMTs as their Vice Chair. I'm also a member of the Advisory Board of NEDARC and the EMSC National Resource Center in Washington.

I was a member of the sub-committee of the IOM Panel on the Future of Emergency Healthcare in the U.S. system and I have no grant funding to disclose, but have done many, many reviews, mostly in HRSA. Thank you.

DR. SAYRE: I'm Michael Sayre and I'm an Emergency Physician at The Ohio State University, Columbus, Ohio. I did that for Chuck.

DR. CAIRNS: Thank you.

DR. SAYRE: And I currently have funding from Medtronic Foundation to help lead a project to improve cardiac arrest survival in five states by improving the systems of care in those locations.

I'm also currently the Chair for the American Heart Association Emergency Cardiovascular Care Committee, which produces training materials that are used in several countries and have received travel reimbursement from AHA for those activities.

DR. CAIRNS: Hi. My name is Chuck Cairns. I'm the Chair of the Department of Emergency Medicine at the University of North Carolina-Chapel Hill.

We have a number of grants that engage with this area of regionalization. So, first of all, it has been our pleasure to work with NQF on the development of the environmental scans and on the draft of this framework paper.

We have a group that is active in

EMS, particularly in regionalization quality and care issues, that has been funded currently by CDC and it is EMSC, The Robert Wood Johnson Foundation, the Duke Endowment, the Medtronic Foundation in conjunction with Michael's project, the American Heart Association Outcomes Project, as well as the State of North Carolina.

We also are engaged in biopreparedness research on a regional basis. That is funded by the North Carolina Public Health, the CDC and the Department of Homeland Security.

And then I am the co-director and principal investigator of the NIH U.S. Critical Illness Injury Trials Group along with Karen Cobb. And I serve on a number of data and review committees for the Resuscitation Outcome Consortium, the Pediatric Emergency Clinical Research Network.

And I have a number of organizational affiliations. I serve on the

American Heart Association Leadership Committee for the Council on Critical Care and Cardiopulmonary Resuscitation. I also am the past Chair and current member of the Research Committee of the American College of Emergency Physicians.

I also am the Co-Chair of the American College of Emergency Physicians Society for Academic Emergency Medicine Federal Task Force. And then finally, I serve on the Steering Organizing Committee of the U.S. Critical Illness Injury Trials Group.

MR. WILLIAMS: Good morning. My name is Jeff Williams. I'm an EMS Fellow and attending physician at UNC in the Department of Emergency Medicine funded by NQF for this project, the environmental scan and the draft framework that we have created.

I have a university grant, small university grant to study community cardiac arrest and integration of AEDs with public emergency systems. And I very soon will be

the Associate Medical Director for the North Carolina State Highway Patrol.

MS. RICHIE: Hi, my name is Laura Richie. I'm actually a Project Manager at NQF. I manage a couple of projects related to renal disease where I have just recently been asked to assist Sally and Eric in this project.

MR. COLCHAMIRO: Hi, Eric Colchamiro, NQF staff, and great to meet everyone today. If you have any questions over the next couple of days while you are here in D.C., feel free to contact me.

MS. TURBYVILLE: Are there any Steering Committee Members on the phone? Robin Shivley? Okay. Yes, it's open. Okay. We will --

DR. WRIGHT: Sally, I have one more that is important to disclose. I'm currently a senior investigator with funding from the Office of EMS at NHTSA to investigate proof of concept of evidence-based guideline

development for pre-hospital protocols. And that is a project that is ongoing and about halfway through and I think important to the process. Thanks.

MS. TURBYVILLE: Okay. And I'm Sally Turbyville at NQF. I'm the Senior Director on this project. So before we move on, thank you, all of you, for providing your introductions and oral disclosure.

I want to provide each of you now an opportunity, if you have questions of your colleagues regarding their disclosure, please, go ahead and do so now. Okay. Great.

So let's get started on the content of the meeting. I'm going to hand it over to Eric to kick us off and we will just keep moving through this agenda.

MR. COLCHAMIRO: Okay. And again, welcome. I am just going to touch over the next few minutes, and feel free to interrupt me if you have any questions, a little bit more about some of the work that has been done

and what is ahead for the Committee.

So the Regionalized Emergency Medical Care Services Project began in November of 2010, funded under NQF's contract with the Department of Health and Human Services. As discussed previously, this project has two core components in this first phase:

The environmental scan, fully developed or pipeline measures which was completed in February 2011, which is a resource document moving forward and then the Measurement Framework Report, a conceptual guide for measure development and what we are here today to really work on and to develop.

And, as discussed, we have been working with the University of North Carolina as partners in this effort, but looking forward to your expert review of the document.

The objectives of the framework report:

To provide guidance to policy

makers, healthcare leaders and other key stakeholders toward a high performing healthcare system; to identify crucial gaps in measurement; and as a springboard for defining performance measurement; and to signal what type and where performance metrics are needed.

Really a key document in the potential second phase of this project where measures would be endorsed, this framework would really serve as a key point and a key guide for the community of measure developers as they seek to develop measures and submit them to NQF for potential endorsement.

And as the arrow at the bottom notes, NQF aims to establish that road map, so that when the measure endorsement happens down the road, that we will have a guide to where those critical gaps are.

The Steering Committee acts as a proxy for NQF within this project. It works with the staff and makes recommendations to the NQF membership for endorsement. So

following this meeting and subsequent conference calls, there will be a vote on a recommendation for endorsement.

As discussed during the orientation, there will be a review period where the framework goes out for comment from NQF Members and the public. And really, NQF gathers that consensus that is so important and that we all are going to be focusing on and the Committee will have an opportunity to respond to the comments compiled from NQF Members and the public.

And then moving forward as following a potential endorsement of the framework, the co-chairs would represent the Steering Committee when the CSAC meets to give final approval of the framework report.

A quick look at the time line. As mentioned previously, this project is going to be moving forward very quickly and we have noted the days previous, the orientation webinar, the first draft due, you can see the

in-person meeting and some tight turnarounds here, but all the more emphasis as to why this Committee's work is so essential and the comments today are so critical.

You can see the Member and public comment will happen in July and then as well, we will have additional conference calls to discuss the work as we move toward potential endorsement, followed by Member vote and then approval by NQF, CSAC and Board of Directors.

As far as relevant external efforts, as often discussed during the orientation call, there was the IOM and the important work done there that many of you on this Committee have seen and were involved with and the workshop from September of 2009 and the subsequent report released in March 2010.

The National Quality Strategy that NQF, through its National Priorities Partnership, was involved in putting together and the importance of better care and

improving the overall quality and making care patient-centered, reliable, accessible and safe.

And then some of the other efforts, we received suggestions about some of the other critical work for the Committee to consider and just a few of them are listed here, but the ACEP work on the State of Emergency Medicine, the Emergency Nurses Association Benchmarking Guide and then work done by folks in the international community, including Canada, as far as EMS planning, which can serve as kind of a comparative at looking how other countries have dealt with this work.

And as discussed during the orientation, a whole range of efforts to consider. These are just a few of them, including the work of many different specialty societies which were mentioned during the orientation call, but a few efforts to consider here.

So that concludes my thoughts as far as the overview and relevant external work. And other comments from NQF staff to report?

MS. TURBYVILLE: Any questions from the Committee Members about the project or expectations from us and from you today and through the course of the report writing? Oh, yes, thank you.

We did a disclosure of interests and introductions and thank you for joining us today. If you could, please, just provide any relevant disclosures of interest that you think your Committee Members or the public should know about? And then also a brief introduction, we would appreciate it.

DR. PINES: Sure. I'm Jesse Pines. I am currently at George Washington University where I serve as the Director of the Center for Healthcare Quality.

And I think the only relevant disclosure is currently I'm on the Advisory

Board for a company called The Doc Clock that measures ED waiting times.

CO-CHAIR KELLERMANN: Thanks again, everybody, for your introductions. I think as you hear us go around the room two themes emerge: One, this is an incredibly accomplished group with a broad array of backgrounds and interests. Second, all of you are terrible business people, because you haven't sold yourself to a lot of commercial interests, it's obvious to me.

Again, I want to express my hope that, as we go through this process, you will be very actively engaged, contribute your best ideas and really push this process, so that we can have the best possible product at the end of the day.

Are there any questions from that overview of the process that any of you have about what we are about today and how we are going to be going about our business that you would like to direct to the NQF staff? Dr.

Martinez?

DR. MARTINEZ: I echo your comments. We have a lot of smart people in here. And looking at what we are trying to do, my question is at what level are we trying to come up with measures? In other words, I can get real down nitty gritty. We're trying to just get high level measures for systems? What's the charge to the Committee? So we don't get bogged down at maybe the wrong level.

DR. BURSTIN: Just one correction. We are actually not going to get to measures today. This is really staying above that. It would really be identifying what are those key areas where you think measures are needed, rather than the actual measures themselves.

The hope would be that this report will then serve as an opportunity for measure developers to look towards and say this is what is needed.

DR. MARTINEZ: I appreciate that.

Thank you.

CO-CHAIR KELLERMANN: Other questions? Andrew?

CO-CHAIR ROSZAK: So we all have the agenda and the handout that kind of outlines what we are going to be going to be doing for the U.S. today. And then tomorrow, I'm sure all of you have received and hopefully have reviewed the UNC document that will serve kind of as a template or a strawman, if you will, as we start discussing some of these issues.

And I think it's safe to say, based on the conversations with the UNC staff and the NQF, that we are certainly not tied to this by any means. This is a starting point, not an ending point. And I don't think anyone's feelings are going to get hurt if you make suggestions or changes or deletions to this document.

So looking at the rest of the day today, we are going to go into a little bit of

detail and talk about some of the background work that has been done and hopefully set the stage to look at what measures are out there, what areas are already being measured and then also determine some of the gaps.

We are going to spend a little bit of time on some of the definitions and I know we have talked at great length about trying to define regionalization and we've done that for many years and I don't think that we are going to have a magic bullet and solve the regionalization definition problem today, but I do think that we are going to have to put forward at least a working definition, so that we can define what it is exactly we are talking about here.

So, you know, kind of in keeping with the comments about keeping this at kind of an elevated 30,000 foot level, I would implore you, please, not to get buried in the detail and we won't make a definition, but it's certainly not going to be something that

is the end all definition for regionalization.

We will have an opportunity for some public comment and I appreciate the folks who have joined us here in the room as well as those who are listening on the phone.

And tomorrow, we will be breaking into sub-groups to talk about the individual domains or buckets that we would like to examine to look at regionalized systems of care.

So that's kind of a brief overview. As the time line showed, this is kind of a tight time line. However, there are many opportunities built in to reevaluate what was done, to reevaluate what was done after that and to reevaluate again. So there will be opportunity by the Steering Committee, as well as the general public, to provide input and comment. So, please, don't think that, you know, after you walk out of here tomorrow, you will never hear from us again, because that's certainly not the case.

So that's kind of a little bit of an overview of what is going to happen today and tomorrow.

Art, have you got a few other things you would like to highlight?

CO-CHAIR KELLERMANN: Yes. Just it occurred to me that while we have a number of accomplished people at the table, we have an equally, if not more accomplished group, looking onto the table. And I wonder if the audience would indulge me for a moment and let each of you introduce yourselves as well.

You don't necessarily have -- I suppose actually, I could make you all parade up here to the microphone, but if you would be happy to -- do we have a traveling mike? I think that would be helpful, both for capturing the record and because we really have some extraordinarily accomplished people, both as individuals and representing organizations, and I would appreciate if the audience in attendance would introduce

themselves as well.

And at the end of that, we will go back to see if there is anyone in particular on the phone that would like also to introduce themselves that may be listening in. So if we could start on this side? Thank you.

MS. SINGH: Cynthia Singh. I'm the Director of Grant Development for the American College of Emergency Physicians.

MS. LATHAM-DYE: Monica Latham-Dye. I'm a Public Health Analyst with the -- with ASPR.

MS. GOODRICH: Hi, I'm Kate Goodrich. I'm a Medical Officer at ASPE and I am the Project Officer for the NQF contract.

MS. HANSEN: Good morning. I'm Cynthia Hansen. I'm a Clinical Psychologist working in the Division of Preparedness Planning at the Office of the Assistant Secretary for Preparedness and Response.

MR. MORRIS: I'm Joe Morris, United States Public Health Service, assigned

to the Department of Homeland Security, Office of Health Affairs.

MR. SMITH: Good morning. I'm Noah Smith with the NHTSA-Office of Emergency Medical Services.

MS. McHENRY: Good morning. Susan McHenry, also with the NHTSA-Office of Emergency Medical Services.

MS. TURGEL: I'm Tina Turgel. I'm the Nurse Consultant for Emergency Medical Services for Children under HRSA.

MS. ROBERTS: Hi, Adrienne Roberts, the Senior Manager for Legislative Affairs with the American Association of Neurological Surgeons.

MR. MARGOLIS: Hi. My name is Gregg Margolis. I'm the Director of Health Systems and Health Policy for the Office of the Assistant Secretary for Preparedness and Response.

MR. CORBRIDGE: Good morning. Ian Corbridge. I work with my colleague, Andrew

Roszak, at HRSA.

DR. GARRETT: I'm behind the pillar. Good morning. I'm Andy Garrett. I'm the Deputy Chief Medical Officer for the National Disaster Medical System, also on detail as the Interim Director for the Emergency Care Coordination Center, an ER Doctor and an EMS and Disasterologist by training.

MR. RYKKEN: Good morning. I'm David Rykken and I'm the Senior Public Health Analyst at ASPR.

MS. BURNEY: Good morning. I'm Tabinda Burney. I work at the Emergency Care Coordination Center at the Office of the Assistant Secretary for Preparedness and Response.

MS. FRANKLIN: Hello, Angela Franklin, Director of Quality and Health IT at the American College of Emergency Physicians.

DR. RAPP: I'm Michael Rapp. I'm an Emergency Physician and a Director of the

Quality Measurement and Health Assessment Group at CMS.

CO-CHAIR KELLERMANN: Thank you very much. Are there any individuals listening in on the telephone that care to introduce themselves? Either no one is listening in or they are all being shy, but that's all right or they can't find their mute button, one of those possibilities.

Okay. Well, we are a bit ahead of schedule, but I want to give Dr. Cairns an opportunity to compose his thoughts, so we will take an uncharacteristically early break to give people a chance to stretch their legs and process their coffee and then we will reconvene.

Why don't we start a little -- huh? Will that work? Okay. And we will plan -- we were going to reconvene at 10:30. I will propose that we actually reconvene at 10:05, that will get us a little ahead of schedule and then we can beat on Dr. Cairns a

little more later.

So we will take a short break.

(Whereupon, at 9:48 a.m. the above-entitled matter went off the record and resumed at 10:09 a.m.)

CO-CHAIR KELLERMANN: Okay. Thank you all very much. Before we start with the presentation, a couple of other items we are going to cover quickly.

Eric asked me for the Committee Members to give a show of hands for those who would be interested in going to a nearby restaurant for dinner tonight, particularly for out-of-towners or in-towners who would like to do that. So if you are interested in joining the group for dinner tonight, please, raise your hand, so Eric can get a count.

Tell me when you are done counting, Eric. M&S Grill, a very nice seafood place around the corner. That's right. Eric, did you get your count? Okay.

Second, lest you all think that

I'm being bossy and Andrew is being retiring today, I have an unfortunate conflict with a major event on the west coast tomorrow, so I will not be here with you tomorrow. So while we are co-chairing, I'm getting to do a little bit more of the badgering today, because Andrew gets the full weight of his office tomorrow. So that's kind of how we have this division of labor.

And before we start with Chuck's overview, it occurred to us during the break that it would be really, really worthwhile to hear from our major federal partners to see if they have any opening or introductory comments that they would like to offer the group.

So purely arbitrarily, Sue, if you could start with NHTSA and then we will follow if anyone from Homeland Security would like to offer a few remarks followed by ASPR and then we will let CMS bat cleanup.

MS. McHENRY: Thank you very much. It's really -- is this on? Okay. It's really

good to see so many old friends and I look forward to making some new ones today. I am Susan McHenry with the Office of EMS at the National Highway Traffic Safety Administration.

And we are really glad to see this effort underway and we have a couple of initiatives that we have been working hard on that I think relate to the work that you will be doing.

One of the projects that I have the real joy of overseeing is our effort to develop our National Emergency Medical Services Information System, NEMSIS. And it is well along its path. We have now made it through three levels of approval with HL-7 standard development organization, so we are kind of moving into the real health information technology arena and we are very excited about that.

We now have 30 states submitting to the national database. Everybody is

working hard on it. And our next version of NEMSIS, which is Version 3.0, is going to be much more robust relative to the various time-critical conditions and really enable us to measure performance in those areas.

And so I think that it will be a really good resource to help and will also be kind of a sequel to what happens in the hospital. So I think that we can really look at a whole system of care through some of those measures. So we are very excited about that.

And I'll be around, Noah Smith and I will both be around, all day today, so if any of you have any questions or anything, I would be glad to answer those. And I'm just going to leave it at that for now, because I know you have important work to be done. Thank you very much.

CO-CHAIR ROSZAK: Thank you, Susan. Joe Morris, do you have some Homeland Security remarks? Not to put you on the spot.

MR. MORRIS: I really don't know if I'm qualified. I have only been there since March, so I'm still in the steep learning curve of Rick Patrick and his tutelage. So I'll hold off right now.

CO-CHAIR ROSZAK: Okay. Very good. Dr. Margolis from ASPR?

MR. MARGOLIS: It's a pleasure to be here today and I'm looking forward to the conversation. I would like to, on behalf of ASPR, tell you how excited we are about this particular project and how important this is for us.

And I think that the work that has been done up until now has been outstanding and I would like to also encourage the group to make sure that we consider some of the broad systems issues that might help us get our head around regionalization of emergency care services, in particular, things like emergency department and EMS system capacity and capabilities and emergency preparedness

and resilience are really important issues for our office, as we are trying to build a healthcare system that is efficient and effective every day and also is capable of responding to disasters and public health emergencies.

So I would ask that you make sure that you think about those kinds of variables in addition to the very important patient care kind of individualized variables that are indicators of quality emergency care.

CO-CHAIR ROSZAK: Thank you. Dr. Garrett, would you like to make some remarks?

DR. GARRETT: I agree with Gregg's comments, that's very much what I would say as well. I think, you know, we're really excited. The implementation, as you know, it's just, you have a pillar for the emergency coordination center and whatever strategic plan moving forward acknowledging that the role that we've been playing is really doing great things in emergency care. So I would

like to make a statement, a plug at this point.

The strategic plan, which you will see, is out right now. We would love any comments from people who have had a chance to review it. I would be honored to have any of the thoughts from the folks around the table; we're at a neat turning point. I guess this is the important part. Thanks for inviting us.

CO-CHAIR ROSZAK: Thank you. Dr. Rapp?

CO-CHAIR KELLERMANN: CMS, if you could speak through a microphone, that would be helpful, so we can capture it. You can borrow one of the --

DR. RAPP: So thank you, Art. At CMS, we were very supportive of this project, too, and I would like to just give a couple of perspectives on it as we think about measurement.

So where we are right now at the

CMS level and we do a lot of quality measurement and those quality measures are incorporated into a variety of programs. We started with just quality improvement and then we moved to pay for reporting or we publicly report information and now we are in changing how we pay individual providers and professionals for their care, based upon that.

So that is focused at the provider level, at the professional level. We spend a lot of time distinguishing one from another and so forth that way.

But what, at least from my perspective, we're hoping to get out of this is not that. We are not trying to measure a particular hospital. This is about a system of care.

And what I'm just sort of emphasizing from my stand point, it's not even about regionalization of care. It's about measuring the care within a region, within an area and I'll just give you sort of an

example.

We have measures that we apply to hospitals on the time for -- to percutaneous coronary intervention of 90 minutes. So we measure that for every hospital in America. And with those, we publish that information on the website.

We exclude people if they are transferred and so forth, but it is designed to say what percentage of patients that come to this particular hospital will get that within 90 minutes.

When you do it at the system level, that's not what you are interested in. You are interested in patients that have the condition that leads them to fall within that type of measure to what extent do they get that if they are in a particular geographic area or within a system.

It doesn't matter what hospital they go to. It doesn't matter what EMS service they call. It doesn't matter whether

they come by a car or whatever. But we are interested in how well that emergency system works.

Now, part of it might be structure. It would be better to have designated hospitals, perhaps, and stuff like that, but that is really -- you know, people might disagree with that or it might not turn out to be the case. We might think that's the case, but it may not be.

So I just want -- what I don't think we need necessarily is to be able to measure the degree to which a system is "regionalized." What we need to be able to do is have a framework for measuring the quality of care. And when we do that, there are different kinds of measures: Structure, process, outcome, and cost. And don't forget about the cost piece of it, because that is very much on the front burner of concern, at least at the federal level.

I think it is really nationwide,

wondering about the cost of healthcare. So cost -- so I would look at measures that way, those different things. So structural measures might be to what extent the people have transfer agreements and so on and so forth, but that's really not getting us to what I think is of greater interest, which is outcomes, cost, processes of care are important, but, again, we're sort of de-emphasizing it at this point.

So there I just wanted to make those points that mainly it's not about regionalizing care. It's about how well the care is delivered within a region.

CO-CHAIR ROSZAK: Thank you, Dr. Rapp. I also wanted to extend a very special thank you and a welcome to Kate Goodrich. Kate manages the NQF contract for HHS. And really on behalf of all the HHS family, we really appreciate the great work you do, Kate. Would you like to say anything, a few remarks for the group?

MS. GOODRICH: I just want to say I'm really glad that I was able to come today. It's great to see this group of people and all of our -- my federal partners in this effort. And I appreciate the comments thus far. I think they are absolutely right on target. So looking forward to the day. Thanks.

CO-CHAIR KELLERMANN: Thank you very much. Question?

MS. TURGEL: Not a question. May I say a couple words? Sorry. Sometimes HRSA offices don't necessarily speak to each other and since I am part of HRSA and Andy, we have just kind of gotten together, I work for the Emergency Medical Services for Children Program, so I just want to make sure that I'm putting a bug in everyone's ear to make sure that pediatrics are included.

And what we do within every state and U.S. territory right now, we have performance measures that they need to report on. So we will have data in August regarding

designation of hospitals within their states and also interfacility transfer guidelines and agreements.

So we will have some of that information from every state and U.S. territory in August. So, please, feel free to utilize us and I will keep probably hitting you in the back of the head making sure that pediatrics are included. Thank you.

CO-CHAIR KELLERMANN: Knowing some of the people around the table, I can assure you that we will not ignore children. Any other comments from federal attendees before we go on with the program?

Okay. We are still ahead of schedule, which is good. And, Dr. Cairns, you have the floor, sir.

DR. CAIRNS: Well, thank you very much, Dr. Kellermann. And let me just reiterate what a pleasure it is to be with you.

This has been a project between

the Department of Emergency Medicine, the University of North Carolina, as well as our colleagues at NQF. And it has really been a pleasure and, frankly, an honor to be involved with this project.

We are just going to give you an overview in this session of the environmental scan. I know that all of you have a copy of it. And so I'm just going to briefly go through the process we follow, because it certainly serves as a resource for our discussions today on the framework report.

And the second aspect was to give a brief overview of how we approached the framework draft.

Now, there are key components of the framework draft that, frankly, we think we need your input on and we want to be sure that people understand and accept some of the premises. So there will be more extensive discussion of those key terms of the guiding principles and of the domains later on in the

day.

So this just serves as kind of a brief overview, but, please, feel free to stop. We want this to be a conversation. We want this to be a discussion and as iterative as you all find valuable.

So the first slide will just be the introduction. So this is just directly out of the environmental scan.

The first comment is that the premise here is that efficient resource utilization is paramount to providing effective quality healthcare.

Second, that this concept of regionalization has been identified as the potential method for improving medical care through this efficient resource utilization. And you could imagine that one of the key terms we will be discussing this afternoon is going to be regionalization, because we just heard what Dr. Rapp's concept of regionalization may be and that may differ

from some of the current practices of regionalization.

Next slide. And while regionalization is clearly not a new idea, we have been serving people across geographies in an integrated way in trauma, in heart attack care, stroke care, evolving in cardiac arrest care, pediatric care, but certainly it has become a very functional aspect with lots of heterogeneity.

And so honing in on which aspects are important for quality efficient effective care across populations and regions will be the focus of the environmental scan.

Next slide. So the National Quality Forum is engaged in an effort to establish NQF-endorsed consensus standards that evaluate the regionalization of emergency care. So that was the purpose of the environmental scan. It's to support this effort.

Next slide. And this scan

included the review of projects and measures as well as to identify measurement gaps of regionalized emergency medical care services.

Next slide. The core research questions that we were tasked with taking on:

The first one, what current performance measures or standards exist that apply to regionalized emergency care? And at what level of development or implementation are these measures?

The second key question what current projects exist in the realm of regionalized emergency medical care services? And we felt it important to look at an overview of projects, because they can provide a context for these measures and, frankly, can help inform the context of emergency medical care services across a wide range of settings, across a number of different aspects of systems and across different types of patients.

And then finally, where do gaps

exist in current measures?

Next slide. So the products of the scan were to:

One, provide a list of performance measures, both in current use and the pipeline. And the pipeline has a very technical term at NQF for these regionalized emergency medical care services.

Describe these existing projects and then provide an analysis of measure gaps.

Next slide. So you could imagine the task of taking on this issue. While there isn't a technical definition of regionalization, and I suspect that we might have a wide range of opinions on what that would be, we were guided by consensus documents that have been recently developed in order to provide a context for measures.

So, first of all, we look for measures or products of emergency care that include care that is time-sensitive or of high acuity. A working definition of high acuity,

something that was time-sensitive and was life-threatening illness or injury.

Second, a measure or project of regionalized care was now within a system that facilitates delivery of care that is not universally available. And so, for example of this, given the acute myocardial infarction example that Dr. Rapp presented, Aspirin is pretty much universally available everywhere.

PCI or percutaneous intervention is not. So you can imagine there are going to be a number of performance metrics in aspects of that care across settings that are both uniformly available and wouldn't be included in this, but then some that are going to be distributed unevenly across the region or a population. That would be included as a measure or project for this screen.

Next slide. So the exclusion criteria is to measure a project for non-emergency care or that's not within the regionalized system. And another aspect of

this is not just care that is universally available, but also care that does not involve a system of both in- and out-of-hospital components, recognizing that there is going to be a spectrum of care across these settings that's going to contribute to a patient outcome, to a system performance or an integration across various settings.

We're going to talk a little bit more about that this afternoon.

Next slide. So what were the results? Well, we identified projects and measures using this evaluation, both regionalized and emergency care. The Norton ghost just showed up. It resulted in 11 domains of what we call domains of regionalized healthcare services.

And we had to put in a specific definition for the technical aspect of the report and that was now emergency care treatment of high acuity or life-threatening conditions in an expedited fashion recognizing

that timely care of emergent patients may prevent mortality or significant morbidity. That was kind of the standard for the environmental scan.

And so this included out-of-hospital areas, emergency departments and other high acuity areas within hospitals.

Next slide. So research strategies. We identified both formal critical review approaches as well as reviewing the NQF measurement library. We reviewed the recent consensus conferences. It has already been mentioned that the Society for Academic Emergency Medicine has a recent consensus conference.

The NIH had a series of roundtables looking at emergency care research, one on neurology and behavioral emergencies, another one on medical and surgical emergencies and a third one on trauma, emergency trauma.

We also noted the IOM workshop on

regionalization of emergency care and I had participated in the ASPR's regionalization roundtable.

After we reviewed those consensus documents and reports, we then searched out experts in the areas of EMS, emergency care, critical care, nursing care, medical care, and biopreparedness to identify other projects and measures that weren't captured in the formal literature consensus conference and measurement review.

These identified measures and projects were then screened by these inclusion criteria to find those that might relate to regionalized medical emergency -- excuse me, emergency medical care services.

Next slide. The scan was done refined to focus in on these emergency care issues within regionalized healthcare. When you do that, the 11 domains become 8.

And, next slide, you will get an example of what this process looked like. So

we had 11 domains of regionalized healthcare that were identified. The first was trauma, the next was stroke, the third was acute myocardial infarction, the next one was cardiac arrest, the next was critical care medicine, including sepsis and medical shock, pediatric specialty care, including neonatal care, toxicology care, specific veteran affairs networks of care, psychiatric care, data management perspectives and disaster preparedness.

Then they were filtered by, for the purposes of, this environmental scan, this definition of emergency care, which is healthcare that is provided in an emergency department or emergency medical services system or acute care areas of a hospital, emergency care refers to the treatment of high acuity and/or life-threatening conditions in an expedited fashion recognizing that timely care of emergent patients may prevent mortality or significant morbidity.

So that was then the criteria for which these were screened. Eight domains remained, trauma, stroke, acute myocardial infarction, cardiac arrest, critical care medicine, pediatric specialty care, toxicology, and psychiatric care.

And then within those domains, we looked for specific project or measures for time-sensitive acute or life-threatening diseases, definitive treatment is not universally available and, therefore, will require a systems approach and care that relies on both in- and out-of-hospital care.

Next slide. I'm not going to go through the numbers. Jeff Williams deserves an awful lot of credit, both public and ongoing, for literally going through all of these sources identifying appropriate domains, lumping them into usable groups and buckets, applying the filtering criteria and then identifying in the tables that you will see in the appendices those specific measures, as

well as the basis and state of development.

Next slide. And so when you do this, you ended up with a sample frame of over 1,000 measures and the final source was just 210 and that's how we have been able to result with the final number of measures that are included in the report.

Next slide. Of these measures, if you look at just where they are, they turn out to be impressively in acute myocardial infarction with 11 and then we have got measures are that are 9 in stroke, 2 in trauma, 4 in cardiac arrest, 4 in pediatric specialty care and interestingly, despite the importance of these other domains, there were a number of projects, but very few measures.

And, frankly, that's the take home from an environmental scan, is that we did a fairly broad review of issues in emergency care and we really did not find a large number of performance metrics that have been widely accepted and/or utilized.

I know that's probably not a surprise here, but it's impressive when you start to quantitate it, given the impact of emergency care on the health of Americans.

Next slide. So does anyone have any questions about the environmental scan of what we did? It is completed. It's up on the NQF website and we certainly hope that it is valuable. It's a valuable resource as we move to this phase of the framework report. Jesse?

DR. PINES: Thanks, Chuck, really great work. One of the questions I have and one of these discussions came up in some of the small groups for the 2010 Consensus Conference for SAM, but why was the exclusion criteria kind of non-time-sensitive conditions? Why did that come up?

And, you know, specifically as we think about, you know, the overall proportion of people who come into the ED with these time-sensitive conditions, it's actually relatively small compared to the, you know,

other folks who were there.

You know, specifically, people with complex medical conditions who actually may get the care in one system, but they may be transferred to another system and have all their testing redone. Was there any consideration given to looking at care coordination?

DR. CAIRNS: So thank you for that question, Jesse. We identified a number of gaps. And one of the key areas that we identified -- and, again, I would just like to thank our reviewers and our partners in review of this document from ASPR, HHS and others.

They highlighted some of these needs in terms of non-emergent care. And so you will see in the draft of the framework report that on the last page, 15, No. 27 in your included documents, we have an area that we have proposed for future research.

And so the need for development of new measures or adaptation of existing

measures to ensure measurement of systems and not only elements of systems. And we have to look at both how transitions and communications between units of service within regionalized systems work, since most of the effort has focused in on the individual units themselves, as Dr. Rapp pointed out.

It's not patient interaction with the healthcare system or a patient symptom to balloon time and acute myocardial infarction. It is currently reported as emergency department to balloon time.

So I think we are trying to get to those broader issues as you have talked of coordination and communication. And clearly, structural issues. So emergency department boarding, crowding, ambulance diversion and how this affects utilization, as well as how does this affect utilization in the context of the growth, of the need and demand for emergency medical care services, by numerous folks, including non-emergent conditions?

And then how this will work in the development of the healthcare system as it undergoes not just response to growth and demand, but also evolution in terms of other forms of payment.

And then these other areas where there may be important quality measures that may not have hit the specific disease conditions. So, Jesse, that was a long-winded answer to say, please, look at the draft report on page 15, No. 27 of your materials and we expect and hope that we will have a lot of input today on those kinds of issues.

Jeff, did you want to add anything to that?

MR. WILLIAMS: I agree with Dr. Cairns.

CO-CHAIR KELLERMANN: I am so glad that people are listening. The floor is open for comments or questions. Dr. Martinez?

DR. MARTINEZ: Yes, just to add on that comment with Jesse, because I think you

were at some of the meetings we have been in and the big turning point of this was the IOM, really looking at that group. And what is interesting, and I just go with your comments just to give feedback to the Committee, is Einstein says what you believe is often determined by what you measure.

One of the questions we had was all these people who get transferred and go to another facility, what percentage of them are discharged from the ED, meaning that they didn't need to be transferred for, at least, procedural issues?

And what we found from going to a lot of the big data sources, including HRSA and others, is no one knows, because they don't measure it. And so it's an important aspect to look at in terms of performance of a system, not just a smaller group, but I think Dr. Corrigan calls them time-sensitive conditions or something like that.

We have a lot of people

transferred for belly pain or chest pain that are really STEMI and so we just should keep that in the back of our minds as we go forward.

DR. CAIRNS: Rick, thank you for those comments.

CO-CHAIR ROSZAK: Others? Yes?

CO-CHAIR KELLERMANN: Looking at all this from the point of view of acute neurology and acute neurosurgical issues, there is really a significant gap in the measures that are available for that.

And if a system ever needed regionalization, it would be acute neurosurgical care because the resources are limited, the facilities are complex and at least anecdotally, I had knowledge of a lot of situations where the delay in neurosurgical care or the absence of neurosurgical care has led to significant problems.

So I would hope regarding what was just said that we are able to at least try to

develop some measures to look at that, because I think that is a significant weakness in the entire system dealing with this acute neurological emergencies that come up and with the lack of neurosurgeons that are available to help take care of these problems.

DR. CAIRNS: Yes, thank you very much. In fact, we think this is an important area, both in the general area of trauma, as well as in specific conditions. And then imagine if you run across into environmental spectrum from pediatrics to geriatrics, there is clearly going to be a need.

CO-CHAIR KELLERMANN: Brendan?

DR. CARR: Chuck, I wonder if you -- the task that was given to you was to do an environmental scan to see what the label end was. I get that. But I wonder if it a little bit pigeonholes us into, you know, repeating the past instead of drawing a blank slate and thinking about how we could restructure this.

And I think that's a trap that we

should address early on, because if we were happy with the system we had, we probably wouldn't have asked you to go back and look at it.

But in asking you to go back and look at it, we are starting from, you know, the past.

DR. CAIRNS: Brendan, excellent point. And I'm going to use that as a transition. So let's go to the framework report, because I think that this is a critical learning that we got from the environmental scan is that in a very comprehensive formalized approach, we found this relative paucity of information and measures.

And we know that there are huge gaps and needs. And I think that this framework report can provide a pathway if not explicit direction on where we might go to address those concerns.

So here is now just a brief

overview of the draft. Again, you all have a copy of it. And we are going to go over some very important components of this draft later on today, but just to provide an overview then about how we decided to framework these issues in a draft report for your consideration comment.

So the first was provide a context and direction to key healthcare system stakeholders regarding the evaluation of regional emergency medical care systems. So at least put in context for you all to give us input on what you think is important and what those key issues might be we need to address, Brendan, in order to move forward.

Second is propose a mechanism to identify the current measurement landscape within regionalized emergency medical care systems, as well as gaps and measurement. So now that we have had a formalized review of what is out there, what should it look like moving forward?

And then to identify what performance measures are needed in this evolving area of healthcare? And hopefully, and we are convinced, that parts of this framework, if not all of it, will serve as a catalyst for the future development of measures and measure concepts, because it's just too important for us not to utilize this approach.

So that's at least a broad overview, Brendan, in order to try and take on some of those key issues you have identified.

Next slide. So the way that we have outlined this, and, again, this was in conjunction with NQF and our federal partners, was to approach it by getting the definition key terms down. This is the third promissory note I have said that we are going to address it, but we will address it.

Important terms, emergency care, regionalization, these kinds of issues. We are going to delineate the purpose.

Next. We are going to introduce an episodes of care paradigm. This is a care paradigm that NQF has found valuable as they take on new areas of healthcare to identify measures. And I do think there is applicability to emergency medical services care, but there are some limitations.

Next. To identify some domains of measurement for regionalized emergency medical care services.

Next. To generate guiding principles which may not only provide guidance to this framework report, but to future endeavors in this area. And so we will spend some time in terms of what those might be.

Next. And then to develop criteria for evaluating the measures within the framework. And to be used as a basis for the draft, the current NQF guidelines. They clearly have been successful in developing and guiding the implementation of care guidelines across a wide range of areas and clearly

taking the approach to emergency medical care services in a regionalization paradigm could be a valuable start.

Next slide. So we did want to introduce this idea of the episode of care approach. And this again is included in the draft framework report that you all have access to. And in this approach, you have a population at risk, this is called the Phase 1 aspect. There is the evaluation initial management of disease, a Phase 2. And then there is a follow-up care or a Phase 3.

So in this generic episode of care, there are three specific phases. One might call the first phase prevention, second phase evaluation, initial management, including potentially emergency care, and Phase 3 follow-up care, outcomes and further intervention.

So then at the end of the episode, you look for risk adjusted health outcomes, mortality, clearly one of them, but also

functional status and then in line with Dr. Rapp's discussion risk adjusted total cost.

So in the evaluation of appropriate times throughout this episode, you look at key patient attributes for risk adjustment, informed patient preferences, the alignment of the care processes with these patient preferences and the assessment of symptoms, functional and emotional status.

So we are going to briefly talk about how we applied that in this draft to regionalized emergency medical care services.

Next slide. So in this paradigm, we took the example of an acute myocardial infarction. So you could imagine that a Phase 1, while valuable, we don't do as much with risk adjustment, prevention, although there may be an opportunity in Phase 1, certainly in Phase 3.

But one thing that you can do in preparation for an episode of care with a patient would be to have a regionalized system

or at least an encompassing system within a geography and a population that designates where needed resources are.

So in the case of acute myocardial infarction, where the cath labs are that are available 24 hours a day, seven days a week and can provide timely care to patients delivered there.

Another example of what you can do prior to the onset of a clinical episode is to have an emergency medical services triage and destination protocol for STEMI, so that the paramedics, the 911 and ambulance folks know where they are going to take a patient who has an acute myocardial infarction, independent of where they live or who they are.

A third potential component is to have a communication technology that will enhance and guide care or the care continuum from EMS, emergency department, cardiology, hospital resources.

So those are all components of

this Phase 1 that are all in place prior to the clinical episode of acute myocardial infarction.

So within this Phase 2 now that the patient has symptoms and dials 911 is how can we earlier identify acute myocardial infarction, in particular STEMI ST segment elevation acute myocardial infarction, a time-sensitive type? Can that be done by EMS personnel? What are the care process measures that contribute to early identification?

What are the care process measures that are consistent with high acuity care that are life saving, for example, in an episode of acute myocardial infarction? What are the timeliness measures, recognizing that time and mortality are closely linked in this condition?

How do we optimize communication between the units of service, between the EMS, emergency department, cath lab and any specialty services required? And then what

are the standards of care that are necessary to provide high quality appropriate care to patients with acute myocardial infarction and how that should be coordinated across these different specialties?

And then the Phase 3 approach would be post-percutaneous intervention ICU care and what measurements would be relevant to appropriate care and outcomes? Care coordination measures across these varied units of care including rehabilitation and how do we enhance communication between providers, both within the acute episode of care and potentially with the care provided by a community health provider?

And the end of the episode could be everything from death, functional status, neurologically in tact and so on. So when you look at appropriate times throughout the episodes, we have got patient-oriented intermediate outcomes. We looked -- assure transitions across these units of service

during this episode of care and that we have appropriate measurement to facilitate comparison across similar regionalized systems in different organizations.

And, Jeff, you spent some time coming up with what some of the challenges and limitations of this model are. Could you highlight some of those?

MR. WILLIAMS: Sure, of course. I did want to add two other comments as well before we talk about limitations.

The first was, one, I think benefit of the episodes of care approach is it allows us to be patient-oriented. I think at the end of the day, we are looking at improving the quality of care delivered to a patient. And so we felt that this was a good model to be able to take a patient through a system from when a care episode, using the term, begins all the way through to, as Dr. Martinez points out, he is either discharged after transfer, which is, obviously, not the

optimal outcome, or receives definitive care.

So we thought that, and I think Dr. Carr made an excellent point, applying to this model, I think where we have gone in the past, at least as much as I have been able to catch up and read in this area, is essentially Phase 2. And we are evaluating care and we are looking specifically most of the time at process measures, but looking at this sort of episodes of care model allows, first of all, the measurement of structures and systems that are in place, potentially in Phase 1 and then also allows evaluation of post-care coordination, did care occur the way that it should have, etcetera, potentially in Phase 3.

Clearly, this is a little bit of a paradigm shift from the initial episodes of care approach developed in some of the prior NQF-endorsed frameworks. But this is how we sort of envision the episodes of care approach working in this area.

So as you chew on that for two

seconds, I'm going to flip to the limitations. I think that, first, one, I think to put this in context, benefit about episodes of care that I just said is, essentially, you are looking at care that occurs to a patient sort of almost in real time.

The episodes of care approach doesn't necessarily, and I think that there are ways to address this, focus on whether that care was appropriate. So I think Dr. Martinez' point about whether or not, for example, a transferred patient is cared for appropriate towards the end of the episode, may be something to emphasize, potentially in Phase 3 or wherever.

But I think one potential limitation is that the model does not necessarily focus on whether care was appropriate. You know, EMS provider identifies a STEMI. The patient is taken to the cath lab. The cath is done. The patient goes to the post-ICU, post-PCI ICU care and

gets excellent care.

Well, you know, are we focusing on whether or not that patient actually needed to go to the cath lab? That's sort of a -- that may not be the best example, but the point is that limitations arise when you consider measuring care across the board. You don't necessarily address whether or not the care needed to occur in the first place.

A second limitation is that if -- you will focus on the box at the bottom regarding emphasizing measurement to facilitate comparison across similar regionalized systems. So a regionalized trauma system in one area of the country may be very similar and have similar outcomes to a trauma system in another part of the country, but individual efficiencies and individual practices in each system are not necessarily highlighted by evaluating simply one episode of care in one system.

So I think that as we consider

this model, we should put a special emphasis and find some place to put comparison between systems, so that those efficiencies can be shared and potentially impact systems across the country.

I think those were the two main limitations we thought about. Clearly, there are potentially others that I'm sure some of you will address, but we hoped, basically, to provide a comprehensive model that would allow for structural issues that come up, process issues that come up to be, at the very least, categorized with this model. Thanks.

DR. RINNERT: Hey, Jeff, don't you think that if we -- as we go forward and we are looking at -- you are worried about sort of the overarching concepts contributing to our missing the fidelity within individual regions. In other words, there are some regions that do things very well at the grassroots level.

And by comparing them or looking

at them sort of with overarching brushes, you may miss that fidelity. As we drill down and get to the individual measurements that we developed, won't some of that loss of fidelity go away or not?

MR. WILLIAMS: Well, I think so. I think that's an excellent point. I think when you drill down to the measure level and you assume that measures are going to be applied similarly across systems, that that will go away.

As Sally pointed out earlier today, I think that the point of this conference, to some extent, is to look at the framework as a whole. So I agree with you. I think that some of that will go away, assuming that the measures are specific enough to apply across systems.

But I think that the framework should somehow address your point. You should perhaps state that explicitly or state that, you know, while we realize that there are

some, you know, trees lost for the forest, that that will happen over time as the framework is implemented in a given system.

DR. CAIRNS: So if I could just follow up briefly on that? I think it's a really important comment, so imagine that you have a system where the paramedics can read the 12 lead ECGs and then determine the next available hospital. And they have decided to distribute both the hospitals and the paramedics in a geographically uniform way, so the access to care is similar across that system.

That would then require a measurement of absolute time from interaction with 911 to say balloon time, as in -- as a measurement of the performance of the system, as opposed to just saying we have a triage destination policy in our system and, therefore, meet the required performance metric.

So I do think that when you put it

on an absolute scale, you can find optimal kind of measurements, but there may indeed be structural measurements that aren't necessarily linked to absolute changes and outcomes in an episode of care.

DR. WRIGHT: Jeff and Chuck, I'm curious if you had an opportunity to apply the model to domain -- one of the domains that is not condition-specific and, for instance, more developmentally-specific? And the reason I ask is just to give you a concrete example, the vanishingly small number of children with time-sensitive conditions actually show up at a place for definitive care at initial presentation. Only 2 to 3 percent of severely injured children show up at a pediatric trauma center, for instance, initially.

So I'm wondering about the ability of this model to incorporate a heavy dosing of interfacility -- of triage beyond EMS in the facility, interfacility transport to definitive care, the kind of activity that

would be more germane to a population-based time-sensitivity occurrence than a condition-specific occurrence where we are looking for a triage at the field level and appropriate disposition there.

DR. CAIRNS: And, Joe, thank you for that example. In fact, we played a little bit around with the pediatric model as well for episode of care and again look forward to the input of this group as to whether or not these examples are valuable as we approach the framework.

But I'm going to move back to this particular example, because in many cases, and in North Carolina we track every emergency department visit. We also track every EMS visit of every patient every day. So we have actually been looking at how this happens across a state.

And it's remarkable how many STEMI patients are taken from the field to a hospital that doesn't have a PCI capability

and are then transferred to another one.

So I think it is somewhat analogous to the pediatric trauma patient who gets sent initially to a hospital with the thought of stabilization, again, just for a descriptive term and then gets transferred for definitive care at another center.

And I think the wisdom of that strategy, I think, may need to be addressed. Certainly, one of the aspects as we look at optimizing systems, back to this example in acute myocardial infarction, is that there is some thought of doing direct field to resource appropriate hospital transport directly as opposed to going through an intermediate hospital.

And you can imagine if you look at a timeliness measure under Phase 2, the third one, that you get much lower times with direct field triage to resource-specific hospital than going through the intermediary community hospital.

So, Joe, I think this is a really important aspect to look at. And I think it's one of the key components, at least we identified, in using this framework.

MR. WILLIAMS: I would just add one other comment in answer to that question. I don't think that the episode of care approach is necessarily limited to, in this way, a particular place that the episode has to begin.

So clearly, when dealing, for example, with pediatric specialty or any other specialty for that matter, I think that an episode of care can begin whenever the need for a regionalized system is identified. I don't think it necessarily has to begin when you are -- the kid's belly starts hurting at home or when 911 is involved.

I think that the episode of care can begin, you know, whenever the need for the system is identified, whether that be in the ED, whether it be on the floor in terms of

understanding the need for transfer to a higher level of care.

I think that's a good point. We should probably address that.

CO-CHAIR KELLERMANN: I have a process suggestion and that's going to be, given that we all have these cute name tags, when you have a question, if you will put it sideways, that will give me a sense of the queue. I'm not sure these things won't fall over, but we will try that.

And so there is a hand here and then we will go to you next.

MR. COOPER: Thanks. I want to build a little bit off of Joe Wright's comments and also the comments made by our colleague from CMS, both of which take off, I think, from some of the concepts that were first enunciated or not first enunciated, but strongly enunciated at the IOM Regionalization Conference.

You know, regionalization is not

centralization, necessarily speaking, in some cases it may well be. But it is a reality of life that not every region is going to have every resource immediately available to every patient. And even if it did, the patient might not choose to avail himself or herself or his or her child, you know, of that resource.

And so I think in building any sort of episode of care model, we really have to pay very close attention to the issue of sustentative care, not just definitive care. You know, what can we do to begin the process, you know, efficiently and effectively, you know, in effect, at the first receiver level, so that the process of care can begin in an, you know, appropriate fashion?

That's a -- I recognize that's a slippery slope because, of course, when patients end up in non-definitive care facilities getting definitive care, if they are getting sustentative care, they tend to

stay there longer than they might. And that too can impact upon outcome.

But I just urge this as we go forward thinking through this model that to remember that we can't just be thinking about the definitive care piece of it. And, you know, all the bells and whistles that, you know, you have listed by example in this episode of care model. Thanks.

DR. CAIRNS: Can I comment just briefly, Arthur? So we agree with you. And, in fact, I think this also speaks to Jesse Pine's point on non-emergent care just because we have decided to come up with a technical definition of emergency and, again, we look forward to this group's input on what that might be.

If you look back at the previous slide, if you could do that, Eric? If you look under appropriate times throughout episode is No. 2 bullet "Assessment of informed patient preferences in the degree of

alignment of care processes with these preferences."

And we need to keep that in mind. And I think it is into the NQF version of the framework and how that applies to our framework, I think will be very important to continue.

MR. WINGROVE: I'm wondering if there is any intent to exclude any geographical parts of our country? And the reason I ask that is one of Dr. Cairns' comments about going -- and the PCI center. There are lots of places in this country where going to the PCI center, the first time is absolutely the wrong thing to do.

And so one of my interests, being kind of a rural guy, is making sure the system rewards people for doing the right thing. And sometimes that is not going to the specialty center the first time.

DR. CAIRNS: Thank you, Gary, I'm smiling. This is a research question that we

have had in North Carolina since you all may be familiar, we have regionalized STEMI care voluntarily in the state. And we actually have areas of the state where thrombolytics are given by paramedics because the time to get them to a PCI center physically is just too difficult.

Having said that, I think you can move it from PCI to say reperfusion therapy. And how do you then optimize reperfusion therapy to resources, geographies and populations, if time is an important component? But let's not forget that, Gary. This is a really important issue.

And our hope is to not exclude any region of the country. Our experience has been to be inclusive in our state. Remember, we have mountains, we have coast and we have got some rich urban places, but we have, unfortunately, got some very poor rural places. So I hope that we will maintain those discussions.

CO-CHAIR KELLERMANN: Nick, did you want to comment?

MR. NUDELL: I think you are starting to address where my concern was also. From the pre-hospital perspective, many episodes of care sort of require you to know the diagnosis in advance or at the beginning. And from the pre-hospital perspective, that's relatively uncommon to start with that approach.

So could you address that, please?

DR. CAIRNS: Nick, thank you very much. One of the premises of emergency care, and I think we need to reinforce this in the definition, is that we deal with undifferentiated patients. And for example, in acute myocardial infarction, when you start looking at populations and geographies inclusive, you find very different answers.

So one of the benefits of our state is that we can look at all these complaints as they show up in emergency

departments and it turns out that less than 50 percent of patients over 80 who present with acute myocardial infarctions present with chest pain.

And you compare that to 85 percent in patients less than 40 years-old. So you even have to be careful on a symptoms-based approach along differentiated illness and injury. And I think that is a key component that we need to recognize, that patients don't present with diagnoses. They present with conditions.

And we really want to address that in terms of our definition of emergency, for example, if you all agree.

CO-CHAIR KELLERMANN: Chuck, I've got a few questions, but I will weave them in whenever we have lags. But I will start at the beginning, which is back to environmental scan for a moment.

There are a number of AHRQ-funded evidence practice centers in the country that

have done systematic reviews over the last several years. I have got the privilege of working with one in southern California. I think RTI has one close to you all.

And they have a very structured process for ascertaining literature and filtering documents. Did you all follow that process or is your process different? And the reason I say this, in my little piece of this world, which is cardiac arrest, your scan did not pick up all of the really noteworthy reports.

And so the current draft is excluding a couple of papers that I think -- and data systems there were very relevant. So I'm just wondering how you got to the measures that you did and whether, in fact, there may be others in some or the other domains that are also not quite -- haven't made the report yet?

DR. CAIRNS: Art, thanks for those comments. Number one, we didn't follow that

formal approach. I'm familiar with it. I was part of the technical center at Duke for RTI in terms of looking at some of those issues.

To be honest, Art, I think if we did that, we would find even less measures than we found. Now, having -- we did set up certain parameters though that may have excluded some of the measures that you thought should be identified.

We ended up with over 1,000 projects and measures. But as we went through the filters, we did put very specific filters on it. We put through the filter that it had to fit our definition of emergency, that it had to fit our definition of system. And then it had to fit both emergency and system in order to be included as a project or as a measure.

So there are a number of measurements, for example, in cardiac arrest that are clearly valuable, time to defibrillation. One of the challenges, of

course, is how does that apply across the system?

And so we are trying to come up with components of how we would put specific process measures in this broader regional context. We have gotten it wrong, Art, and we look forward to further suggestions on how we might include it.

A second key component were those things that we named that are systems and structural and process issues. So, for example, another component of cardiac care are these systems, such as the Ontario-based projects on advance cardiac life support where an entire system has been put together and demonstrated an impact on outcomes.

If there is components unidentified to a system approach, then they wouldn't have made it into our screen, but clearly, they are effective when applied. So how we can identify measures and even projects, then form those measures, would be

very valuable. So I would look forward to your inputs.

CO-CHAIR KELLERMANN:

Specifically, I'm thinking, you know, you have OPALs, ROCs, several others, but the CDC Care Registry is not cited. We have known for 15, 20 plus years that return to spontaneous circulation is not only a proximate outcome measure for a well-functioning EMS system, 911, bystanders, first responders and paramedics, but it is by far the most potent predictor for a successful outcome with good neurological status at discharge and neither of those made the cut for the first draft.

So I -- and that's -- I don't want to dive into the weeds too soon, but it would seem to me those are examples of the process. If -- and that's leaving aside a whole other conversation we will have later, which is where are the holes that we need to be conceptually advising NQF as we go forward where we don't have measures today, but want

them. That is what, at least, jumped out to me.

There may be others in other domains, but that's the one that I know best.

DR. CAIRNS: Those are good points on all those. We clearly are aware of the OPAL group and I intersect with the ROC group and I'm going to let Dr. Sayre comment on how many of those findings have come out in terms of measures and performance measures that are used for that purpose.

I know are dropping the standards in the emergency care coordination -- excuse me, the Emergency Cardiac Care Guidelines Group has been doing a lot of work with that.

DR. SAYRE: I kind of agree with Dr. Kellermann, in that I think part of it gets to the definition of what you mean by a system here. So if what you are saying is that the measure has to touch maybe two different organizations at some level, that's perhaps the threshold here for something to be

included.

I'm reading, but I also think that there are probably measures that impact what happens to patients further down in that system, that if they are not optimized in the beginning, and I think that was part of what the comment was over here, they're not going to allow for high quality care to happen later.

CO-CHAIR KELLERMANN: Ron? And then we will go to you, Tom, because your side has been --

DR. CAIRNS: And I just wanted to point out --

CO-CHAIR KELLERMANN: Go ahead.

DR. CAIRNS: -- that if you look at the list of projects, the entire American Heart Association Cardiac Arrest Guidelines are listed as a cardiac arrest project.

CO-CHAIR KELLERMANN: Ron?

DR. MAIER: Just to further flog this point, I agree completely with your

concern. And as an extension, one of the things about -- and before I start, I have to give you -- this is a great document. And I congratulate you on your effort. It's a phenomenal effort and it's sort of always going to be somewhat deemed for failure, because you know you're going to be able to set up the parameters and actually capture completely.

But I think that's what the group is here for is to add individual experiences and fill in some of the gaps that are obvious. But continuing with our theme, the only things that bother me a little bit about your approach, which I agree with, I like the episode of care. I think it's a great way to sort of look at the system.

But it leaves off a big hunk of the front end and I don't know how far we want to go with that and that is access. So if you want a buzz word in medicine these days, access to care has got to be there, because

this can become an increasing challenge.

And as you know, 20 years ago at the CDC when we were debating trauma systems an we had this big final fight as we came down to inclusive versus exclusive as opposed to using the regionalization word, the concept was divided around the access issue.

And I think it's something we'll resolve with the inclusive system that's allowed the access for that patient. It had sort of missing in your approach right now. I think you can add it on and I think the group needs to decide how far towards access they want to go, because that can be another whole topic.

And again, I don't know where the group wants to go, but I think it's something we should explicitly define, we're either going to go there or not, because right now, it really isn't dealt with very much.

And as an extension of that, the impact which you allude to, but don't really

go into, is the impact of disasters on access in the system. And again, that may bog us down for the next two months and we may not want to go there, but I think, explicitly, we should deal with the concept and put it where we want to put it.

DR. CAIRNS: Ron, thank you very much. And what a key issues. And so we talk about infrastructure, we talk about diversion. We talk about overcrowding. We talk about rural versus urban. Really, we are talking about access. And I think that we need to address it.

How we address it, I think, is going to be a little challenging, because I think we are going to have to -- when you try to do a scan for performance measures in these things, it becomes challenging, especially if you want to have them have an impact on mortality or significant morbidity.

However, that doesn't mean that we don't need them. And I think the framework

can provide an opportunity to identify those areas where we need better performance metrics and we can define what some of the key gaps are.

You had made another important point. Did I address your questions, Ron?

DR. MAIER: I don't think there is an answer you can give. I think it's something the group, I just think, needs to wrestle with, because I think it's something that we need to come up with at the end of the two days.

DR. CAIRNS: Oh, disaster, disaster. Thank you, sir. I agree. And so disaster, now, imagine the idea of across a geography and a population, regionalized emergency care where there is a surge or there is an overwhelming incident and you can imagine that you could have even an episode of care approach to such a thing, because you have got preparedness, you have got response and then, of course, you are going to have to

figure out the plan and integration for the next one.

And, unfortunately, we have had too many examples where we haven't done Phase 3 after that.

CO-CHAIR KELLERMANN: Chuck, just a quick point of clarification. As Ron said, nobody is here to criticize you or Jeff for the report, but to contribute and because we've got three cards up and I'm sure we will have more, you are welcome to respond if you think there is an immediate, but also, I just want to make sure we get all of the ideas out on the table, so NQF staff and the group can hear them, particularly as we barrel into lunch.

So we have got three and we'll just move around so there will be Tom, and then Kristi and then John.

MR. LOYACONO: Thank you. I wanted to piggyback on Gary's comment about the system doing the right thing in the first

place. You know, destination and location of the incident is not the only variable. If you have services that are not available in the first place, it could change the appropriateness of going to a place for stabilization versus going on.

And a part of that is communication and making sure that the right resources are sent in the first place. In many systems, there are no choices in very rural areas and in many systems an early decision has to be made. And I think all that has to be a part of whether or not the measure was appropriate, given the circumstances in that area at that time. I hope that makes sense.

MS. HENDERSON: Yes. I just wanted to make sure that we include discussion about telehealth, the regionalization access to care, all of these issues cost. We can't always take the patient to the expertise. There is a lot of times we are going to have

to do the opposite.

And there is a lot of sophisticated telemedicine networks across the country that we could look into and explore how we could build off of that.

CO-CHAIR KELLERMANN: You are being quite modest. I believe that you all run one of the most sophisticated in the country.

MS. HENDERSON: We do, in emergency medicine.

CO-CHAIR KELLERMANN: John?

DR. FILDES: I just wanted to build on what Art said and that I think that the environmental scan is excellent and well-thought out. I was surprised to see that only two performance measures surfaced in trauma, considering its history back to 1966 and the number of studies done.

I'm sure there are lots of reasons for it, including even that some of that early work was never computerized.

But I would mention though that the systems guide written by the college is probably the most recent iteration, "The Living Organ," of the 2008 HRSA document. And it contains over 100 citations in it. It would be -- and I'm sure that you have waded through that, but there are many measures that are in there that are currently in use that have actually proven their worth, but somehow escape recognition by the methodology that was used.

So I just bring that up as a point.

DR. CAIRNS: Yes, these are good points, John. And it's one of the challenges, because, you know, we identify projects, so you will see that, you know, we have pretty broad swaths of projects. So, you know, similar, you know, to cardiac arrest, clearly, there are guidelines and there is evidence-based and there is a lot of different components to it.

The translation of those into measures that have -- you know, that then have reduction in mortality or significant morbidity is where some of the challenge in our screen comes up. So that does suggest that there are clearly successful endeavors that are going on.

And frankly, we recognize trauma as the earliest and potentially one of the most comprehensively studied. So how we translate those projects, those learnings, those findings into performance metrics that kind of meet these criteria, I should tell you that one of the -- we didn't go into our next level of performance metric evaluation, because NQF has a very formalized approach to what is an acceptable measure.

But some of the things that we look at are things that not just have evidence behind them, but that they are not universally applied and, therefore, have incremental value. And there are a number of other

components, performance metrics that we think may be valuable for acute care.

We cited one of our papers from 2008 in emergency medicine regarding that, but that's just something for this Committee to discuss.

DR. FILDES: Can I follow-on?

CO-CHAIR KELLERMANN: Yes.

DR. FILDES: I think it's important as a group that we don't lose focus on some other things. And I use this example often, the Injury Foundation's Guidelines, I believe it is Chapter 2, "The Use of Oxygen." It says that "There is no evidence to prove that oxygen is useful."

The study was never done. You can't prospectively randomize people to be hypoxic or not. There are going to be some things that are just evident that may not be captured with a rigorous approach like that. But I don't think that they can be dismissed out of hand.

CO-CHAIR KELLERMANN: Kathy?

DR. RINNERT: I wonder, if maybe, at this point, it's reiterative that I think we are sort of tying together the inclusive system and the issue of access, because they really are one in the same. And then that, obviously, parlays into the comments from our -- the group that is watching from over here that has to do with then building systems capabilities and capacity to deal with it.

Not every hospital needs to be able to do everything for everyone. And yet, we would expect that there are at least some basics that can be accomplished to determine whether or not this person needs more subspecialty care and pass them further down the line.

What those metrics are to say that it is an inclusive system, to say that it is access rich versus on that sort of is more relegated to preventing patients from having access, I don't know what those metrics are,

but that certainly would be one -- an overarching principle that I think we need to address. And it certainly wasn't something that you all set out to do in your project, but would be something that I think would be of value.

DR. CAIRNS: Can I briefly respond? Yes, when we looked at just kind of our intellectual approach, so I'm amongst friends and I know they are on the phone, too, we really sought to identify what would be potentially unifying themes across a regionalized emergency care system.

So the first kind of threshold was those conditions for those patients in whom it has been proven that time is a key component and time measured in hours and minutes, not days, weeks and months, and that there is evidence for reducing death.

And so when you start taking a look at other issues, such as access and process and structure, that there are going to

be some challenges.

Our, again, intellectual approach initially was well, what are those structures and processes that help support the care of those time-sensitive life-threatening conditions?

So that is not inclusive. And we recognize that the evidence may not be there in a regular fashion for very important conditions. And we have already discussed the idea of non-emergent conditions in a disaster plan in surge.

CO-CHAIR KELLERMANN: Jesse?

DR. PINES: Thanks for those comments. One of the issues, key issues, which comes up logistically with performance measurement is the attribution to a particular system or hospital or physician. When it comes to regionalized emergency care, this becomes a real challenge because, you know, when someone comes into an emergency department in a hospital and you are trying to

get that patient to the cath lab quickly, you kind of know who the players are in that system and if there is a delay, you can figure out what happened and attribute it to the hospital who ultimately is responsible for all those players.

When it comes to transferring patients between different systems, now, you are talking about EMS. You are talking about, you know, bringing -- pulling that back to closer to when the emergency actually starts. Then the level of attribution becomes a lot more complex, because it may be that a delay could happen at any of the parts of the system.

And, ultimately, the question is are these measures intended to be applied to hospitals, regions? I mean, where -- I don't know if there has been a lot of discussion about where there might --

DR. CAIRNS: Jesse, good point. And, clearly, we have a lot of internal

discussions on it. And so one of the filters that we put is that it needed to be a system and it needed to have different settings contribute to the outcomes.

And so antibiotics for pneumonia, for example, wouldn't make it in our measurement framework, despite evidence that has been presented in its adoption as a national metric, because antibiotics are pretty universally available and the system is within the emergency department.

So that was at least the basis of the scan. You know, there are critical components that could occur outside of the hospital, like I'll go back to defibrillation times where, you know, there is clearly evidence to show they are beneficial. What that time might be and how you attribute that to the system, the paramedic, the 911 group, the availability of AEDs, these are challenging questions.

CO-CHAIR KELLERMANN: Chuck, given

that I see no cards up, I'll take the Chair's prerogative and launch another question.

Let's take the episode of care paradigm for a moment. And I look at the document and I see you have pulled out candidate measures or domains. I'm not sure I see yet much clarity about where holes might be.

And let me give you sort of -- put this into an episode of care, if you will, for a moment as to possibilities. Imagine that I am a patient with severe pulmonary edema developed over 15, 20 minutes. I call 911. I'm hypoxic. I'm in ventilatory failure.

I would want to know from a quality perspective, first of all, if the hospitals in my areas have been designated as to whether or not they are a cardiac receiving center with the various modalities and skills to manage. So designation of capabilities.

I might like to know whether that hospital is, in fact, available, because it is

not so overloaded with patients that it is on diversion or the cath lab is, in fact, open and staffed and the cardiologist isn't either in the cath lab tied up or on the back nine of the local golf course, and, therefore, not available to intervene.

I would like to know whether or not the paramedics have to call each hospital individually to find one who can take me or whether they can call a single number or radio or look on their dashboard of their ambulance and know that my hospital is open and available or is not for whatever reason.

I would want to know whether I got diverted once, twice or three times before I ended up finding a hospital that was able or willing or had to take me in.

And then, obviously, I would like to know much more basic performance measures like time from I dialed 911 to the point that I did receive PCI or whatever, definitive care I needed.

And most importantly, I would like to know, ultimately, whether I lived or died and had a decent outcome.

Some of those, I think, are in the candidate list now. Others aren't yet and maybe because we don't have good ways of measuring and many regional systems don't have these capabilities today, what are your thinking and your colleagues about sketching those sorts of measures out, particularly issues again of capability, capacity, diversion, some of these performance metrics that could really potentially have a very major effect on outcomes.

And I might have missed them when I went through.

DR. CAIRNS: No, you didn't. And we think they are critical. And, in fact, we think that's the real value of the framework. So I'm going to go back to the episodes of care paradigm though and say that I think it could encompass an awful lot of those

components.

I think it can encompass whether or not that hospital has the structure and staffing to handle a wide range of acute cardiac emergencies or let's make it broader to critical care emergencies.

I think that you could have a component of what the communication systems are between these units of service, such as EMS and emergency departments in order to be able to match patient need with available resources.

And I think that would also speak to a lot of issues in terms of emergency department capacity and capability and how it communicates with EMS to match during times of stress or surge or diversion the needs of patients with its availability.

And there were a number of other key components within that episode of care that I think could be put in this framework for Phase 1, structures, systems.

I think the other issue, in fact, I took down Dr. Rapp's comments here of structural process outcomes and cost and I think we could probably, if the Committee is interested, put a component of that in each one of those phases, because I think you hit it.

Undifferentiated patient with shortness of breath. Wide range of potential needs and causes. Time-sensitivity given it's an acute condition. And now, we have got to understand how that episode of care plays out across those units of service within that geography, understanding time and life-threat are going to intersect in the needs of this patient.

Is that a fair enough synthesis?

CO-CHAIR KELLERMANN: Yes, I think so. We have got three signs up now, so we'll move up the table this way. Dr. Martinez, you are up.

DR. MARTINEZ: Yes. Just very

quickly. As unaccustomed as I am to being heretic, I'm glad you made that last comment, because I wanted to mention that with Mike.

You know, the current system as it stands right now, we don't measure a lot of things talking about gaps. And, to me, the cost issue is a big one, because the system, as it sits right now, is killing a lot of our hospitals. It's just killing them.

And so, you know, what we proposed several years ago was to flip it around, so that it was a two-way system and not a one-way system.

But I'll tell you, Chuck, I just stepped down a role. I had 103 hospitals and probably half of those were rural. And we have gotten to the point to where they transfer as much as they admit.

DR. CAIRNS: Yes.

DR. MARTINEZ: And those patients, as you follow them up the chain, and our surgeons were great about that looking over

triage, because they wanted to get rid of that because of the cost involved with that, the vast majority of those patients are discharged from the receiving facility.

So it's really not a procedural issue. So I really wanted to put it on the radar screen.

CO-CHAIR KELLERMANN: Rick, it just occurred to me, I'm not sure everybody would follow. You talked about the system that's killing our hospitals, you are talking about a system where everything goes to the--

DR. MARTINEZ: Yes.

CO-CHAIR KELLERMANN: -- big central hospital as opposed to --

DR. MARTINEZ: Because the natural end of this is we're going to build a 40 story building in the midwest Omaha and we are going to just transfer everybody there.

And so what happens is that the smaller facilities are losing their capabilities and their knowledge and

everything else, the patients aren't repatriated and so, you know, I go back to Dr. Carr's comment, is that if we put the measures to reinforce what is already done, then we end up with that issue of people won't see the effects until we can't correct it.

So I just think the cost issue has to be in there somewhere.

CO-CHAIR KELLERMANN: And that fits again into Kristi's comment earlier about do we have systems to get information decision making to the bedside of these first hospitals?

DR. MARTINEZ: We started talking last week.

CO-CHAIR KELLERMANN: Right, right.

MS. HENDERSON: Okay. Can I comment to that?

CO-CHAIR KELLERMANN: Yes.

MS. HENDERSON: When we implemented our telehealth, we had that same

problem. Everyone was being transferred to our one trauma center in the state, most of them discharged.

Now, we have a 20 percent increase in local admissions to the rural hospital, because we have helped them stabilize, feel comfortable with the patients and they don't have that expertise, because they only get one cardiac arrest every three months, so they lose that. And they are not comfortable, so they want them out.

So telehealth just can support that and keep them in their rural area.

DR. MARTINEZ: And, Chuck, just the measure we may not have it, but I threw it out there, is that the capacity of the system rises when that communication -- you have been very good about mentioning communications and those links, those hand offs.

But you see that with TeleStroke, that they over-transfer everybody and over time the knowledge goes up and they are able

to discern better what needs to go and not go. And so the local hospital becomes better, but it is also our key access points in America.

CO-CHAIR KELLERMANN: So, for example, playing on that thought, if we are measuring things like moving of patients, we might also consider measuring the movement of CT images, so that we can make clinical decisions where the doc or nurse practitioner in a small hospital can say this patient does not need to come to me. This patient can be managed by you at your local -- you know, et cetera.

So I hear what you are saying. Brendan and then Jesse or you took your sign down.

DR. CARR: I was wondering and I don't know who to even direct this question to, but if someone could tell me if this is outside of the scope of what we should be talking about, I think that's okay. But I'm sitting here thinking about how this will be

someday operationalized.

And I wonder if that needs to impact the way that we talk or think about these things. And specifically, I'm wondering in the world of the ACO when -- if it makes sense to be thinking about how the episode of care model interacts with the world of the ACO.

Are we thinking that multiple hospitals, independent of payer, are going to be jointly held accountable for the outcomes of patients in whatever that catchment that Jesse was referring to is? Are all the hospitals in my hometown of Philadelphia jointly responsible for the cardiac arrest outcomes of the city?

And somehow CMS incentivizes or disincentivizes the communal performance, because it's hard for me to get my head around how the end piece, who pays the bill at the end of it is related to the Phase 1 building of the system.

DR. CAIRNS: So first of all, really good comments. And I think that they-- frankly, just a quick comment on cost, telemedicine, resource matching and potentially implementation.

We recognize that a lot of these issues are challenges. And if you take a look at the last few pages of the draft framework report, we put in some criteria for evaluating measures. And these are from the NQF's perspective. And then we put a little bit of a spin on it and we cited it.

The key components are is it important as a contributor to quality of care, scientific acceptability or, you know, how does the measure define strength of evidence, the validity, the usability?

In other words, how meaningful are they going to be to attend in audiences? And what's the relationship between the measured use and the outcome? And is it of sufficient magnitude to make a difference? And is it

feasible?

Do we have the data readily available across the systems of care? And is it cost-effective to implement the measure?

So, obviously, I assume in the telehealth world that you all found it to be useful, feasible and valuable. And that may be independent of the scientific validity of the approach.

And there may also be other aspects where feasibility is just not available in order to do it. But I think the idea of connecting patients with units of service to effectively, efficiently and cost-effectively provide their care may be a valuable theme for this group to consider.

MS. TURBYVILLE: I would like to add to that. Because this is a measurement framework effort, it also provides a fantastic opportunity for all of you to inform where the data platforms should be going.

So if there is an ideal set of

measurement that you can understand or intuit today, for example, but you realize that it might not be feasible right now, we still would like that captured in this framework report.

It also serves as an important signal, you know, getting all of you together of where we might want to continue pushing in order for those measures to then be feasible and usable in the future. So do not limit yourself with just what we are able to do now, but, yes, continue to push us. We want to capture that in this report.

CO-CHAIR KELLERMANN: Dr. Maier?

DR. MAIER: Also just because we don't have so much time, but you talk about inappropriate transfer. Saturday night or Sunday morning, I got a transfer in from Anchorage by Lear jet and talk about somebody that doesn't need to be there to be discharged and then figure out how to get back to Alaska without any money, I mean, the system we have

is really great at optimizing rural impacts.

But what I wanted to say is an extension of what Art was saying when he gave his great example of I think you can use as you argue to talk about using the episode of care to try and figure out what we don't know.

But there is an amazing overlay to that. And I think again, something which we should address and that is I think it almost has to be disease-specific driven on top of the regionalization plan and that is, you know, a trauma system may be perfect to answer all of their parallel questions that Art asked, but then they have nothing to do with the same question with an acute cardiac event.

And it may or it may not, but I think some how we have to build a system that can analyze that the cardiac patient is going to go through the regionalization appropriately and cost-effectively the same way the trauma patient, using potentially totally different hospitals.

And the system has to be able to feed that correctly to optimize the current outcome.

And then as the last extension, somebody had mentioned earlier we just don't want to reproduce the past. And I think it was also mentioned that it is time to move on.

One of the things that Chuck puts in his report is that he implies from his review that the system that has the most risks under its name, such as stroke or MIs, is therefore the most mature and advanced, which I would argue with.

Because one of the things we have done in the last 30 years is we went through a lot of that process monitoring approach and that is if acute subdural is not operated on four hours, the process was not met and it's bad care. And as you know, it's all those that disappeared over the last 30 years, because they don't hold up as carved in stone approach to monitoring quality of care.

And I think actually the longer list means you haven't been in the game long enough to figure that out and that as we also heard process may be time to move on and actually start looking at outcomes that are valid markers for the system. And if the system can produce a great outcome, then we can start looking at the components to individualize and make each of those better.

CO-CHAIR KELLERMANN: I would say yes and in measuring outcomes in episodes in a true regional system, whether we define regional in terms of populations or geography that it is population-based.

So it's not just the outcomes of the 100 patients that we know about, but the 150 that we aren't capturing today. And that's what Mike Rapp properly said before the start of the morning. He said from a CMS perspective, we want to know how are communities doing managing life-threat X as a community?

I already know whether or not Dr. Martinez can manage the patient with life-threat X in front of him, but I want to know can the community optimize outcomes within their population for people with that life-threatening condition?

That requires a different data collection strategy than just the referral center and its registry in order to capture that type of information.

Nick, you are up next.

MR. NUDELL: The conversation reminds me of the question I asked on our telephone call about the definition of a system or a region and I know that that's a million dollar question.

But for example, I know of hospitals that are licensed hospitals within their state, but are unable to accept obstetrical patients or other -- there is many hospitals where the physician is a family-practice physician at home and is called to

the emergency room and has 30 minutes to get there.

There are a lot of different kinds of systems and different ways that they are implemented, so having some measurement or some way to compare could be important for helping those systems to mature or change or find the ideal way to implement their system.

DR. FILDES: Sally, I want to thank you for your comments and this follows on to some of the others. And so, I mean, in grappling with what your goals are in measuring care in the regionalized system, you know, I'm getting the idea that really what you are trying to do is just to, you know, capture the background of what is happening as opposed to taking an FAA approach to, you know, having a top down set of directives within specters and standards and so forth and so on.

Am I right in that? You're trying to get a population-based background count and

what emergency care looks like? And then back into what is happening in the region? Because that's different from the FAA approach, which says tomorrow we are going to write a book that says what do you need for STEMI?

And then we are going to send a bunch of people out to make sure that there are hospitals that can do it. And then we are going to measure whether or not they are doing it.

DR. CAIRNS: I can answer it from our perspective and get Sally's reflection. So this is a process. All right. So the environmental scan, remember we came up with those criteria. We came up with a search approach and proposed it and just used that as kind of an information document, right? Just to show what would happen if one were to use that approach now.

Clearly, the framework, I think, is to kind of identify where we are, where we need to go, where do we have mature

opportunities? Where do we need to develop some?

And I think that there will be an ongoing process beyond that before a specific measure comes out, is endorsed, much less implemented towards Brendan's comments. But, Sally, I'll defer to you.

MS. TURBYVILLE: I think how you stated it is right. We are looking to set a framework, not a strict set of rules about what it is going to look like. We want to signal to measure developers. We want to signal to those who are building the systems, those who are maintaining them how we might evaluate and assess as we continue to improve quality of care that is paying attention to the resource allocation throughout our system.

So I think it's a fair way to think about it.

DR. FILDES: My next question would be what data system is going to be used to collect data?

MS. TURBYVILLE: So NQF doesn't collect the data or develop measures, right? So what we are trying to do is get the experts together that will help inform those who then do look to build the data system to help inform those who do develop the measures.

So that's a good question and I think to the extent that there are recommendations or suggestions that come out of this expert group, we would want to share that with that community within our quality enterprise.

CO-CHAIR KELLERMANN: Mr. McCullough and then Dr. Kusske.

MR. McCULLOUGH: Just in follow-up to the invitation that Sally has made about looking out of the box a bit more. One of my concerns is just in general in the barriers and implementation. And I'm just going to pick my home State of Georgia here.

Our noncompliance now with so many things that have been the national standards

for decades and I think no matter whatever system we create, until we can get at the local level, the fire chiefs, the EMS directors, the hospital administrators, who are willing to give up their perceived market shares, then we are not going to have success at whatever is created.

And so I'm hoping that's something that may come out of this as well is whether we increase our stakeholders at the table, but unless we get the buy-in from fire chiefs and local EMS directors who are going to be willing to embrace the national standard and to even follow any kind of national guidelines, then I'm afraid a decade from now we are still here, still not implementing what was approved 20 years ago.

CO-CHAIR KELLERMANN: Dr. Kusske?

DR. KUSSKE: Taking that a step further, one of the issues that has retarded the development of regionalization and systems is the EMTALA laws. And the EMTALA laws have

-- until recently, the regulations have not specified how CMS would approve of community call systems and community is a large term. It doesn't necessarily just refer to a city, but it may refer to a state.

And whenever this is done, I think the -- we are going to have to pay attention to those regulations, because they will certainly affect whether any regionalization system is effective or not.

And so I think that needs to be a consideration. It's a little bit tangential to what you are talking about, but it's a key issue that has to be dealt with, I believe.

CO-CHAIR KELLERMANN: Arthur?

MR. COOPER: I can't stand my tag up, because it's on the floor, so forgive me. I want to build a little bit off of Ron Maier's comments. We have had a lot of experience in New York State with population-based trauma registry.

And as Ron has indicated, one of

the things that we have discovered is that unless you are actually doing the individual risk adjusted measures for the individual diseases that you wish to study, you are not going to have a true picture of what is going on.

The hospitals that you would think on the basis of, you know, academic excellence, high volume, etcetera, are not always the best performers. In fact, there are many, many performers that have low volumes and aren't publishing a whole lot of papers that have outstanding risk adjusted mortality statistics.

Now, developing a population-based trauma registry, you know, with all the bells and whistles and collecting data on every single, you know, patient, is difficult enough. When you multiply that by X number of emergency conditions, you know, it becomes really a formidable task. Easier now with an electronic medical record.

But one of the things that we have learned is that if administrative data is constructed in a way that it includes at least an initial set of vital signs from the first-- you know, from an emergency department visit, a first set of vital signs builds in the physiologic component, therefore, the time-sensitive component, that plus, you know, a few basic items of interest from the emergency department record, coupled with the discharge data abstract data set that is available in, you know, virtually every single state and territory, at this point, gets pretty darn close in terms of the reliability of the data to which you would get with a trauma registry.

So I think as we look towards the future, and I'm, you know, thinking of Sally's comments here, unless we are really looking at the outcomes, unless we use the tools that we have, maybe enhance them very slightly across the board, you know, we are going to be missing, I think, a great deal of opportunity

for improvement.

DR. CAIRNS: Can I make a brief -- just a brief comment?

CO-CHAIR KELLERMANN: Yes.

DR. CAIRNS: I agree. I mean, I think that we clearly need to have the data systems in place. I think they have to recognize how we cross the units of service. Then we have to think about what an episode of care is and where it starts and where the critical elements of the data are required to evaluate that episode of care.

And, you know, I like the emergency department vital signs. Imagine if we presented that to the EMS vital signs for those that intersect first with the EMSes.

CO-CHAIR KELLERMANN: Chuck, it's always dangerous when I don't see name tags up, because it gives me an opportunity to ask another question or two, but as we roll into lunchtime, because I feel like with no obvious candidate for toxicology or for mental health

at the table, could you talk for a moment about the "absence of any measures" in either of those domains?

I think I was struck at the comment in the draft that while we didn't see anything for acute psychiatry, because it sort of is available everywhere, and I might have thought you would have said it's sort of available nowhere.

And so given that we don't have an emergency psychiatrist at the table, could you just elaborate for a moment on what either wasn't there or what needs to be there to capture behavioral health, which is an enormous challenge in this country, a major cause of morbidity and a not inconsequential cause of mortality from suicide, family violence and the like?

DR. CAIRNS: Absolutely. I agree with both your comments that psychiatric care is a big challenge and needs to be addressed. I would hope it would be addressed in the

framework and toxicology.

So in psychiatric care, I think one of the challenges in terms of looking at measures from an NQF perspective is that they are just not there. And that doesn't mean that they shouldn't be there.

So imagine the components that would be important. One would be how to match patients with need. How to address acuity. How to develop interventions that are impactful within a time frame, especially identify any of those that are associated with short-term mortality or severe morbidity.

And then the issues that we have discussed here in terms of access, infrastructure, a regionalized approach, including recognition of geography and all-inclusive patient populations would seem to me to be a good start.

And if I were to take a look at the episode of care, I can imagine that the Phase 1 would be to be sure that there is a

system of identification of where psychiatric emergency patients intersect with system and how they are best served.

Phase 2 would potentially include everything from evaluation and risk ratification to communication between emergency and psychiatric providers, between resources available and patients required, guarding the need and I would hope to develop some standardized care that would show an impact on outcomes.

And then the Phase 3 side is to figure out how we can intersect the system, the entire emergency system to better serve this population of people with a huge chronic demand for service where severity is clearly demonstrated. That's the first shot.

Secondly, on toxicology. You know, toxicology does have a series of papers and a series of conditions where time has been shown to make a difference. So, for example, it would be bicarbonate and tricyclic

antidepressant toxicity and there is a time-sensitivity to it, there is a characterization intervention mortality reducing effect.

So most of it is based on electrocardiogram characterization. And so EKGs are fairly universal and bicarb is fairly universally available. How that integrates though into a geography of say poison control centers and serves every patient within a population or geography, so that they can get the benefit of that time-saving intervention, would be an example of another episode of care approach.

So Phase 1 would be how do you intersect poison centers and other readily accessible information system? How do they either determine destinations or triage or similar to your telemedicine approach to apply to populations?

And then for an episode of care, how does that system them deliver patients to the appropriate care setting to get that life-

saving intervention?

So I think you can use the episode of care framework for both of those conditions. Dr. Kellermann, I do think that I appreciate Dr. Maier's approach that disease-specificity may be important. Although, I recognize the EMS paradigms that patients don't necessarily differentiate themselves.

And so we have got this challenge of undifferentiated conditions that is really going to be a key component, all-inclusive geographical-based systems and maybe there are going to be strategies that can do it, whether it's telemedicine, whether it is EMS, triage, whether it is some new form of systems.

Nine-one-one to me seems like another opportunity, just because it's an immediate access point. Those are initial thoughts here.

CO-CHAIR KELLERMANN: One could imagine measures like suicide within 24 hours

of an emergency department visit as a measure of bad outcome. Another might be a length of time from presentation to emergency department to admission to an inpatient unit for involuntary commitment currently measured in days, rather than hours in many communities.

DR. CAIRNS: In fact, you are absolutely right. And, you know, during this scan, you can imagine the universe of potential things one could look at in this. So, you know, like the sad person scale, which is supposed to be a --

CO-CHAIR KELLERMANN: Right.

DR. CAIRNS: -- suicide predictive scale, you know, if we could have a valid specific applicable measure that has been proven to make that difference, that could be universally applied, well, I can imagine that would be a great performance metric.

And so, for example, NIH just put out a recent U01 to try to develop that so it could be applied. And so, obviously, that

would then be a wonderful measure for us to consider or certainly a gap to identify.

CO-CHAIR KELLERMANN: Okay. We will go to Helen and then to Howard and then we are going to break for lunch. This is a very energetic session.

DR. BURSTIN: Great. Just one overarching comment as you think through their framework and the domains and the sub-domains. It is important to consider which kinds of measures could actually live in a non-disease-specific mode and which ones require that they don't.

I would argue a good number of these cross-cutting domains, like care coordination and communication, I would hope you would not have us wind up with thousands of measures for every disease entity.

DR. CAIRNS: Great point.

DR. BURSTIN: And instead think about what is cross-cutting and what works best, especially considering there is a team

approach for many of these.

And then specifically though, four conditions where you think that is really important, I would argue those should be branches off this framework and then identify the key domains and sub-domains for those key areas. But otherwise, you wind up with literally care coordination measures for every condition and that's not optimal either.

CO-CHAIR KELLERMANN: We are going to indulge my traumatic colleague from Washington State here for a moment.

DR. MAIER: Because I'm being traumatized. No, but I just wanted to reemphasize what you said. I think you are absolutely correct. In fact, if anything, if you look at the current processes and standards that are being used, they are sort of picked for diseases being totally different and they shouldn't be.

I mean, the vast majority should be standardized across and I think that's a

big thing that is missing as seen in the survey is that we haven't done that.

CO-CHAIR KELLERMANN: Howard, you get the last word.

MR. KIRKWOOD: Okay. Well, this is more in the nature of food for thought and since it's time for food, I'll be brief.

One of the bits of background noise that is having -- giving me some difficulty getting my head around all of this points to the need to, you know, sort of begin with the end in mind.

And I'm kind of cluttered by how are these going to be used, because a lot of the discussion we have had, you know, I think there is somebody who has used the word pay for performance before in the background and there is other compensation issues, so it would help me focus in on the target if we could talk a little bit more about how these are going to be used.

The second point we have talked

about a variety of domains and we haven't mentioned patient or customer satisfaction in there. And I think the greatest system you develop will fail if the people who are supposed to use it, hate it. So satisfaction is an issue.

And third, and I'm glad you brought up the example you did, when we talk about EMS, I would like folks to keep in mind that EMS is more than just transporting patients to hospitals.

We have just undertaken a project among its pieces utilizes EMS providers in the field to get mental health patients to the right resource, rather than just delivering them all to the back door of the emergency department.

In our community, a mental health patient will consume a monitored ED bed for 14 hours before they can be replaced. And when we did the arithmetic the other day, we had made enough room for 500 additional chest pain

patients to be evaluated by keeping those people out of the ED.

So there is a lot more to be contributed by them than transportation. Thank you.

CO-CHAIR KELLERMANN: It reminds me of another historic document courtesy of NHTSA, the "The EMS Agenda for the Future," which talked about a number of these topics many years ago.

Okay. That was an excellent morning session. We are going to break for lunch. We reconvene at 12:45. And my colleague Mr. Roszak will chair the first half of the new session.

(Whereupon, at 12:03 p.m., the above-entitled matter went off the record and resumed at 12:54 p.m.)

A-F-T-E-R-N-O-O-N S-E-S-S-I-O-N

12:54 p.m.

CO-CHAIR ROSZAK: All right. If we could start making our way back to the chairs, we will get back underway. Amazingly, we were pretty well on schedule this morning.

You AMS guys break it up back there. All right. Well, thank you all for getting back. I hope you enjoyed your lunch.

Skip, do you have some opening remarks to start off the afternoon?

MR. KIRKWOOD: Thanks. Just following up on my closing remarks, we are talking about high level framework kind of stuff here. And one of the thoughts that evolved over lunch, after a couple of discussions was, you know, maybe we are not looking at one set of measures, maybe we are looking at two.

One being the actual performance of the system and the other being something that looks like a capability index. Because

again, going to where we think this is headed, pay for performance and adjustments of compensation, you know, the best any given regional system can do is the best it can do.

And that may not be the same as the region next door. So just a thought.

CO-CHAIR ROSZAK: Very good. Well, thank you. I'm glad to hear that it was a working lunch. So we are going to move into the definitions section and I believe we have some PowerPoint visual aids for this section.

So I will turn it back over to our folks at UNC to kind of lead us through the definitions. And remember, like I said before, these are very much working definitions, but they are definitely subject to modification. So if you do see some things that stick out and would like to make a few amendments here and there, we are certainly open to that as well.

So, Chuck, are you going to be leading the way?

DR. CAIRNS: My pleasure, Andy. So we talked about in the framework concept that there were key terms and definitions that really needed to be decided upon. And we realized that there have been a number of attempts to define these terms.

But in recognition of the functional aspects of this project, we felt it was important to get something down on paper, a minimum as a strawman, if nothing, to kind of inform what the next steps are in the framework. So we plan on running through these.

And so if I could get next slide? The first is emergency care. So we are defining emergency care as healthcare that is provided in an emergency department, emergency medical services system or acute care area of a hospital.

A further clarification around this is that emergency care refers to the treatment of high acuity or life-threatening

conditions in an expedited fashion recognizing that timely care of emergency patients may prevent morbidity or a significant -- excuse me, prevent mortality or significant morbidity.

The next term is regionalization. Regionalization refers to the concept of an established network of resources that deliver specific care, for example, protocols, definitive procedures, higher care levels or care pathways that is not universally available in the out-of-hospital setting.

For example, a physician's office or it's acute care hospitals.

Importantly, regionalized does not equal centralized care.

The third key term is system. A system or system of care is a coordinated chain of healthcare providers and associated infrastructure, including both in-hospital and out-of-hospital components, that delivers care to patients with specific emergent medical or

surgical needs.

Next slide. A system of care may exist to serve a particular geographical area, patient population or disease condition. The out-of-hospital component may be represented by the pre-hospital, for example, emergency medical services, recognition of a time-sensitive condition and initiation of a system of care or could also be represented by the transfer of a patient for definitive care within a regionalized network.

MR. COOPER: Chuck?

DR. CAIRNS: Yes?

MR. COOPER: Given your initial definition of emergency care, would a patient who is hospitalized in an acute care area of a hospital who suddenly develops an emergent condition, either related or unrelated to the reason they are in the hospital, would that count as part of this as well or you mean to focus only on care that is initiated outside the hospital?

DR. CAIRNS: Great question, Art. So I think that's something the group can decide on. Clearly, there are going to be cases where patients are going to be sent to a setting that does not have the specialized services they need and they could have a time-sensitive life-threatening condition that will require transfer and management in another facility.

So from the perspective of the eventual destination, that was an out-of-hospital transfer for an emergency care condition.

I would also understand the perspective of the episode of care started with the initial condition and then followed them through those different units to service. So I think it's something worth discussing. No, it's great.

MR. McCULLOUGH: One comment.

DR. CAIRNS: The other part of the -- you know, we are -- excuse me, I didn't

preface my remarks. I'm trying to make this as interactive as possible.

MR. McCULLOUGH: One comment regarding that. I know from the perspective of the American Heart Association, many of our courses, especially those in resuscitation, advanced life support for adults and for pediatric centers around both the out-of-hospital and in-hospital emergent event and how that is treated differently than what would be the reaching care provided on a medical order in a pediatric facility.

So I would not like to say that we exclude an emergency event, you know, particularly from the area of training and also in the concept of many facilities that have organized medical emergency response team, well, that is becoming a growing body of knowledge in and of itself of how to deal with those pre-arrest events and how to manage those again differently from reaching care measures.

CO-CHAIR ROSZAK: Chuck, do you want to go through these and then come back and relitigate them all or do you want to do it one at a time? What's your preference here?

DR. CAIRNS: Whatever works for the group, Andy.

CO-CHAIR ROSZAK: Okay.

DR. CAIRNS: I certainly could go through them. They are not extensive and then we could go back to key terms.

CO-CHAIR ROSZAK: Yes. Let's go ahead and get through them all and then we'll come back and relitigate the issues, if need be.

DR. CAIRNS: Fair enough. Did you say relitigate? Well, the good news is that I think the next slide starts the domains. So if you want to go back through the definitions, Andy, maybe this would be a good opportunity to do so.

CO-CHAIR ROSZAK: Yes, why don't

we go back to the first one. I believe the first one was emergency care?

DR. CAIRNS: Yes.

CO-CHAIR ROSZAK: Okay. So emergency care. Do we have comments around the table about the working definition? Oh, for God's sake, you're supposed to be up here. What are you doing?

CO-CHAIR KELLERMANN: I'm not chairing this session, so I get to act like that. Chuck, personally, I like the second paragraph a lot more than the first paragraph, because it's generic, rather than provider organized.

And the other limitation in my mind with the first paragraph is that you are leaving out another very important component which is the bystander and that's not just for cardiac arrest, it's for trauma and a lot of other things.

In particular, we talked about disasters and resilience. Community

engagement is going to be more and more important in systems of care. So I would back away from a provider focus and consider more the conditions for defining it. Because it starts with the next door neighbor, the family member, the witness.

CO-CHAIR ROSZAK: All right. Rick?

DR. MARTINEZ: Yes. Just to further actually look not from the provider, but it's actually the location of care. And I think that is going to change dramatically, so we might limit ourselves as this thing grows in time, given the comments made by others. I do like the second paragraph quite a bit.

CO-CHAIR ROSZAK: All right. Nick?

MR. NUDELL: Going back to something I said earlier, I think I do also like the second paragraph more, but I think it still also requires somebody to identify if an

emergency exists in order to know. And in the 911 world, that really starts with dispatchers doing triage.

So they are not always thought of as being part of the healthcare system, but it starts very early in the process, or it could.

CO-CHAIR ROSZAK: Skip, do you have a comment? Your tent is still up there.

MR. KIRKWOOD: No.

CO-CHAIR ROSZAK: No? Okay. John?

DR. FILDES: I am sure there is a way to reconcile it, but, for example, if the healthcare that is provided in the emergency department is say obstetrical or burn and it might be in a high acuity treatment area that is not exactly in the four walls of the emergency department, I'm sure there has got to be some way to reconcile that.

CO-CHAIR ROSZAK: Jesse?

DR. PINES: Just thinking about that second paragraph, I mean, you know, this

is, I guess, getting back to the initial comment that I made, what percentage of emergency department care really is encompassed in that second paragraph?

I mean, that's, you know, part of what we do, but that's not really the majority of what we do. So when we seek to define that, you know, particularly when it comes to regionalization, it may be helpful to broaden it a bit too. Just a thought.

CO-CHAIR ROSZAK: Go ahead, Rich.

DR. ZANE: I think there probably should be mentioned the episodic or unscheduled nature of the care as well.

MR. COOPER: Yes, that's a very good question. And I think we need a little bit more discussion by the group. Are we speaking about, you know, in effect fast-track care? Are we including that in our -- do we mean to include that in our definition of emergency care or not? I am not sure I know the answer to that question, but my guess is

that, you know, the greater public is probably more interested in the emergency component of it than the fast-track component of it.

I may be wrong, but I just raise the issue for discussion.

DR. MAIER: I mean, I agree. I think it is difficult and I think my personal bias is to stay more focused on the two emergency life-threatening high acuity, except that the rest of the patients in the emergency department have a great effect on the resources and availability and access of those high acuity patients.

So I think it's definitely a part of the process. Whether it is absolutely defined in this paragraph or definition maybe not, but I think they have to be a strong consideration of the system and how you monitor the systems effectiveness.

CO-CHAIR ROSZAK: I think that's a great point. That's going to be really key. Of course, people in the room understand that,

but as we expand this concept beyond people who are not, you know, familiar with the intimate details of what we do on a daily basis, it's important to capture that very sentiment.

Other comments? Tom?

MR. LOYACONO: Yes, just to follow that. I think the definition of emergency care would focus on the care and the point that is being raised about location would follow in the system or one of the other definitions.

If we decide to retain the first paragraph though, I think we need to identify what we mean by emergency medical services. Are we implying the three hospital care piece, because there are varying definitions that depending on who you are talking to, what it really means.

CO-CHAIR ROSZAK: Yes. And I know this was an issue that we struggled a little bit at the conference that, you know, Brendan

and Rick hosted not too long ago. Of course, the IOM struggled with this as well as many of you are intimately aware.

So, Chuck, Jeff, any comments on the definitions on the thoughts that we have heard?

DR. CAIRNS: One, I thought there was excellent discussion. And you know, when you think of a system of care and we take the episode of care model, it is easy to try to put these into frameworks of systems we could hold accountable.

But I think taking a step back and just looking at the second paragraph and saying this is what we want to define emergency care and then put that in the framework would open up, first of all, Phase 1 for everything from preparedness as well as community engagement.

And then number two, would still allow us to have frameworks within units of service, including bystanders. So I think

this is a very robust discussion.

MR. WILLIAMS: I would just add one point. I agree with what Dr. Maier said regarding the bias maybe to stay on true emergency care. And the only thing I would add to that is the extent that the sort of urgent care components that Dr. Cooper mentioned, which are important, clearly, especially as they impact the care of acute patients may be less relevant to a regionalized system.

You know, you don't necessarily need regionalized ankle sprain care. And so for that reason, we had sort of focused more in our brains on the high acuity life-threatening side. But I think I agree it's a good discussion.

DR. PINES: Just to expand on that, I mean, when -- we have a word up there that says timely care. And most of the diseases we are talking about today, our time is measured in minutes. But time, you know,

could also be measured in days and weeks.

And Ron talked about the access issue. You know, to give a clinical example, someone comes in with chest pain who doesn't have an AMI, are we talking about regionalization for that individual? You know, that patient wouldn't be seen in the urgent care side.

And I agree that when we are talking about what -- we are not talking about ankle sprains here. We are talking about the most common thing -- complaints that people come into the emergency department with, which are chest pain and abdominal pain and a fraction of those actually have time-dependent diseases that are time-dependent on the order of minutes and hours and maybe even days.

So when we are thinking about a regionalized system, you know, I think it would be more helpful to broaden a little bit and think, you know, perhaps more complaint-based stuff, you know, for someone with chest

pain.

You know, the 2007 ACC Guidelines say chest pains should have a stress test within 72 hours. You know, is that the job of regionalized system to ensure that actually gets done, assuming that they don't show up with ST second elevations?

CO-CHAIR ROSZAK: So would you like to see the word timely removed? Is that your suggestion or what is your --

DR. PINES: I think we are talking about timely, but I think we might want to have a qualifier in there about exactly what we are talking about. You know, perhaps -- I would have to think about it exactly as to the wording, but I think the notion that timely care means, you know, from the patient perspective. Yet, getting access to, you know, the medical care that they need in a timely fashion from their perspective.

CO-CHAIR ROSZAK: Okay.

DR. PINES: And also from a

guideline perspective.

CO-CHAIR ROSZAK: John?

DR. FILDES: So the real question is do you want to capture the universe of patients who get their medical care in the emergency department or do you want to go in the direction of a disease-specific registry that is acuity-based? Because that sounds like where you are trying to go.

You're trying to go to if you are this sick or sicker, then we want to record you. But if you are less sick than that, we don't want to record you.

CO-CHAIR ROSZAK: Well, I certainly think those comments have been reflected before. I think there is definitely the people that are always going to be there no matter what, and I don't know what we can exactly qualify if they are there for emergency purposes or not, but they are still there, so we can't just discredit them.

But I am kind of inclined like

Jeff was saying there, are we really going to set up a system for toothaches and ankle sprains and this kind of stuff? Is that really the intent of regionalization?

So it is a little bit of a quandary and I appreciate everybody's input on that. Now is the time to speak up experts and let your voices be heard. With that, Dr. Carr?

DR. CARR: I actually think that we are describing -- I think emergency care captures a piece of this. It captures the piece that I think most of us in the room are talking about building regional systems around. I just think there is another term that isn't on here that is the broader picture of what gets done for unscheduled care.

So would it change things to add another definition to say, you know, to describe what acute care is or unscheduled care or something like that and to create a definition around that? And then to say that

a piece of that, 10 percent of it, I don't know if the number is -- Jesse is sort of asking somebody to put their neck out there and say what proportion of what we do.

Some smaller percentage of that is emergency care and is the piece that needs to be regionalized.

CO-CHAIR ROSZAK: That may, you know, play into some of the stuff that Skip and, of course, Gary have been talking about with their community, you know, EMS programs, community paramedics and all that kind of stuff would still be kind of captured in that second bucket of, you know, unscheduled care or maybe something that is not under this definition classified as emergent care, so that might be a good idea.

MR. McCULLOUGH: I think we have to define for ourselves whether we want to define emergency care what we would like for it to be or what it is now and most likely what it will continue to evolve to be in the

future.

Even within the same definition of EMS, truly we are an emergency medical service, but probably only about 10 to 15 percent of what we do are the emergency components. The 80 percent is big MS, the medical services. So again, I think we should consider not just what we envision it to be or should be, but what in reality it is now that the community uses us.

CO-CHAIR ROSZAK: Chuck?

DR. CAIRNS: You know, it's interesting because we, obviously, took a functional approach as we put together our thoughts in the framework draft. And so I think that one thing is true is that this area has evolved rapidly.

As an example, discussing with Art Kellermann during the break, that at the NIH roundtable on medical and surgical emergencies, and by the way they took on the whole area. The first time we went with the

NIH Directors, Dr. Sohini said what is the hypothesis of -- for emergency care?

In other words, what is the basis for the field? We responded back saying that time makes a difference in people's lives. And we were able to find 14 conditions where time has proven to make a difference in terms of reducing mortality and that time is measured on the order of minutes to hours.

And so if you were to take one perspective of that status of the field, we say that time-sensitive mortality reducing conditions would be a focus of emergency care.

I would hope that the evidence will expand beyond those 14 conditions and I suspect that it will -- there will be a number of conditions once the systems are in place, they will also become targets for intervention.

So in that sense, clearly, the current status is a valuable construct. When we talk about what may move forward in the

future, just an observation, 50 percent of patients admitted to my hospital now come to the emergency department. That's up from 35 percent 15 years ago.

So our role in the healthcare system -- emergency care's role in the healthcare system is clearly increasing. And to not recognize that evolution and challenge, I think would also be difficult.

So I gave you a split answer, but I do think one of the valuable things in this framework is for this group to define it. This is an opportunity to talk about how it will be defined for a population and geography.

CO-CHAIR ROSZAK: Go ahead, Jesse.

DR. PINES: I mean, I don't have, you know, any great great answers, but I guess one of the ways to think about it may be what patients that we see with -- you know, certainly the patients with MI and the really critically injured and a few other diseases

would benefit from regionalization?

But what patients do we see on a daily basis who would potentially benefit from regionalization? And it is probably not the dental pains and the ankle sprains, but it is -- it definitely goes beyond that type of condition that we are talking about.

So if we're thinking about, you know, regionalizing a system, I think taking it from a patient perspective and, you know, perhaps coming up with a set of conditions or, you know, expanding that list of 14 to things that, you know, we see commonly that could, you know, for the most part are taken care of by us, you know.

There are -- when you have chest pain, you don't, in general, go to urgent care centers and retail clinics. You know, that's what we take care of. We take care of abdominal pain. You know, looking at the top 10 list of things that we see and thinking about from a complaint perspective, rather

than a disease perspective.

CO-CHAIR ROSZAK: Dr. Wright?

DR. WRIGHT: Where this thread of discussion -- particularly, Chuck's comments about the role of emergency care in the broader healthcare system is leading me is to suggest that if we don't consider the functional aspect of what emergency care is about in the context of the broader healthcare system, what we miss is the opportunity to really address the resource consumption that is at play.

When we want to deal with the time-sensitive and need to deal with time-sensitive conditions and have the other, I'm picking out a number right now, I'm not done, 70 percent of what goes on or whatever, that consumes resources and perhaps impacts the time-sensitive delivery of care.

The other element of that that comes into play is that just like you, all of us are experiencing an increase in these

ambulatory care sensitive conditions in the department that if -- I think we have an obligation to contribute to the definition of not just the time-sensitive, but the non-time-sensitive things that don't need to be there and begin to suggest where they are best cared for, how they are best cared for.

And I think if we don't recognize that on the context of our discussion and our framework here, then we will not be informing the rest of the system as we should.

CO-CHAIR ROSZAK: Would your recommendation be to have -- create an additional definition then or would you like to see this one modified?

DR. WRIGHT: I think that a more expansive definition that does recognize the non-time-sensitive conditions that functionally do operate in the emergency care environment.

CO-CHAIR ROSZAK: Ron?

DR. MAIER: So I would like to

argue against that approach. To me, the concept I thought we were addressing is how do we deal with time-sensitive disease. Maybe that's not why we are here, but I thought that's why we were here.

And it's more than just what happens in the emergency department. It's what happens. Do you have the operating rooms available? Do you have the ICU beds? Do you have the rehab? You know, do you have the access on the front end for time-sensitive diseases?

Not that what is being discussed is not important. And the fact that if it keeps going the way it is, it may collapse the whole emergency regionalized system and that's why I say it needs to be a factor. It is a great risk factor to being able to deliver time-sensitive care.

But to me, it should be brought in in that sort of construct that it is a major business of the emergency department, it has

a major potential negative impact on optimizing time-sensitive care, but what we are trying to do is look at a way to optimize development of the system to ideally deal with the time-sensitive diseases.

And bringing in these other things are going to be a negative impacts on that, but truly focus on that and the longitudinal aspect of it, which has never been done before. We have gotten stuck in the emergency department. What can the emergency department do for acute MIs?

What can the pre-hospital people do for acute MIs? And to me, this is the opportunity to look at it as a system approach to the disease, which is time-sensitive illness. And that has never been done. And to try and bring some standards of care to that process for multiple diseases.

CO-CHAIR ROSZAK: All right. Let's go to Allen.

MR. McCULLOUGH: It sounds as if

we are just trying to define three concepts under the umbrella of emergency care. At least the three concepts I'm hearing is what is an emergency? What is emergency care? And then what are emergency services?

So perhaps we might need to, if we are really attempting to define those components, define those individually and not attempt to try to define that all-inclusively under one term.

CO-CHAIR ROSZAK: Rick?

DR. MARTINEZ: Going back to John's point earlier. I think, you know, every day under federal law, I have to determine whether an emergency medical conditions exists or not. And I do that very well, although I have no idea what that is.

Okay. I mean, it's true, right? It's very subjective. But it is interesting if you are going to measure the system and the system is required by federal law to deal with emergency medical conditions, we ought to

probably maybe add some light to what the definition is.

Is it time-sensitive? And I kind of think we are going along that line. I know Dr. Carr has done some great work along those lines, but that may be one of the benefits coming out of this.

DR. CAIRNS: Yes. In fact, I was just going to refer to Dr. Carr, because you took on this issue along with Dr. Clancy, the Director of the AHRQ.

DR. CARR: Is that okay?

CO-CHAIR ROSZAK: Yes.

DR. CARR: I'm sorry. It's nice of these guys. I was looking it up to make sure I got the words right while they are throwing me under the bus. So we wrote a paper describing an emergency care sensitive condition, which I think -- which we wrote with Dr. Clancy because the universe of ambulatory care sensitive conditions are known, make sense to folks and we just sort of

said there must be this parallel universe of conditions that emergency care makes an impact upon.

And so I guess I think that we are saying or that most of the table is saying yes, emergency care is very broad and probably we shouldn't regionalize at all. What is the subset that we want to regionalize? And I guess I would argue that the emergency care sensitive condition, the analog, the ambulatory sensitive care condition is that which we might want to regionalize.

And I promise you, I will read the definition if I could find it. So ambulatory care sensitive conditions are conditions for which good outpatient care can potentially prevent the need for hospitalization for which early intervention can prevent complications or more severe disease.

All right. Those are exist -- and those exist and we know what those are. And emergency care sensitive conditions, I still

can't find.

CO-CHAIR ROSZAK: I got it.

DR. CARR: I want to get the words right.

CO-CHAIR KELLERMANN: We can come back to you.

DR. CARR: Thank you, sir.

CO-CHAIR ROSZAK: Gary, go ahead.

MR. WINGROVE: I am going to switch to someone earlier said we should define what emergency medical services is. And in the last 12 months or so a term has kind of cropped up out here that has been fairly widespread adopted to describe those parts of EMS that aren't the hospital and it is field EMS.

That would not include the 911 centers. So if we are going to talk about the 911 center, we need to include it specifically as well. But at the time this paper was written, that term probably wasn't out here, but it is widespread now and maybe that's a

better term to use in the definition.

DR. CARR: Yes, sorry about that. So emergency care sensitive conditions would then be described as "Conditions for which rapid diagnosis and early intervention in acute illness or acutely decompensated chronic illness improve patient outcomes.

DR. PINES: So just to make that a little broader, I mean, where we are talking about, you know, I think those conditions and people with symptoms of those conditions. I mean, I think that's where the differentiation is between the ankle sprains and the chest pain is that, you know, if we just add, you know, potentially high acuity and life-threatening conditions, I think that would be more reflective of what we do.

CO-CHAIR ROSZAK: John?

DR. FILDES: I just thought I might add something for the discussion. I hold up National Burn Repository and, of course, National Trauma Databank. So to get

into the National Burn Repository, you have to first have a diagnosis of a burn.

You either have to die, be admitted or be transferred out to a hospital that can take care of you. That's the only way you can get into that repository. And it represents about 90 percent of burn centers in the United States.

And then in the National Trauma Databank, you have to have an ICD-9 Injury Code. You have to die, be admitted or be transferred up to a level of care, and that has about 90 percent reporting from Level 1s and 2s in the United States.

So it's a matter of diagnosis, geography and outcome that qualify you for that disease-specific registry for both burns and for trauma.

CO-CHAIR KELLERMANN: Weighing in on this, I have come down on the grade that favors focusing on very high acuity conditions and symptoms, because that's really where the

time criticality piece of this comes in.

I do believe that everyone else profoundly affects how well the system can, in fact, deliver on that. And thinking back to the pre-lunch admonition that we look for common things across conditions before we go into conditions, it seems to me in a sense, for lack of better terms, we are talking about measures of capability, capacity and staffing across multiple conditions.

Capability is kind of what we do when we designate various centers now -- often deals with stuff, but it can also deal with expertise, etcetera. Capacity is when we are swamped or on diversion or overloaded or out of ambulances or no 911 operators available.

Staffing is clearly an issue Dr. Kusske was getting to with on-call specialist coverage, etcetera, and systems that manage that may be better positioned to do that than otherwise. All of those are, if you will, structure measures using the Donadedian

quality of care metric.

Then there is going to be a whole other set of metrics on performance, which is the process part of quality. And then outcomes and costs. And it seems to me if we keep that in mind as an overall -- capability, capacity, staffing, performance, outcomes and costs -- that we've got, we are a long way towards where we want to go, but with a focus on high acuity conditions, time-critical conditions.

CO-CHAIR ROSZAK: Let's go to John.

DR. KUSSKE: Just real quick. Well, when I first read this, all this material, I immediately thought of time-sensitive conditions, because that's all we deal with primarily. And I thought that we were going to be talking about regionalizing those conditions like neurosurgical problems, which do require personal expertise, staff, facilities, a whole host of things to make it

work right.

And just having a neurosurgeon on call doesn't make it a specialized capability. There are a lot of other things that are needed. And it seems to me that that is going to require a system that has identified facilities that can do that, and that seems to me to be part of the regionalization.

And some of the other things that have been talked about, I mean, it's the same way. A 16 year-old with an epidural with a dilated pupil has got about an hour to live before they herniate and die. So they are time-sensitive and need to be done.

So that's where I'm coming from. And I recognize that setting up systems that are going to accommodate that may be difficult in various parts of the country, because of the distance and a number of other factors, but that's how I came into this system, thinking we are going to be talking just about time-sensitive care.

CO-CHAIR ROSZAK: All right. For the purpose of time management, we are going to have to wrap this discussion up pretty quickly. We have a few more definitions and a few other things to get to. So, Chuck, I'll let you ask some last -- I think there is -- it's pretty safe to say some general agreement at least about what we are talking about here. People are shaking their heads, yes -- ?

Some people are not shaking their heads, yes. I think it's pretty safe to say that we have a general idea and I think we kind of share the general idea of what we are talking about when we are talking about regionalizing services. It seems to me everyone has kind of expressed that in similar terms. So we will certainly, you know, be able to redraft some definition that is more-- Helen, you want to jump in here? Go ahead.

DR. BURSTIN: Just one, again, a context piece. I think it is fine to define emergency care and I think you are kind of

coming towards that. There is lots of other opportunities in a framework, though, beyond definitions.

So what it sounds like you are talking about is -- it sounds like there is probably a very important domain of sort of contextual issues around primary care access, ambulatory care, sensitive conditions that are going to be important to measure for people to really be able to understand the effect of regionalized emergency care.

But it doesn't have to be part of your definition of emergency care, but it might be a very important arm of your domain or sub-domain.

DR. CAIRNS: Helen, I just wanted to say: well put. I mean, the reason to go through these key terms and definitions --

CO-CHAIR ROSZAK: All right.

DR. CAIRNS: I'm done.

DR. MAIER: Well done, period.

DR. CAIRNS: But I get the

microphone again, Ron.

CO-CHAIR ROSZAK: All right. Let's go to the next one, and we will keep chugging away here.

DR. CAIRNS: So the next definition regionalization. This was taken from, you know, many reports. I see Ron has already got his tent up, so go ahead and fire the first shot if you will, sir.

DR. MAIER: I think this is actually a very good definition. The problem I had is then you read the next one and, to me, you use different words to say exactly the same thing. And I guess that's why I just bring up the lock -- to sort of lump them both together. I think they are saying exactly the same thing.

And the question gets back to -- do we need to spend a lot of time disassociating them, or just recognize that they are integral parts of each other. Since you call this -- actually, I guess the next

one you use the word -- yes, it's regionalized system.

Then the next word is system. So, you know, there is total overlap. So I would just bring that up as a first point of discussion, as to whether these two -- we need to spend an hour trying to disassociate these two concepts as pertinent to our goal.

DR. CAIRNS: No.

(Laughter.)

CO-CHAIR ROSZAK: All right. Any other comments on the working regionalization definition, as it appears on the board? No? We're all happy with that? Okay. Let's go to the next one then.

System. So I guess -- kind of building on what Ron was saying -- is there a need to have this term defined? Is it integral to this process?

DR. MAIER: As I say, I couldn't tell any difference between the two, unless what you are trying to do is say that region

is part of a system or something that way. But I really couldn't, just reading the words, prove that from the verbiage, and I didn't know whether it was important to say that regionalized care becomes part of a larger system of care, in which case if you -- you know, if that's the important point, take home point, I guess we could wordsmith it.

But just from what is written up there now, I don't get that from it.

DR. CAIRNS: So fair enough, Ron. I think the reason that they were separate is just to have a discussion around this term regionalization. It means many things -- or it used to mean many things to many people, and frequently they didn't intersect.

I think when you start putting in the context of a system, you begin realizing how they would intersect, both in terms of geographies, populations, resources -- and certainly any framework of a discussion of performance, metrics, quality measures, and

everything else.

So I agree that systems kind of unifies a lot of the definitions of regionalization, and one of the key concept discussions we had was on this emergency care. And once you tackle that with regionalization, I think the system is inherent.

MR. McCULLOUGH: I would just recommend if we maintain that word in the definition of system, we may want to broaden it beyond again just the healthcare providers to include first responders, the public safety community, and certainly just community-at-large, since really that is where EMS systems begin -- is at the community level, so the word inclusive.

CO-CHAIR ROSZAK: Well noted. Rick?

DR. MARTINEZ: Yes, the only -- and my little two bits on this is that -- I really hate the word regionalization. And the reason why I do -- I agree with it in many

ways. Like, I hate patient satisfaction, but I love patient-centered care, because one is measuring after the fact. You know, if I design it right, they are right in front of me. That's probably a better way to approach it.

But if you look at that conference, it was actually called "Beyond Regionalization: Building Integrated Networks of Care." And I don't know what the answer is on this, Chuck, but, you know, the reason we got that way is that a lot of people believe regionalization is all top-down.

Remember when we kind of started saying, we've got to do things differently as well, but who is going to run this thing? If you look at what is happening in the marketplace, people are aggregating together to build these networks, with or without us.

And so I don't have a right answer, but somewhere along the lines I just want to raise the question again. We do want

to make sure we are not using old terms that people believe in, and stopping innovative approaches that have to occur down the road. That's all.

DR. CAIRNS: I think it's a very fair comment and, frankly, some of our initial discussions with NQF and our partners were a rather pointed one about using the word regionalization.

The mechanical answer was: that's what the RFP was. I'm the departmental chair, I have to be a little bit practical when it comes to these things.

But secondly, it did provide a really broad discussion of those issues. So again, I think this is an opportunity in this framework paper for us to define those. And I think the regionalization conference SAM put together -- I think the IOM workshop -- really helped put these issues into a broader context than they historically have been used.

And so now, it's the case of,

again, making it functional.

CO-CHAIR KELLERMANN: I think what we have is fine, but you have to have some definition for a population. You can't measure quality without rates and you can't measure rate without a denominator. And if you think back, Chuck, even to your original figures, those little funnel graphs, that first funnel was population at risk.

So somewhere in the definition, system could be a system for one person or a system for 300 million people, but what's the population? It may not be geographic, but I do think there needs to be some term in there that references that this is a population-based concept. Otherwise, we can't really, as Mike Rapp said this morning, measure care across systems -- otherwise.

DR. CAIRNS: Art, I would just like -- one, I agree with you. In fact, it harkens back to some of the earlier work done on emergency care and regionalization, in the

sense of defining a population within a specified geography.

It was one of the old terms we used to use, because whether we like it or not, Rick, I mean, a lot of these things are defined by geographical distributions, whether that is by a state -- by a county, for example, in terms of EMS -- or in terms of accountability, at least in our current system.

So defining that as an inclusive population within a specified geography would be one approach.

CO-CHAIR KELLERMANN: Yes. I mean, I just think whatever it needs to be for a defined population, because it could be geographical, but it could be the subscribers in your system. I think back to the IOM Regionalization Conference and Dave Magid's carrying on about how Kaiser patients were better going to their Kaiser hospitals, or to the nearest hospital, or whatever.

So I just think we can keep it open, but there needs to be the concept, the population-at-risk embedded in it.

DR. CAIRNS: Yes, I mean, that's fair enough. I think what the challenge is, when you get into ACOs and we get into Kaiser and other models, is the intersection with the EMS. It's just one of those things that I consider challenging.

It's interesting how electronic healthcare records are definitely leading to development of ACOs and concepts across those care settings for a defined population. But how EMS, which is caring for that population at this initial episode, has not been integrated.

And I think that is just being -- one of the challenges that I find when we select populations based on, say, an ACO model. But that's just for the group to discuss.

CO-CHAIR ROSZAK: John?

DR. FILDES: To me, one of the key differences between regionalization and a system is that a system implies that you have got a plan, you have authority, and that you have someone who is managing the operations of the system.

And that's a lot different from regionalization, which can occur if somebody builds a cath lab and sends out an announcement to everyone, or if there is only one neurosurgeon in three counties, or if there is only one obstetrician on call at one hospital. Things will regionalize themselves, based upon resource and market forces and all sorts of things that don't require any planning or any action -- they just happen.

Systems require planning and action.

DR. WRIGHT: So you are in the camp of keeping this definition in, I'm guessing?

DR. CAIRNS: That was for context,

Dr. Maier. You notice that Dr. Williams also put the word in there for now.

CO-CHAIR ROSZAK: Use your mike, please, if you're going to talk.

DR. MAIER: But I think it does help deal with that very valid concern of the system being a plan, as opposed to the random nature of the marketplace -- is it does bring both parts together based on the traditional regional approach, but applying an overview system to make sure that it works as well as possible.

And you could also just put: as a population-based system or regionalized system. And then you would have your true denominator that you need.

CO-CHAIR ROSZAK: Arthur?

MR. COOPER: I did hear a few moments ago the issues of, shall we say, systems of care designed around payer groups. And so accountable care organizations, Kaiser, etcetera, etcetera, etcetera, at the risk of

stating the obvious, we are here at a meeting of the National Quality Forum at the National Value Forum, and I think our first task is to define the quality elements and leave the economic side of it for the moment.

I think there is no question that efficiency is vitally important, but I think the quality step comes first.

CO-CHAIR ROSZAK: All right. It looks like we have exhausted -- oh, I'm sorry, go ahead, Tom.

MR. LOYACONO: Yes, I just want to say, to me, the regionalized implies some geographic boundary. Do you have systems of care that define clinical care outcomes? The things that you have to do? But the regionalized piece says some geographic boundary.

And you can have small ones and big ones, and the regionalized system of trauma care in my community is not the same boundaries as the regionalized system of

cardiac care, but they interlock.

And I think that if we don't keep -- it goes to Dr. Kellermann's part on population, I think you have to measure it in terms of geography, or else you're not going to be able to measure it and it's not going to be meaningful. Just my opinion.

CO-CHAIR ROSZAK: All right. Very good. Any other pressing issues with the word system, the definition? Skip?

MR. KIRKWOOD: Just I think what I'm hearing is -- folks are comfortable with the concept of regionalized care. They are comfortable with the concept of systems of care. But not quite so with regionalized systems of care.

They may not be the same and they may be overlapping in different ways.

CO-CHAIR ROSZAK: Yes. That's kind of what I've heard, too, yes.

MR. KIRKWOOD: So we could carefully define something that simply doesn't

exist.

CO-CHAIR ROSZAK: Right. Which -- and the overlap or the, you know, potential areas of difference between the two kind of leads me to wonder if we need both of these to stay in.

DR. CAIRNS: Andy, just from our perspective, and for your consideration, the reason to discuss these terms and definitions was to just help inform the framework.

CO-CHAIR ROSZAK: Right.

DR. CAIRNS: And so I agree with Helen's earlier comment that that's the value of this session -- is just so we can get some conceptual pieces out there, so we can now kind of build the framework, whether it is across the system or across disease conditions.

CO-CHAIR ROSZAK: All right. Let's move to the next definition. We will come back to this after we've had some more discussions later on today. We may very well

agree that we need to keep both of these, or maybe we can axe one of them.

So we had regionalization. We had system. Now, we have system of care? Okay.

DR. CAIRNS: Yes, it just modifies system, and -- Oh, I'll leave it up to you if it's valuable to go through this.

MR. WILLIAMS: One comment I would have -- and not to put Mr. Wingrove back on the spot -- but this might be an opportunity to further define the out-of-hospital component, if you wouldn't mind just repeating your comment about -- I believe you said earlier that there would be perhaps a better term that you would use to define emergency medical services. And I didn't catch all of that.

If you could just repeat that? This might be an opportunity to further define the out-of-hospital piece.

MR. WINGROVE: Yes. About a year ago, the term field EMS started to get used

around D.C. here. And it was set up to describe those parts of the EMS system which aren't the hospital, but are done out in the field and not in a fixed location.

It has gained a lot of popularity in the last 12 months, and is used in a wide variety of forums, and might be a good term to use here. I'm not sure it is intended to include the 911 centers, so we might want to be specific about that in the places where we want to talk about the 911 center.

But field EMS is pretty much the term of choice when talking about the parts that aren't the hospital.

CO-CHAIR ROSZAK: I guess looking at the definitions, I guess, I was just chatting with Art, my concern is that we are going to complicate or confuse people right off the bat, looking at these definitions, in an area that is somewhat already confusing if you are not familiar with the subject matter.

So a little bit for the sake of

brevity, it may be worthwhile to maybe combine one or two of these definitions into one. Any thought that you may have on that, Gary?

MR. WINGROVE: Personally, I like having them separated for this reason. When I first heard the term regionalization among emergency medical care, the first thing that popped into my head was: finally somebody is going to talk about having ambulance companies that serve a broad geography instead of having 50 ambulance companies in that same geography.

So, for me, I wasn't quite sure what regionalized emergency care was trying to get at, but that's what it meant to me personally when I first heard it.

Seeing this definition on paper cleared that up for me. And that's why I think it is important, because my whole concept was: we are bringing things together in a tight network, and I get the distinction now by seeing the terms separated here.

CO-CHAIR KELLERMANN: I hate

wordsmithing, and I haven't had this much fun since I was on the Board of the American College of Emergency Physicians. But regionalized systems of care, regionalized seems to be in that where we ought to be talking about defined populations, geographically or otherwise.

Systems to me at least seem to be pre-thought, planned, organized methods of delivering services, etcetera, as we talked about not the one off or the -- I'm flying by the seat of my pants, but we thought it through.

And care is clinical services delivered by whomever to help improve somebody's outcomes.

Somehow when I look at these definitions, they are not lining up with that basic kind of syntax -- I mean, systems. We have systems of care definition here and we are describing populations.

And then regionalized, we talked

about how we are carrying forward the not -- the populations themselves. So somehow if we get back to regional systems of care, and then you've got your taxonomy.

DR. CAIRNS: All fair points, Art, and I think the key thing is -- we are trying to put them in context for a discussion of the regionalized emergency medical services discussion. That was the reason to try to put some context, because they are -- whether we like it or not, there have been preexisting definitions and concerns regarding all these things.

And I would say, in particular, regionalization. And we got a lot of feedback, including some from our federal partners, that this would be one of our biggest challenges -- for us to hit this definition -- so we thought it was important to bring it forward.

CO-CHAIR ROSZAK: All right. What's the next slide? Okay. Whew.

DR. CAIRNS: Domains.

CO-CHAIR ROSZAK: I thought it might be like care or something. I wasn't sure, geography or --

DR. CAIRNS: Et tu, Andy.

CO-CHAIR ROSZAK: Right. So we are still being mindful of the time, so we would like to get through the domains and also the phases, and I know over lunch a lot of us chit-chatted about the episode-of-care framework that was laid out in the last session.

And, you know, really coming in here today, what I conceptually visualize as the episode-of-care, particularly the Phase 1, was not at all what we talked about. And it was a very expansive view of Phase 1 from what I had envisioned.

And, you know, I know there is a lot of concerns about that episode-of-care and trying to take what we are doing and make it fit. So I think we -- it is worthwhile to

have a little bit of discussion, probably at some point before we adjourn this session, about the different phases and where these domains could potentially fit or how they interact.

You know, one of the things that was a concern was that the episode-of-care almost by necessity is seemingly measuring one of the most expensive parts of the whole healthcare system, because you have an episode-of-care, someone needs treatment, automatically right off the bat you are generating costs.

And, you know, the challenge to capture the things that we are doing on an everyday basis, and, yes, I'm looking at you, Gary, because of the community paramedicine stuff and the prevention that, you know, you guys have been so successful at rolling out and doing. You know, we need to somehow capture that as value-added as well, especially if we ever want to get paid or

reimbursed for any of that prevention or, you know, preventing readmissions and all that stuff.

It needs to be measurable. It needs to be in the framework somewhere. So I think at some point we need to just talk about the different phases, and maybe they are more expansive than we initially thought. And we can certainly help flesh it out, and it's going to be an important part of moving forward, especially for tomorrow.

But I think for right now, we are going to -- let's get into the domains and at least try to get those working definitions down. Clearly, we have a little bit of work to do on the definition section we just went through, and I'm confident that with all the brain power in the room, we'll be able to have something that we can at least glance at by the end of the day or midday tomorrow, to try to revisit and just see if we've captured everybody's comments and thoughts.

So, Chuck, why don't we move on to the domains, and we will -- I believe we have definitions for each of these as well, right?

DR. CAIRNS: We just have a little clarification on what we are talking about. Again, these are all, by the way, in the draft report, if people want to see the context for them.

So the domains are detection and identification.

Next slide. Resource utilization; medical care; coordination of care; outcomes.

So we will start with the first domain.

Next slide. The main one, detection or identification. So, essentially, measuring regionalized emergency medical care services is the evaluation of how an episode-of-care is recognized as it begins. Emergency care is defined in part by time-sensitivity. Therefore, the measurement of the rapidity of detection and timely identification of the

nature of an emergency clinical episode begins the process of scrutinizing an episode of emergency care.

Domain 2 -- and remember, the wording on this is so that it fits on the slides. The text, I think, is better in the document.

Domain 2, resource utilization. At its most basic level, the concept of regionalization is about matching resources to patients. This domain evaluates the structural and process components of regionalized emergency medical care that catalog personnel, facility and service resources, and evaluate the use of those resources.

Domain 3, medical care. This domain -- divided into three sub-domains that identify where regionalized emergency medical care takes place -- evaluates the actual medical care to patients within an episode-of-care.

The basic question being addressed is: did the patient receive medical care that met accepted standards? And this includes an evaluation of whether or not a patient in an episode-of-care received care that was timely and in accordance with broadly accepted standards and protocols for a given emergency medical condition.

Domain 4, coordination of care. This domain evaluates the connections between the various units of service within an episode-of-care. Regionalized emergency medical care services are comprised of many discrete components that must interact efficiently and effectively to achieve the best outcome for the patient.

Domain 5, outcomes. Measuring patient-oriented outcomes of an episode-of-care may be the most pragmatic method of evaluating the effectiveness of a system. While measuring structure and process elements are key to evaluating a system's functioning

parts, the end result -- the outcome of an episode-of-care -- may be the most obvious illustration of whether the system works.

I'm just going to reference Dr. Kellermann's suggestion on return of spontaneous circulation from cardiac arrest.

So those are the five domains.

CO-CHAIR ROSZAK: So the point of these domains or buckets or whatever terminology you want to call them is that when we are looking at a system, the regionalized system of care, these are the domains that we would necessarily want to look at to determine whether or not, you know, we are getting the quality, if the system is functioning properly, and all that kind of stuff.

So these are the, you know, put forth domains that we are going to be discussing, but I would like your take on them. If there is anything that you think that we are missing, if there is anything that is maybe too duplicative or if there is

anything that just doesn't make sense, Ron, as usual -- go ahead. Sally, do you want to jump in?

MS. TURBYVILLE: Yes. Just to add quickly to Andy's point -- and then tomorrow we will break up in work groups and further dive into this whole idea. So we are definitely -- in addition to the time today -- we will revisit, because we realize how important it is to get these domains and sub-domains at a point that we can move the framework forward.

DR. MAIER: I want to support -- I think the domains, in general, are very appropriate and are the buckets so we can assess the system. The two again -- the flogging of my pet horse today, I'm not sure why I didn't come in planning on this -- but I take it within detection -- and it sort of gets back to Art's hang-up on population-based employment -- is the access.

Because, you know, again, if half

the people die before the 911 operator answers, you know, those who they do find may do well. But if half die unnecessarily before they get access into the system, there is a problem with the system.

And so I would assume that is in there, but just to emphasize that not knowing who is dying out there is not good.

And then the second half is -- just for discussion. I don't know how far we want to go into recovery with this process, because, again, that's a major part of a good system -- is, you're not only avoiding the mortality and morbidity, but you are reintegrating those people back into society, at the optimal level of function.

And again, that may be more than we want to chew off in this session, but just it's a critical part of the system's outcome.

CO-CHAIR ROSZAK: Gary?

MR. WINGROVE: I am wondering whether two things are already built in here,

or not. That would be: is prevention an appropriate thing to have in here? And the other would be along the lines of what Dr. Maier just said, in terms of readmission or the end result, the final end result.

DR. CAIRNS: So excellent comments. Thank you again. So on the first one, I think that Phase 1 should certainly incorporate those issues, Ron. I think that we need -- I think that's a critical component of Phase 1 that we need to get into play, including access.

And then number two, I think this idea of outcomes is what we should define as kind of a measure of Phase 2 and Phase 3. And I think we need to figure that out. I think we need to define what is important.

Prevention, Phase 3. I think we are trying to look for a link for where regionalization of emergency care services should link with prevention. In a typical episode-of-care model from NQF, it would be

Phase 1.

I think the challenge that we face though is that we have people who intersect with us per our earlier definitions with an event. And so when you look at an event-based approach to this, I think there is a component for prevention and intervention in Phase 3, but I just bring that out as my interpretation of the episode-of-care.

And I don't know if there are other interpretations of how one might incorporate it into the traditional position of Phase 1.

CO-CHAIR ROSZAK: Other comments about the domain structure overall? Jesse?

DR. PINES: Just a point of clarification. Are these intended so each of the measures would fit uniquely into one of these domains? Because it seems like these are all really overlapping.

MR. WILLIAMS: Yes, I will field that. Yes, I agree. I think that's part of

the point. The domains, first of all -- and I appreciate the group's feedback -- are essentially just titles that we came up with that were, we felt, like some reasonable categorization of where measures could occur.

I think issues like access issues, like prevention issues that are coming up, that would be more specific to a certain measure, could certainly go in whichever domain seems most relevant to that measure.

And I agree with Chuck. Unfortunately, the slides don't do the sort of thought process justice. But within the draft, and specifically within our appendix where we go through the MI example, I think we talk a little bit about possible measures that can fit within domains, and which domains may be relevant for which particular phase in an episode-of-care.

But it is all subject, it's certainly all subject to interpretation and, certainly, there is some overlap.

DR. CAIRNS: And I just wanted to give one more comment, because the value and, frankly, the learnings we have had as a group interacting with NQF, who are clearly, you know, the experts and the leaders in this endeavor, is having this kind of formal approach.

So even though this framework is going to guide development and identify gaps and start to put this into a context of emergency care, understanding, you know, how the folks who do these performance measures think has been very helpful.

And so that's where the domains came from. We tried to put them in a structure where we could at least start to attack some issues -- and this is a draft, Jesse. So we look forward to where you think things might go, could go or intersect between different domains.

CO-CHAIR ROSZAK: Can we put all the domains back up there, just so we can get

a visual? Nick?

MR. NUDELL: I was waiting to see the slide. The medical care domain has three sub-domains, with the hospital components broken into two: emergency care and inpatient care. And I wonder if we might not benefit from having a similar approach to the out-of-hospital care, where there is a definite focus in some systems to respond to emergencies?

Then there is also a growing section that doesn't respond to emergencies, but is partially part of the prevention that Gary mentioned that has a different focus, but addresses the same system -- or we would want it to be a part of the system, rather than something not considered.

CO-CHAIR ROSZAK: Gary?

MR. WINGROVE: I don't know if this comment fits in this section or somewhere else, so I can bring it up another time, if that's more appropriate.

If we think about regionalization

as a population and systems of care serving that population, is there a chance we can get at the issue of people with time-sensitive life-threatening diseases arriving at an emergency department not in an ambulance?

CO-CHAIR ROSZAK: I mean, I certainly think all options are on the table. What do you think, Chuck?

DR. CAIRNS: Yes. I mean, I think that could end up in detection/identification, for example. It could certainly end up in terms of the Phase 2 of care, and in the disease state. And it could certainly be an integral part of communication with inpatient specialty services, for example.

So I do think that you could put in -- my interpretation -- the walk-ins to the emergency department.

CO-CHAIR ROSZAK: Kathy?

DR. RINNERT: Yes, as we are looking at this sort of linear progression, and I hear it coming from sort of different

directions on the table here, different comments about what about this part, what about that part? Where is the quality assurance in the feedback loop between these different steps that help the process to learn from itself and be self-improving?

Where is the quality assurance part? Would that be down with outcomes, where you are actually utilizing the final -- whatever the final disposition is? The patient really didn't have an acute injury or illness, or they had a broken hip or whatever. And then you go back to say: well, how do we detect and identify?

Are we getting a bunch of broken hips from a certain nursing home, because there is a fall/trip potential? And who is going to go out and fix that thing? We need to have a way to identify quality assurance between steps, or maybe from the outcomes back to the detection and identification. And I don't know where that would fall or what we

would call it.

But the system has to learn from the things it is doing. And there has to be interaction between the different steps to help inform and make the learning happen.

CO-CHAIR ROSZAK: And I certainly think quality assurance should be built into probably all of these, but then also seeing this as one, you know, one picture, you are going to have that vision of what happened to make the 911 call all the way through what happened here. And I think that is going to make the quality assurance even more powerful.

Chuck or Jeff?

MR. WILLIAMS: I would just add, Kathy, I think that is one benefit of the episodes-of-care approach. I mean, I think depending on the specific measure that you are talking about, a measure of such concept could either fit in coordination of care or potentially outcome, just depending on what the measure itself was defined as.

But the episodes-of-care approach, as we sort of exemplified earlier, I think Phase 3 is where some of that occurs, sort of the ongoing care and/or continuity approaches and/or looking at the processes that have come before and where the opportunities are to measure those.

So I think depending on the measure, it could be in one of multiple domains, but the phase in which that would occur is probably Phase 3.

DR. CAIRNS: I turned it off, sorry, Andy. I knew it would happen at least once. Great, great comments, Kathy. So imagine -- and we have got two separate frameworks here. We have got these domains set up. And then we also have this episode-of-care model, where we have got different phases within that episode-of-care.

And I think in each and every phase, I agree with Andy, there should be quality assurance, and there should be loops

in that whole kind of quality management perspective.

Number two, you will be able to then define -- or at least identify -- characteristics across phases that are important to both the units of service within that episode-of-care, as well as coordinating care for a specific disease state.

And, you know, we have got some small groups set up, if I understand correctly, Sally, and there are some specific questions that I think hit some of those key issues, because I think that those are what we were thinking were important.

CO-CHAIR ROSZAK: Go ahead, Jesse.

DR. PINES: You know, just looking at, you know, thinking about all the potential overlaps here, I know people have talked about prevention and, you know, healthcare versus medical care, and what we are talking about here. And I think that another potential way to organize it would be that, really, medical

care could be the kind of -- the kind of meta-dimension, and then underneath that you could have the different areas that people get the care, and then under that you could have potentially the different, you know, resource utilization, coordination of care.

Because really, you know, having medical care and coordination and resource utilization a separate dimension, I'm not sure it makes sense.

DR. CAIRNS: Well, we are open to all suggestions. Again, that was a draft just so we could get some of these issues out, understanding that the typical framework for these performance measures is to develop these domains, and from these kinds of perspectives.

So in that context, medical care is only one of many potential domains for quality or performance metrics. And that's why regionalization of care may be distinguished by its need beyond medical care.

So there has to be coordination of

care. There has to be this appropriate resource matching. There has to be identification across the system or, as we have had a pretty big discussion, an all-inclusive population within a defined geography.

And I think that is one of the challenges we face as we move to this dimension of regionalization of care, beyond specific components of medical care in the episode-of-care model.

CO-CHAIR ROSZAK: Yes, I mean, even issues like reciprocity, clearly, a great component of a regionalized system is reciprocity, so where would you, you know, plug that in? And that's not necessarily just inherent in medical care.

DR. PINES: Right. But if we think about, you know, where the sub-domains sit, I mean, we have resource utilization and coordination of care in the emergency department, in the out-of-hospital area, and

in the inpatient zone. And I think ultimately if we want to take performance measures and have them mapped back to dimensions, if it could be within individual, you know, kind of a unique bucket, you know, I think it is going to be a more sensible way to organize the domains.

DR. CAIRNS: Can I just make one comment to that? So, Jesse, thank you for the suggestion. Again, this is all valuable and if the group feels we can model it out any number of ways.

One thing I did want to distinguish, when we were thinking about these, we didn't think about a single unit of service in quality performance metrics within that unit of service. Especially measures that were exclusively within that unit of service, because we didn't think that that would be serving this concept of regionalization or system, because we wanted to get those components that would clearly

cross units of service, or that would clearly involve integrated systems of care.

And so going into a silo for emergency department care, while it may be extremely valuable to a broad population of patients and there may be good evidence for a specific performance measure, if that care and that performance is really isolated to the emergency department setting, then it may not be serving the purpose for regionalization, which is to try to understand that resource within this broader context.

And so that was one of the reasons that -- not push-back, just trying to absorb those perspectives.

DR. PINES: Well, just to trying to differentiate the different resources. I mean, we have the, you know, role of the emergency department as a diagnostic unit versus a treatment, you know, hospitals and emergency departments as treatment units. And if we -- and I think that there are probably

ways to regionalize both of those that are going to be somewhat overlapping, but not always overlapping.

I mean, you know, you can't -- it would be difficult to make the diagnosis of a subdural, if you don't have a CT scan. And I think when we start talking about a lot of these rural communities, you know, and regionalizing emergency services, it's not necessarily about putting a neurosurgeon there, but probably putting a CT scanner there.

So I think that kind of differentiating by zone is appropriate.

DR. CAIRNS: Thanks.

CO-CHAIR ROSZAK: John?

DR. FILDES: I am not sure it's the right way to go, but one of the things I have been trying to model here in front of me is using these in Column 1 and then creating three more columns to the right, one for population at risk, one for evaluation

management, and one for follow-up.

And mapping across, I was just looking at the 30 measures that you identified to see how they might fall in. And then the projects, you have 28 projects, I think, and 30 measures that you identified.

DR. CAIRNS: Yes, John, you know, that was just to inform the concept here.

DR. FILDES: No, no, but --

DR. CAIRNS: Let's not be wedded to those.

DR. FILDES: No, I'm not, but I'm trying to make a point.

DR. CAIRNS: Yes, I understand.

DR. FILDES: Systematically, I think they drop in.

DR. CAIRNS: So, John -- can I comment on that, Andy? Great idea. In fact, one of the things that we were thinking of in the context of Helen's comments and, basically, an evolution of our thought from the discussion earlier, is that if you can

imagine, I just substitute your horizontal access for Phase 1, Phase 2, Phase 3 of the episode-of-care, and then I pile on top of it.

And I suspect there are two things that are going to come out of that. Number one is that we are going to find that there is a baseline, Phase 1, Phase 2, platform that reaches across general elements of emergency medical care.

And then I think there will be some condition-specific elements that cross it as well. And it will be interesting to see not just how it works out in terms of a grid, but how it might work out in terms of a map.

DR. FILDES: And then within each of those cells, you would have to weight the value of the measure, because you could measures that would fit in each of those cells, but certain of them will have great value, while others may not.

DR. CAIRNS: Frankly, I think we will find a lot of them don't exist and that

what we will do is we will give prioritization for identifying them, potentially, John. But that was my comment. Sorry, I was reacting though, because I think it's a good syntheses.

CO-CHAIR ROSZAK: Dr. Carr?

DR. CARR: Yes, it feels a little bit like there is something missing before detection and identification, like a system readiness kind of thing or some sort of incentive to be prepared to build it ahead of time.

And I don't know if that's the right structure to do it or if it's all rolled into Phase 1 each of these. I'm sort of on the fence there. But I love this idea of the X and the Y.

DR. CAIRNS: Great point, Brendan. And I think, you know, the Phase 1 discussion, I think, is going to be a critical one. Because, you know, frankly, our federal partners have been pushing us on this and appropriately so is how that infrastructure,

how we have these processes in place to take on these critical issues of preparedness, of diversion, of overcrowding, of surge and they are really important.

DR. RINNERT: So perhaps the other along that same line, Brendan, may be capacity, capability, access is that first -- because until you know sort of what is the lay of the land to detect and identify, it's going to be difficult, because you don't know what is the current state.

DR. CAIRNS: Right. That's great. I think we just got a sixth to match.

CO-CHAIR ROSZAK: I like that a lot. So, you know, I'm sure we all thought about this before we came here about what are some things that, you know, ideally if you are going to measure a regionalized system, what are things that you would look for?

So as you kind of go back through your mind and click off those items that you have thought about ahead of time, as we look

at these domains, is there anything else that we have missing? Are there buckets up here or are there buckets that are not up here that you would like to see that are important for measuring the system?

Nick, I know you have talked a lot about the public and the first responders and training of those people. Is there a category up here that you think you could plug into? Is there access issues that Ron has talked about at great length? You know, some of the stuff that Skip and Gary have talked about, the preparedness stuff that Brendan just mentioned, do we feel like these domains -- and I think we should probably add that, a sixth one.

Is there anything else that is missing or that would, you know, be an addition to add greatly to the discussion of the framework? Art, you're back in time to comment?

CO-CHAIR KELLERMANN: Well, just

it's hard to keep wheeling my neck around. The neurosurgeons have already had one whack at me, I don't want them to have another one.

Does resource utilization adequately encompass issues of lack of access due to overuse or unavailability of resources? So I'm thinking back again to capability versus capacity.

I mean, if we are on diversion, if all the ORs are full, if there is the one OB/GYN for the two counties is on vacation, because Lord knows she or he gets at least a week off a year, is that reflected in that domain or how do we address those issues?

I mean, are we going to -- you know, one would hope that if we do get to truly regionalized systems, that real time ongoing monitoring of capacity and low balancing is a really important part of that process.

And I just wanted to make sure that as we aspire to the future, that we are

both recognizing the importance of those issues and, in fact, measure those, so that we can see how systems perform.

MR. WILLIAMS: I will address that briefly. First of all, I will say that it's very easy, I think, for the group to take a look at the domains, especially since we have talked about the episodes of care approach as a longitudinal time-wise approach.

It's very easy to see the domains in a time-wise approach, too, but that's not necessarily the intent. I would sort of second Dr. Kellermann's comments that in the draft, at least as we have addressed it in the draft, some of the issues regarding access, regarding capacity, regarding, for example, our issues regarding crowding and diversion, those are discussed within the domain of resource utilization to some extent.

Now, clearly, that's not all utilization. Sometimes it is just a discussion of what structural measures could

potentially be there. But I think it's up to the group. I mean, I think, certainly, we could create a sixth domain that addresses specifically capacity, capability and access or we could fold it under resource utilization, although I agree that perhaps reordering them or possibly making them not as visually time-based would, perhaps, be more clear.

MR. KIRKWOOD: Much of the discussion today is centered around the episode of care model. The reason I would agree with an additional domain for sort of capacity and preparedness issues is because those things -- you can make a tie between them in the episode of care model, but it's a stretch to do so.

And it's also just one of the core issues when we talk about whether EMS fits in the realm of public health or medical care or public safety, that's the linchpin of that discussion there, because we don't pay for

preparedness and capacity in a system that is otherwise compensated for an episode of care.

CO-CHAIR KELLERMANN: Yes, just to point on that, it continues to drive me to distraction that we talk about surge capacity in this country, when we know on any given day or any given night how many hospitals are on diversion and how many EMS systems have no ambulance available and, yet, we talk about surge capacity.

And because we aren't tracking and reporting and aren't aware, you could go to the HHS Secretary's Op Center now and you would have no idea what the current load capacity of the major 20 metro areas in the country is.

I just think that's unconscionable. And so if we want to move the field, I think we do have to make sure that there are measures that if you call yourself a system, there are certain things you ought to be regularly mindful. One of them is your

load capacity and how much you are carrying and whether or not you've got folks off-line or not.

Dr. Fildes likes to pick on the FAA, but the FAA knows if an airport is open or it's closed and whether you are diverting a lot of air traffic. Yes, okay, got it.

MR. WILLIAMS: That would be a relatively easy job, because the truth of the matter is we probably don't have any surge capacity. We have the ability to move a problem around a little bit, but if you go to the metro area where I live, the average hospital is about 105 percent of capacity every day. And there is just enough ambulances and just enough paramedics to run the expected number of calls.

So, yes, we can move a problem from here to there and shift something in three hours or six hours or twelve hours, but right now, there is no surge capacity.

CO-CHAIR KELLERMANN: Well, with

all respect to our federal partners, I thought I read a report recently that we have lots of surge capacity and preparedness, because the hospital administrators said they had it.

CO-CHAIR ROSZAK: We will go over to Nick.

CO-CHAIR KELLERMANN: I'll be quiet.

DR. CAIRNS: Yes, I think that it's a good discussion point on whether or not to add a sixth domain. And I don't know whether it should be a set sixth domain or an experimental sixth domain, but, certainly, it has got to be incorporated in this capability, capacity and access. Because I think it kind of incorporates at least a lot of the discussion if people agree.

CO-CHAIR ROSZAK: Nick?

MR. NUDELL: Andy, you drew me back in. The area that could potentially be in resource utilization, but it's not a very good description for it, would be regulatory

issues. Scopes of practice, licensing, credentialing, those -- just kind of that domain of -- that includes training and education, the official act of allowing somebody to do something or to not do something, those kinds of things, I think, are also important to include in a system.

CO-CHAIR ROSZAK: Yes, I actually had that written down here and I was kind of struggling where I would plug that in, so I'm glad you reminded me of that and brought that up.

Any thoughts on that? And I want to make sure, Kristi, too, you had brought up e-health and, you know, all that, you know, utilization of technology and all that. I want to make sure that you are comfortable with the domains and there are places for you to plug that in and capture that, especially with all the great work you have been doing.

So I guess I'll just ask you, do you feel comfortable? Would this work for

you?

MS. HENDERSON: Yes, I think it crosses into several categories, coordination of care, several of them, so I'm comfortable with this. I do like adding a sixth category though.,

CO-CHAIR ROSZAK: Gary?

MR. WINGROVE: So I agree with Nick and just want to say it in a slightly different way. So we have population and a region. We have a system that has got a bunch of parts that are intertwined, but done separately. And so system governance then also becomes an issue of the feedback actually affecting the whole system and how that system is governed to make sure that all of those pieces are accountable.

CO-CHAIR ROSZAK: Arthur, you're right behind the picture there. Go ahead.

MR. COOPER: Yes, I agree with the access, capacity and capability sixth point. I'm wondering if number two should be

workforce and resource utilization in keeping with the points that have been made by Nick and others?

CO-CHAIR ROSZAK: Well, I think there is enough agreement that we should probably add that sixth bucket. And let's try to populate it tomorrow and just see what we come back with. And if we do see a lot of overlap, we can always condense it at the end of the day tomorrow.

But I think, at this point, in developing the framework we want to shoot for the moon and let's be all-inclusive and ask for all we can. And then if we have to pare it back or, you know, make changes to make it fit better into this model or this theme, we will do that.

But, you know, this is really a blank slate like we said in the beginning. So if you are setting up a system to look at regionalized medical care, what are the components? So let's not limit ourselves and

let's try to populate as many of these as we can.

Other comments or further discussion on the domains? I know we wanted to talk briefly about the different phases. We have got about a half hour until we break. Do we have the phase of care slide? Can we shove that back up on the screen for just a minute? I think somebody had that earlier in the day. Sorry about that.

And, Chuck, do you want to just talk a little bit more or maybe Sally might be more appropriate since you are more, you know, in tune to the NQF processes, but this was a process that was developed by the NQF, I believe, to look at other areas.

And we have kind of adapted it for our use here with some modifications as we have talked about today. So maybe do you want to just give a little bit of background and maybe describe how it has been used in other areas?

MS. TURBYVILLE: Sure. So as NQF has continued to work in both endorsing measures, but also guiding the development of measures, they realized that it would be a great idea to come up with a conceptual model.

And so through a lot of efforts and working with a consensus-based Steering Committee, such as yourself, it's also an endorsed-framework, this episode of care model was put forth.

And we have been applying it more and more as we move forward, but we realize, in particular, when we are talking about an area such as this where we are looking at systems, that it may not fit perfectly.

So when we challenged our team, I mean, UNC, to think about how this framework would work in the context of thinking about regionalized emergency medical care services, what we need, what we have now, where we need to go in the future, I think there was a lot of effort in thinking about that.

And I think what we have learned is that there is some advantages to this model, but we also realized going in that you are going to uncover some limitations. And so there is a couple of options as we think about this, whether it is adapting the model to make it work.

So perhaps -- I had a sidebar conversation with Helen in thinking about what you all were speaking about this morning that rather than trying to produce and episode-based model for each condition that may be time-sensitive and life-threatening, is there a generic model that thinks about the system and then captures these cross-cutting measures so that we are not trying to reproduce measures that could actually look at the system for every condition.

And then as we think about particular conditions that are lift-threatening, that's where they enter in Phase 2 where they become an offshoot.

So an example, and I don't want to get into too much detail about you having the graphical example, there was an AMI episode done by one of the cardiac groups in applying this model and they had the AMI episode and then they had trajectories coming off of that for different types of severity that occurred with AMI, because the treatment and needs for those two populations was very distinct.

So taking that kind of approach and thinking about a generic model, this being the generic model, but really regionalized emergency medical care model and then maybe the trajectories are when needed for particular conditions.

And so to think about, as has already been started, this Phase 1 could perhaps be where we think about some of these preparedness issues. The population is the community that is going to be -- that you need to work through this emergency medical care system.

So that's what we were thinking. We know that there may be some limitations. You may even identify some complimentary conceptual model that needs to accompany this. We are not trying to force any -- you know, a square peg into a round hole or anything of that nature, but it really is a starting point.

And I think we have learned a lot already so far. So we offered it as a conceptual model to this group and we would like you to kick it around as much as you can, take it where it can, and then also let us know, you know, what and if there are limitations to it.

That said, I think we also want to make sure we spend time talking about these different phases and the trajectories that may come off of this model to support the measurement area.

We do know that it does help measure developers to think about where they

can start developing measures. It gives them a little bit more context, because it's -- so when you are thinking about a condition or, in this case, an emergency medical care episode, it's so broad and challenging that to provide more context within the different points is a helpful exercise to continue pushing us to better assessment and better quality.

CO-CHAIR ROSZAK: Thank you.

MS. TURBYVILLE: Okay. And so as far as the domains that have been put forth, I think what I have heard so far is right. I think we will find that the domains will come up at different points of this episode. The domains themselves don't have to only fit in population at risk for, you know, the first domain, etcetera.

So I don't think it is going to be -- we are going to have the same type of relationship. And, in fact, I can imagine that the domains in some kind of VIN diagram and then as we look at these episode of care

models, we might think about how to illustrate how the different domains interplay with the different phases.

I don't think we are going to have all of the first two domains just in Phase 1, the next domains in Phase 2, etcetera.

So if you think of resource utilization, that potentially would be a bar across the bottom that encompasses the entire episode related to emergency medical care services. The same with coordination of care. What will be helpful for -- in thinking in terms of assessing those is that there will be different types of services you would want to coordinate and assess the coordination or different types of services that you are going to see high or low utilization that you would want to measure, etcetera.

It doesn't, as said before, always get to appropriateness, but I do think there is room for measures of appropriateness within an episode of care.

Other components of the domains may focus more on certain phases and that's okay. I think we let the context and the content of the domains and the episode lead us in that direction.

CO-CHAIR ROSZAK: Very good. I think that's very helpful. So is there any other questions or concerns or inquiries about the domains and how they relate to the phases? Is that pretty clear?

What do we think about the episode of care model? Everybody seems to be -- is it something we could work with? Do you feel it will be a good fit? Is there things we need to define, Phase 1, Phase 3? See how it goes tomorrow? Take a break. Jesse?

DR. PINES: Overall, I think it looks good. One of the things you could consider is having another phase after Phase 3, which -- and trying to differentiate hospital care versus what happens afterwards, because that seems to be all lumped in,

because, you know, lumping in ICU care with care coordination and integration back in the community seems pretty different.

CO-CHAIR KELLERMANN: It fits most of the time, but it doesn't fit load issues and it doesn't fit mass casualty events. And those are unique when we are talking about regionalized systems, as opposed to a typical NQF where we are analyzing quality of care for a particular clinical condition involving a particular patient.

So I think we just have to be constantly aware that this works within most context for an episode of care involving a patient with a life-threatening or time-critical condition. When you are talking managing emergency care in a community on Friday night or after a tornado, it is going to be very different.

DR. MAIER: I was just going to remind Art of his earlier comment that if you build in the capability as part of the

process, then you will be able to deal with the Friday night issues. So it does become covered within this paradigm.

DR. CAIRNS: And, Art, if I could just comment on that, because I think that we've got Phase 1 where you can put a lot of those kinds of issues in. I think that time-sensitive care and what works for a patient can work for 100,000 or 100 million patients, if we've got the appropriate conceptual framework, appropriate resource matching and then the appropriate drivers and philosophies.

Clearly, the specific measures for an episode of care for one patient aren't going to be the same as they are for 100,000 or a million people, but that may be yet another reason why we need to add this domain and include that in there.

CO-CHAIR KELLERMANN: Yes. I think I am just attempting to be explicit in what NQF's mission is implicitly. We are measuring quality in order to improve it. And

in this case, we are discussing an approach to beginning to get our handle around quality for regionalized systems of care with a goal that we will help, in fact, fashion high quality regionalized systems of care.

So it's important to keep these concepts in mind.

DR. MARTINEZ: Yes, I think it's a bit of a conundrum trying to figure it out, because the episode of care model works well in many ways. And, you know, JCAHO and others use tracer methodology and that sort of stuff.

The thing that I -- taking Art's point is when you are measuring a system, one of the things that is not seen very well is what's the capacity? And then where are we in relationship to the capacity?

Interestingly enough, you know, in California years and years ago, they actually started making the hospital put on-line how many beds they had. It was fascinating because all of a sudden the diversion issues

disappeared, because we all knew. And you could see when people were getting their higher level, EMS could distribute better, so that was a system issue.

And the thing I'm interested in is, you know, as you start measuring, how many times you have capacity in a system, but not in a particular place? And that allows you to do system management performance, too.

DR. CAIRNS: I agree.

CO-CHAIR ROSZAK: Mike, Tom, John? Anybody from that end? Okay. Art?

MR. COOPER: Yes, somehow, you know, in speaking about the system as opposed to the condition, we need to really, I think, think to the phases more as input through output as opposed to, you know, the current definitions that are a particular condition or disease-related.

You know, capacity is certainly part of that, but it is, and a huge part of it, more than that as well. But I have to

think this through a little bit more, but I'm trying to think of how you could sort of take this model and following Sally's suggestions here kind of morph it a little bit, you know, so that it fits the system model a little bit better. I'll have to concentrate on that overnight.

But I think that, you know, when systems engineers look at systems, you know, they are always looking for, you know, the rate limiting step, you know, or steps. And I'm not sure that the episode of care explicitly captures that.

And again, I think Art's point, Rick's point, that capacity is a huge part of it is true, but there may be other factors as well.

CO-CHAIR ROSZAK: All right. We are almost to break time. Is there any other comments that we have? Any concerns or questions about the phases, about the domains?

Tomorrow, we will be getting into

small groups to work on the domains and you will be -- I believe we are going to have what five or six breakout groups? Is that right?

MS. TURBYVILLE: Three breakout groups.

CO-CHAIR ROSZAK: Oh, three breakout groups. I'm sorry.

MS. TURBYVILLE: Of six.

CO-CHAIR ROSZAK: Six people each. That's what it is. So be thinking, you know, throughout the day today and then tonight about some of the key indicators that you would like to see in each of these buckets or domains.

And you will have a chance in your small group to probably dive, take a deep dive into one or two of the domains, but then we will also convene as a group and, you know, be able to share. So don't think you will just be limited to those two domains or those three domains that your groups gets assigned.

We obviously want your input on

all of the domains, so be thinking about that tonight and the rest of the day.

So with that, I think, unless there is any burning issues, we are going to take a break now. And we got done a little bit ahead of time, which is good. So it's 2:40. The next session is at 3:15.

Why don't we take about a 10, 15 minute break and let's try to be back by 2:55. That will keep us ahead of schedule. So come back about 2:55 and we will adjourn back then.

(Whereupon, at 2:37 p.m. the above-entitled matter went off the record and resumed at 3:08 p.m.)

CO-CHAIR KELLERMANN: We are now going to shift to discussing Regional Emergency Medical Care Systems Guiding Principles. And again, Dr. Cairns, I believe we have some opening remarks and presentation.

And again, thank you all for your attention today and your diligence. If we do finish a little early, I don't think it will

be a tragedy, but only if we have exhausted this topic and exhausted our sponsors.

DR. CAIRNS: As a measure of efficiency, we will pick up where we were. And again, this is all in the draft report. We now move into this other key theme. We talked about definitions. We talked about domains. And now the framework guiding principles.

So the following principles are overarching themes that are intended to provide direction to the standard implementation of the regionalization of emergency medical care services framework and future development of measures and measure concepts within regionalized emergency medical care services.

Next slide. So here is the first proposed guiding principle. Regionalization of emergency care is a method of matching resources to needs in a timely fashion with a goal of improving patient-oriented care

outcomes. Regionalization does not equal centralization of care.

Next slide. Number two, the effective utilization of regionalization concepts cannot occur without addressing potential structural deficiencies in the emergency healthcare system, such as ED boarding, ED crowding and EMS diversion.

Three, identifying and evaluating measures of whole systems of emergency care is difficult due to the immature development of these systems. Measurement of regionalized emergency medical care services should strive to effectively measure system components as well as the system as a whole.

Four, measures used to judge the effectiveness of a system should include patient-oriented outcomes.

Five, system evaluation should promote shared accountability for the system successes and failures across units of service and in the system.

Six, the development of regionalized emergency medical care services is an ongoing process with continually changing structure and process elements. Valid system level measures should detect and recognize improvement or lack thereof due to changes of a system's component parts and the communication and coordination between them.

And that's it. So, Andy, I don't know if you wanted to go through each of these principles, if there is any value in doing so.

MR. LOYACONO: Are these -- do you know what pages these are in the handouts, by chance?

DR. RINNERT: 13.

CO-CHAIR KELLERMANN: Yes, Chuck, I would suggest we go back and we will just go through each of these one at a time. And if you've got your handout, you should be able to pull them out.

DR. CAIRNS: So in the document it is our page 13 of the framework report draft,

but No. 25 of the pages of the materials you have been given.

CO-CHAIR KELLERMANN: Any comments on suggested modifications to Principle No. 1? We can circle back to -- well, No. 1.

DR. FILDES: I was really pleased to see No. 1 and regionalization does not equal centralization, because particularly safety net hospitals and public hospitals end up bearing the brunt of this idea and just because, you know, they have docs in-house when the sun goes down, they become the regional experts on everything. So mitigating against that is very important.

DR. CARR: That being said, we probably should define it. I mean, I have seen this now happen a lot of times, you know, after the -- this is pretty prominent in the regionalization workshop from the IOM.

Is centralization defined somewhere?

DR. CAIRNS: No. In the

Kellermann dictum. I mean, I think that's one of these things this group could define as the differences -- and distinguish the differences between regionalization and centralization.

Okay. So the concept here --

DR. CARR: Hold on.

DR. CAIRNS: Okay.

DR. CARR: No, I mean, I think I understand it, but I guess I think that other people are going to be reading this and we might need to give a sentence or two.

DR. CAIRNS: Well, I think it is--

DR. CARR: I mean, it's a great point, Brendan. And you know, honestly, one of the issues that comes up just as background is that the idea of centralization, as John pointed out, is frequently confused. You could be the focal point for all care. You could be the focal point for emergency care. You could be the focal point for specialty care.

But the purpose of regionalization

might be to create a system. And where there is, for lack of a better word, a rational planned approach to the care of patients across a geography or a population with a goal of improving their outcomes as we have discussed earlier for time-sensitive life-threatening care.

And that would definitely distinguish centralization concept from the regionalization concept. It should be unselected, not planned, not defined for conditions with a specific patient-oriented outcome in mind. That may be one comparing contrast between the two.

CO-CHAIR KELLERMANN: Dr. Maier?

DR. MAIER: Just given the opportunity to flog that horse again, on one, which is one of these difficult paradigms of a vertically integrated horizontal system, I think one allows you to deal with what we are discussing earlier and that is that on the horizontal part, you have the standards of

what a regionalized care delivery system should be regardless of the disease, while allow the disease-specific vertical integration to utilize the same baseline standards, but then to become potentially unique to the institution and/or the disease to allow to be more robust.

And I think approaching it that way with the baseline standards that all components regardless of what you focus on, whether it is cardiac, stroke, trauma are held to with a fiscally feasibility attendant in large degree to allow consistent recording and monitoring and then to allow for specifics based by disease and not all institutions being necessarily involved with each disease can pull that out and look at their own outcome standards on top of that.

CO-CHAIR KELLERMANN: Does that work for people? Well, good. Having lost his tent, Dr. Maier is out for the rest of the afternoon. I'm sorry, I don't see any signs

over here.

Shall we move to No. 2?

DR. KUSSKE: What is actually happening now in southern California is that the trauma centers are de facto regionalized care centers. And so just about anything that comes up is sent to the trauma center to take care of.

And so that, in effect, is happening right now, at least in that part of the world. And it appears to be a situation where primarily unfunded patients are sent to these trauma centers to be taken care of.

And the guise that is used to refer patients is the -- is referred to a higher level of care as defined by EMTALA and that so far has been the standard operating procedure for lots of hospitals in southern California.

CO-CHAIR KELLERMANN: So you are saying in lieu of regionalization, you have a centralized system that's centralized based on

economics?

DR. KUSSKE: It seems that way.

CO-CHAIR KELLERMANN: And I think your colleague on the other side of the table had pointed out that these cases all tend to show up more often after hours?

DR. KUSSKE: Well, sure after 5:00 in the evening and all day Saturday and Sunday.

CO-CHAIR KELLERMANN: Okay. Shall we go to No. 2? Leading off, Chuck, at No. 2, two thoughts. One would be possibly somewhere slipping in the word monitoring, because if you don't -- if we don't monitor these issues, we don't know that they are happening.

And the other which sort of speaks a bit to Dr. Kusske's comment a moment ago and to Dr. Fildes in the break is in addition to boarding, crowding and diversion, the fourth issue, I think we are seeing more and more, is on-call or gaps in on-call coverage, either because there aren't enough specialists or the

specialists aren't willing or able to take after hours calls. So you might want to add that as well.

Again, back to -- you know, a system may be capable, but not have the capacity for any of several different reasons.

MR. McCULLOUGH: Would the EMS faculty be a component? I'm not sure if there is geographic variation to that, but I know in rural parts of our state where -- it's a challenge, because of the lack of paramedics. I'm not sure about nursing shortages, if that's still an issue in some of the other areas as well.

CO-CHAIR KELLERMANN: Dr. Martinez?

DR. MARTINEZ: Yes, I agree with your comment about on-call. I would actually change the wording a bit, from my perspective, to access to appropriate consultation, because things like radiology, you know, and other things can be solved electronically.

And just that also allows us down the road to go straight from the EMS to consultation.

CO-CHAIR KELLERMANN: Good point. Yes, sir.

DR. KUSSKE: Well, there is one more point to make and that is that if a hospital has a specialist on-call and that specialist won't respond for whatever reason, that technically is a violation of EMTALA. But CMS then looks at that as a deficiency in that hospital and requires that the hospital, such as a hospital that has the capability, has to take the patient.

So that there is a legal aspect to this as well, which sets up that transfer because of EMTALA.

DR. CAIRNS: Yes.

DR. KUSSKE: If you were a physician, say a specialist on-call at Harborview and you knew that some other hospital in your area had specialists that

could take care of the problem, but they had refused to come in to see the patient, and the patient was referred to Harborview, you might be upset by that because they didn't show up.

The issue is that when that happens, CMS views that as a lack of capability of the hospital that the patient was initially referred to and so they think then that the hospital, such as Harborview, has to take the patient because they have the capability and the other hospital didn't -- doesn't.

DR. MAIER: So your proposal would be?

DR. KUSSKE: Well, the --

DR. MAIER: I mean, it happens all the time, you're right. I mean, that's where half my patients come from that scenario. I mean, I'm well used to it, but I mean what would you propose to get out of it.

DR. KUSSKE: Well, I think it's an education issue. I think that the hospitals

that are receiving these patients need to have more contact with CMS to define how they are being treated. If they don't, actually it's a violation of the law on their side if it's a lateral transfer, so they need to report this more often.

And I think this is just a matter of education more than anything else. I'm not sure that all the -- everyone -- all the administrators are aware of that aspect of the regulations.

CO-CHAIR KELLERMANN: Well, in a magical truly regionalized system, you might be able to identify that hospital be -- seems to only transfer patients after 5:00, weekends and major holidays or during the day when they are uninsured. And those patterns would be readily discernible over time if we were truly sharing data and managing it.

If it's a one off, it's a one off and no one every notices. So again, part of our idea, if we identify important data to

collect and understand to see about the quality of the system, it can actually make the system better and more accountable.

Dr. Fildes and then Dr. Pines.

DR. FILDES: Yes, just a follow on what you just described as a system where in advance you decided what the rules are, you monitor them. There is an enforcement arm. There is authority.

In regionalization, as you know, can occur without that thought. One of the best examples I'm trying to resolve right now is on hand surgery and replantation of hands. And if the only guy in the state is on his annual vacation with his family, then they don't have it and it has to go out-of-state or somewhere else.

It binds a region, but nobody planned it that way.

DR. PINES: Just the way that No. 2 is written, so addressing potential structure of deficiencies in the emergency

healthcare system, such as boarding and crowding, in a lot of areas the, you know, crowding could be a demand issue that the structural deficiency is not an emergency care system, but it's in the wider healthcare system.

So I don't know if we want to go into that at all or have that discussion. I mean, if one of the reasons for, you know, boarding and crowding is that we are -- you know, that primary care doctor is just referring their patients in and not seeing them.

CO-CHAIR KELLERMANN: My personal sense is if we are paying attention to approximate complicating factors, that's realistically probably as far as we go, unless we want to manage the entire healthcare system of the country.

But I think my sense of this one, Chuck, is your intention is to say that we do live in an imperfect world and these are

important factors in terms of timely access, immediate access to care that need to be taken into consideration.

DR. CAIRNS: Indeed. It came out of a discussion, one, it's a recognition that the system has challenges. Number two, that it doesn't exist as a system really. And that this -- one of the things we need to do is to start making it a system.

And then number three, when you start looking at what the components of the system are, that there are challenges both at the unit of service level, but also that interfere with the interaction of the units of service to provide timely life-saving care for illness and injury.

CO-CHAIR KELLERMANN: Any other comments on Principle 2? Yes, here and then here.

DR. ZANE: One could say this is cause and effect and you could say that the inefficiencies or the deficiencies could be

caused by a lack of regionalization, so that if we were regionalized and efficient, we wouldn't have as much boarding or crowding or diversion.

So I don't know if it makes it redundant or appropriate as is.

DR. CAIRNS: So I think it's an interesting hypothesis. I think that we wouldn't -- we won't find that out until we do it, but I think that clearly we have unstructured patient resource matching going on right now.

And so this would clearly be an approach to a structure, matching of patients and resources. And, again, I like that distinction we made between capability, capacity and access. I think that that is one way to think of it.

CO-CHAIR KELLERMANN: Gary?

MR. WINGROVE: From the rural perspective, boarding, crowding and diversion aren't major issues. They pretty much take

care of what comes in. But I was wondering if we could add a few words in between such as and boarding that might get at what Allen said and what the rural issues are and that's lack of paramedics mid-levels and physicians.

Many of the emergency rooms in our state aren't staffed by physicians any more. It is all mid-level. Some of them have telemedicine support and some don't. But those are the issues that we struggle with. The vast parts of the state don't have paramedics at all.

CO-CHAIR KELLERMANN: I wince at the term, but provider shortages or something of that sort would get at that in a generic way that encompasses -- yes, workforce shortages. Yes. Dr. Fildes, you were waving your --

DR. FILDES: Just to say on No. 2, you said it much more eloquently, but to revert back to the FAA analogy, there is no air traffic controller.

CO-CHAIR KELLERMANN: Yes.

DR. FILDES: There is nobody who is matching the systems capabilities with the patient flows and, you know, keeping an eye on things. So in real time, there really is nobody overseeing the system.

DR. CAIRNS: That's an interesting point. I think that you have taken it one step up and that is there was some discussion of guidance and there was some discussion of policy implications. And I think that it's an interesting point and it may be valuable for the group to highlight that.

MR. LOYACONO: Related to crowding and diversion is the holding of ambulances unable to off-load. It has an effect on the ability of the system to continue to respond on both in the urban and the rural areas. And if it is probably something that could be added, that would be great.

CO-CHAIR KELLERMANN: I do think as a collective group, we have come up with

the most trivial terms to describe the most serious behavior. I think many people call that parking. Boarding, it sounds sort of like no big deal, but, you know. Dr. Martinez?

DR. MARTINEZ: Well, I was going to support the wording here in a way, because he asked the question about boarding and should we include that? And the answer, I think, is yes, because that's the process measure, right? You can put your structure in, but if it doesn't affect these things, then you -- perhaps the way it is working or how you are doing it in terms of a process is not giving you the outcomes that you want.

So I like these ideas of having some linkage to the fact that we will create these programs and this will be the starting point. And as you build the program and you move into its performance, you should see these disappear.

CO-CHAIR KELLERMANN: Yes, Art?

MR. COOPER: Not meaning to open up a can of worms here, but -- what me, as John says. But I do think that as much as your point, Art, about not taking the entire healthcare system is true, we all recognize that there is a rate limiting step at the back door of the emergency department in terms of getting patients upstairs and that seriously limits capacity.

There are many reasons for that as you know far better than I. But I think that that's a point that somehow has to be, you know, touched on in this analysis. If that issue isn't fixed, you know, the throughput problems are going to continue. The boarding continues, the diversion continues, all of those issues continue.

And since what we are fundamentally about is ensuring access, capacity and capability for folks who really need emergency care, I think that does have to be addressed somehow.

CO-CHAIR KELLERMANN: I think we talked during the previous discussion about inpatient care as one of the domains. And three cheers to NQF for now starting to ask for measurements of things like time to a bed and throughput time in emergency departments. Although, one knows you can hide a lot of mischief above or beneath the median, nonetheless, it's a start.

MR. COOPER: I guess I'm suggesting that something should be added to this list to reflect that. I'm not sure what the wording might be. I'll leave that to smarter people than me. But I think something has to be mentioned.

CO-CHAIR KELLERMANN: Other comments? Shall we move to 3? No? We're staying on 2 for a moment.

DR. RINNERT: Just a quick comment.

CO-CHAIR KELLERMANN: Kathy, yes.

DR. RINNERT: We are using lots of

terms that are common to those of us here at the table and to those of us who do healthcare on a routine basis: boarding, crowding, diversion, the throughput is a good way of putting it, patient parking. Are we going to have a composite glossary or some appendix where these things are defined and it is not within the main body?

I mean, this is going to be a document to inform policy and decision makers who don't know these terms probably as well as we do. So I assume we are going to pull some of these buzz words out into a glossary or something for other folks to be able to interpret this correctly.

MS. TURBYVILLE: Yes, that's right. We want to make sure that it reaches as general an audience that is interested as possible. So we will work on beefing up the glossary with terms that are overly technical or emergenese or whatever you want to call it.

CO-CHAIR KELLERMANN: So that

would seem to be a way, for example, to define centralization in this context means. Boarding in this context usually means no inpatient bed available or at least -- blah, blah, blah, you know. So I think that's a great point well made.

Key Principle No. 3. Should I interpret silence as a general -- oh, Dr. Cooper, what do you have to say about No. 3?

MR. COOPER: I'm sorry. I don't like the word immature.

DR. CAIRNS: Fair enough. We agree.

MR. COOPER: It's -- there are systems that are immature. There is no question about it. But there are systems that are also very immature -- or very mature, excuse me, and we have an equally difficult time evaluating performance in some of them as well.

You know, there are disease entities for which, you know, quality measures

are well-defined, et cetera. But there are mature systems in which there are large numbers of patients for whom quality measures are not defined. And we have a hard time evaluating those systems as well. So I'm not sure what the word is, but I think it is not-- immature captures only a part of it.

CO-CHAIR KELLERMANN: Maybe a period instead of a comma and dropping the last half of that sentence would suffice? It is difficult.

DR. CAIRNS: Yes. Thank you for those comments. You know, we are sitting here thinking we have so many challenges: data, integration, thinking of these as integrated units of service within episodes of care across regions, across geographies. It's just going to be difficult.

Although, I think there may be value for us to identify some things, Art, that we can highlight as either successes or ongoing challenges.

MR. COOPER: I mean, I think I might say -- I might not drop the second half. I might say due to the complexity or something along those lines, I think that's really more to the point. And it's really varying complexity as well. It's tremendous variation, as we all know, and complexity as well. But you know this better than I.

DR. CAIRNS: No, sir. I just would like to remind everyone, again, here we have got this electronic healthcare record and we have got this huge movement to integrate electronic healthcare information, yet the key component of our systems here, emergency medical services, is not necessarily mandated yet. So it's a challenge.

CO-CHAIR KELLERMANN: Yes?

MR. WINGROVE: It's hard to have a system without leadership. And it's hard to have leadership without good governance, and good governance really doesn't make any difference without accountability.

I'm wondering if there is a way to work in the words accountability and governance into that one?

DR. CAIRNS: The only concept I wanted to add to that would be -- oh, excuse me.

DR. RINNERT: Wouldn't those go into Item 6?

DR. CAIRNS: They could. They could also go into Item 2. You know, one of the challenges we have both in terms of governance and accountability is -- and it could go into here -- is leadership. And again, I think there are policy implications for that in addition to governance and structure.

CO-CHAIR KELLERMANN: Yes, I would encourage the group to remember when we get to the point, and we are not there in this meeting, but to actually develop measures. It's also issues like validity, interlayer reliability, et cetera. Leadership, you can

see it when you see it, but it is awfully hard to quantify or define or measure in a system.

Other comments about No. 3 or shall we move to No. 4? Number 4, if Dr. Martinez was here, he would say -- oh, you are here, Dr. Martinez. In the spirit of Dr. Martinez, might we consider, should we or is it necessary to say, in addition to patient-oriented outcomes, patient-centered processes of care or is that a little too pompish and over the top?

We talk about structure. We talk about outcomes. Do we need to talk about measures that actually reflect the patient's experience? Rhetorical question.

DR. CAIRNS: I can give you a perspective and that is that I think the challenge here, if we get into too many process-oriented components, that we need to maintain credibility, validity and impact and probably value to the broader organizations, including CMS.

CO-CHAIR KELLERMANN: Some might say NQF has done a very good job of developing process measures. It's the outcome measures that are more of a challenge, to those are admirers of the six hour pneumonia rule. Dr. Martinez, you had something you wanted to say?

DR. MARTINEZ: I was going to say, you know, actually the best presentation I ever went to -- I used to be on the board of the Public Health Foundation -- but they gave a presentation on patient satisfaction or customer satisfaction in public health, which I thought was going to be a waste of my time.

And it turned out to be really fascinating, because they talked about, you know, the way it works is when you look at what you -- you are measuring all these surveys, which is why I hated them, because you are measuring after the fact and you are getting what they experienced.

And the question is what were you trying to give them? And then to do that, you

actually have to talk to the patients, right, and see what they need and what they want. That's a concept that's very foreign to many of us.

So, you know, what I like about the movement toward it is that a lot of our systems are set up based upon what is convenient for either the hospital or the physicians or the nurses. We just talked about boarding and everything else.

So I really think that if you drive it, like STEMI or our colleagues in surgery did a long time ago, let's just own the patient and do surgery, then you end up with a better system that actually meets the need of what it is supposed to be designed to do.

So I'm not so much against saying patient-ordered processes on there as a way to help define that, because I don't think patient-ordered outcomes is -- it's pretty vague to me also, I guess, you know?

So I leave it for us to discuss, but I think in the end, if you look at even the measures of value, they are going to put 30 percent of some of the monies coming down the pike are based upon patient satisfaction and that, to me, is kind of overkill.

But the message that is coming down is that we have to design these things based upon what the patient needs and how it works for them.

DR. RINNERT: And maybe this is a segue off of that, but I think our patients certainly expect their experience to be efficient. And it is amazing even within my own system, they go from one doctor to the next to the next to the next trying to get something accomplished.

And it may in the end be effective. It may even be efficacious, but is it efficient? So I don't know if efficiency needs to be worked in there somehow. Because the shortest point from A to B is probably the

best for the patient, system utilization, et cetera.

CO-CHAIR KELLERMANN: Mr. Kirkwood? We will just work up this side of the table. This is the verbal half of the table anyway.

MR. KIRKWOOD: It may be implicit in, or just understood in, within the confines of this group, but I haven't heard the words evidence-based when we talk about performance measures yet.

DR. RINNERT: We don't have the measures.

MR. COOPER: That was one of the points I was going to make, although coming at it from a different angle. The movement, as Rick has pointed out, to look at the world from the patient's perspective is a very important and powerful, you know, tool in our armamentarium to improve quality of care.

However, the fact is it's a heck of a lot easier to send a survey to a bunch of

folks after their hospitalization, than it is to try to figure out, you know, robust outcome measures that are disease-specific.

And, you know, in my own system, we face this on a regular basis. You know, department heads are routinely judged on their HCAP scores, but not on the actual outcomes of the patients in their departments, because there aren't any robust outcome measures.

And I just worry that if we, if you will, overemphasize the, you know, patient-centered component that that will be missing the outcomes component just because measuring patient satisfaction is more than a little bit easier.

DR. MARTINEZ: Can I just make a quick comment? I know you've got a whole table full, but let me just clarify my point. I don't really care about patient satisfaction. Let me stay that again, okay? The reason why is because exactly what you are saying, but for the cardiologist, I used to be

the most highly paid secretary in the room making multiple calls to take care of my STEMI patients.

For somebody to say, you know, what's good for the patient? 90 minutes to the cath lab. Let's do it. That drove all of these systems, because it was patient-oriented.

You see the same thing coming down with sepsis, things like that. So I agree with what you are saying. The outcome -- it has to be evidence-based, right? Okay.

CO-CHAIR KELLERMANN: Brendan?

DR. CARR: I don't know if this is the right place for it, but when I think about patient's perspective, I think about how I would go about looking for my healthcare, and I go about that by fact-finding. And I just don't know how well we arm patients to fact-find.

So I'm wondering about transparency, about emergency care resource

availability. We've talked now about strategically aligning EMS practices with emergency care or hospital-based emergency care practices, but if I'm -- if I decide to drive in a rural area, my uncle -- rural is a bad example; there are probably fewer facilities.

But even a densely populated area and I decide to drive my family member to the hospital with their crushing chest pain, I don't have a 12 lead, but I still might want to know where the cath labs are. The idea of consumer-driven healthcare is an important thing. And I don't see -- we have talked about before, I have talked to the surgeons a great deal about their decision to be very transparent in what is provided and what the resources are for a Level 1 versus Level 2 versus a non-trauma center and we have never decided to do that in emergency care more broadly.

And I wonder if it is at least a

dialogue that we should be having?

CO-CHAIR KELLERMANN: Ron?

DR. MAIER: I was just going to extend on the earlier comments from Richard and maybe we could just add at the end of this "and accountability" to also get towards the oversight requirement also? But to just make it patient-oriented outcomes and accountability to the patient is maybe a way to start integrating that into this process.

CO-CHAIR KELLERMANN: Works for me. It also has the virtue of brevity, but it says a lot. Other comments about 4? Jesse?

DR. PINES: I mean, I disagree a little bit about, you know, not caring about patient satisfaction. I mean, when it comes to regionalization and moving people for long distances where, you know, their family may not have the resources to come visit them in the hospital, I mean, I think that we have got to have something about, at least, patient preferences and balancing patient outcomes and

patient preferences in this in order to be complete.

CO-CHAIR KELLERMANN: Other comments? Number 5, here is that accountability word again. Any comments, modifications, observations about Principle No. 5?

DR. WRIGHT: Just to the point made earlier about our need for definition and glossary. When I see units of service there, we'll need to make sure that we have an understanding not just amongst ourselves, but for the consumers who will see that term.

CO-CHAIR KELLERMANN: Other comments? Nick?

MR. NUDELL: When I think of accountability I'm thinking of transparency and some way to promote the transparency, so I understand the point being described, but there is not really a mechanism of how it would be accountable or some kind of method or who it would -- so I guess is it a point of

you send a letter to each of your patients and you say here is how you rank compared to all my other patients or is it a website? No, seriously, you know.

Is it a website where you direct them to and there are some graphs and charts or is there a report done annually? Do we send them to Medicare's website or things like that?

DR. RINNERT: That's sort of to Brendan's point. Give to the consumer so they can choose ahead of time who they are going to go to or if I'm going to refer a family member in Des Moines, Iowa to somewhere that I don't know anyone up there?

CO-CHAIR KELLERMANN: One could imagine system evaluation should promote transparency and shared accountability. I want to ask Chuck. When you talk about before we defined and "units of service," what was the purpose of adding "and units of service" to the segment for the system successes and

failures?

DR. CAIRNS: So that concept came out of actually a Macy Foundation effort in looking at future research directions in emergency care. And in one of those prescribed papers on new methods to assess the outcomes of emergency care, we borrowed this concept that an emergency department is a unit of service in an episode of care.

So if you think of the unit of service being an emergency department in that episode, another unit of service might be the EMS system, another unit of service might be even community engagement, another part of that service might be specialty care and consult and another service might be intensive care unit or surgical care.

So I think the key point here is to have shared accountability across these units so they are not done in isolation. So the emergency department is not in isolation and the EMS system is not in isolation of the

rest of the components.

So that was the rationale part for putting that in there.

CO-CHAIR KELLERMANN: Is that clear to everybody?

DR. MAIER: Just -- do you have an example of where that has ever happened? I mean, not meaning that -- that doesn't mean we shouldn't do it. I'm just wondering do we have an example of like a hospital sharing a bad outcome with the local fire chief?

DR. CAIRNS: So, Ron, it is interesting we actually do. And so one example that comes to mind immediately is that one of the American Heart Association criteria for STEMI recognition, and they have an award program where they give a gold, silver, bronze recognition, has moved from door-to-balloon time to interaction-with-first-provider-to-balloon time.

And so you know get shared credit or shared failure with your EMS system. And

I think that is one step, at least, in terms of publicly recognized. It is a national recognition program. For those of you who have to interact with this, you will recognize how challenging that can be, how important a step that was in terms of integrating the two and I thought it was a nice first step, in terms of thinking of episodes of care with real world examples.

DR. MAIER: I was going to say it just might be nice to actually throw that in there, because there is not a whole lot that I know of.

DR. CAIRNS: Yes, we agree.

CO-CHAIR KELLERMANN: Other comments on this one?

MR. LOYACONO: I would just offer an example. We participate in that program and it is successful and our people are excited about it. We also have a program with our trauma team, for lack of a better word, we do an M&M pre-hospital with the trauma group

looking at outcomes, both good and bad. It was pretty unique.

DR. WRIGHT: And the idea of shared accountability should not just be limited to outcomes. As I'm listening to you, Chuck, I'm thinking here about this sixth dimension that we have added now at the top, an example that was mentioned earlier about full transparency of capability, bed capability, that an entire system is fully aware of and can see.

We have such a system in Maryland where every hospital can see exactly what bed status is. Every hospital can see what its emergency department status is. And it has impacted the whole diversion rate thing, but in terms of that dimension at the very top, I forgot what -- what we called the readiness dimension there.

DR. CAIRNS: I like your words, Joe.

DR. WRIGHT: The concept that the

-- certainly, from the out-of-hospital, pre-hospital component into the emergency department component transparency there is very important and I think about that when we are talking about this particular principle.

CO-CHAIR KELLERMANN: I'm reminded of Kristi's next door neighbor in Alabama, Joe Acker has a system like that that is very much an honor-based system where hospitals volunteer their report to a single office with a desktop PC and a handful of paramedics and a telephone and it's an honor system, but the CEOs actually meet bi-quarterly to go over their data, how often they were on diversion, what were the reasons, et cetera.

And his comment to me at the IOM Regionalization Roundtable were that they keep each other honest. If they sent their number two or number three or number four, it would fall apart. But since the CEOs come and confront one another, everybody plays.

Again, it's a one-off system that

is unusual drawn by the commitment of people, but it does reflect shared accountability.

DR. CAIRNS: And the impact of leadership.

CO-CHAIR KELLERMANN: Shall we move to No. 6? We're on a roll. Chuck, I'll chime in here for a moment and simply say I struggle a little with the term continually changing structure and process elements. I was thinking, you know, it is an ongoing process and certain structure process elements may change for something, just so it doesn't sound quite as amorphous.

I would wonder again if I were a new person coming into this process and saying what's the point? If you are going to keep reinventing your terms every few months, you can't really measure the tracking. I just reflect the fluidity of this, but I think we also have to have a little different sense.

DR. CAIRNS: Art, well, a point well-taken.

CO-CHAIR KELLERMANN: Other thoughts? Ron, you are smiling like you have something you want to say.

DR. MAIER: I'm very pleased.

DR. CAIRNS: Ron knew I was trying to be as short as I could.

CO-CHAIR KELLERMANN: Other comments? Are we beating this group to death? Jesse?

DR. PINES: Just the issue of -- it says valid system level measures. I mean, I think that there may be measures at different levels. So I don't know if we want to box into system level measures there? Just a thought.

DR. CAIRNS: Jesse, good point. Just for clarification, the reason we put in system level measures is because we are looking at both the systems component in that second part of the sentence, and then coordination between them. So again, the idea is to get away from isolated units of service

specific measurement.

But, obviously, there are going to be components within that unit of service that may contribute to overall system performance but that's the point is you are looking at system performance not unit of service isolated performance.

CO-CHAIR KELLERMANN: Other comments or observations about Principle 6? Before we leave this topic, are there other principles or issues not embodied in these six that any of you think are fundamental to our goal of identifying important principles or concepts for quality measurement in regionalized systems of emergency care?

Is there something that is not here that we are overlooking that we have not addressed as we have gone through the discussion of these six principles?

Dr. Martinez and then Dr. Pines.

DR. MARTINEZ: Yes, just a quick comment. I think this is all great. And I

think we are learning a lot. But, you know, I have heard reference to some of the characteristics or attributes and quality from IOM and I'm not sure they are reflected in here, whether it is timeliness or evidence-based or patient-centered.

So we may want to consider at least a point that talks about that, or recognizing those attributes as being part of what the system would provide.

DR. PINES: Yes, one of the things that I don't see here is any discussion about how the different regionalization efforts may overlap with one another and how they may be complimentary or not complimentary, depending upon the disease area.

And I'm not sure if we want to create a new principle around that, but I'm sure that will be one of the pragmatic issues that come up.

CO-CHAIR KELLERMANN: You know, everybody may read into it what they will. I

sort of thought that in the statement regionalization does not equal centralization, that's another dimension of -- centralization requires everything to one place and, obviously, different places could be effective for different things, but I hear what you are saying.

Ron, go ahead, you've grabbed your button and then we will go down here.

DR. MAIER: I was just going to reinforce that concept, because I agree with what you said. I would assume that becomes part of it, but it's such a major problem in this country right now that the regional territories are like walls that no one goes over to integrate the care across those boundaries.

And maybe we need to be explicit in saying that we expect this system be a national system in the end product and the regions are going to integrate fully to give optimal care, and not have the boundaries that

no one can cross.

CO-CHAIR KELLERMANN: John?

DR. FILDES: This discussion took place with -- talking about the CDC field triage criteria and we had a big panel a couple weeks back and a few of you were there. But this concept of a defined trauma system, let me do strike, define emergency care system, was that there are a lot of places in the country where three or four states come together, like the quad cities, and a defined system has to dissolve geopolitical barriers.

So you know, that was a bright moment in the room when the decision was made to actually put that in print, to say something like that, that a defined system of care dissolves these geopolitical boundaries. And so perhaps that same thought could be incorporated here.

A separate comment on this, you were kind of asking for last call on comments, is I don't think there is a strong enough

statement in here about a system requiring -- enabling legislation in a lead governmental agency and some oversight with command and control and authority to monitor and to make accountable the parties who participate in the system.

And I don't think that you have to go overboard with it, but these are really, really good thoughts and the next question is, well, who is going to do it?

CO-CHAIR KELLERMANN: Well, I don't want to parse this issue too finely and I do want to look back to the NQF staff folks as to what sort of in-scope for NQF and what's out-of-scope.

Clearly, I think that -- it is my sense that a number of the federal partners in the room and a number of us at this table believe that those issues are important, whether this process is the vehicle to advance that or not, I don't know and I would have to ask the NQF folks.

MS. TURBYVILLE: That's a good question and I don't have an answer today on how far we want to push that on that framework, but we have got it down and we will certainly discuss with Helen. I have seen some frameworks pushed very hard beneath the leadership, so my sense is that there is definitely a possibility to emphasize that need.

DR. CARR: One other word to consider, the word population or population health isn't in there anywhere and I just wonder if we could add to No. 3 something about future measurement regionalized emergency medical care services should try to effectively measure system components and population level outcomes or something of that nature, as well as the system as a whole.

I just think that once we -- when we really encourage people to sort of zoom out from their hospital's outcomes, even though we keep saying the word system, I think we might

want to be a little bit more explicit and say that we are talking about their catch area, their population, you know, the community, how it would be defined.

CO-CHAIR KELLERMANN: Brendan, I think it is a good point. I actually think it might even fit better in No. 1 right up front if you just said with a timely -- with the goal of improving patient-oriented care outcomes and population health, because you are really talking about outcomes across the population. And I think you would get at it.

Dr. Cairns, do you consider that a friendly amendment?

DR. CAIRNS: I do.

CO-CHAIR KELLERMANN: We notice you are getting briefer and briefer. And we appreciate it.

DR. CAIRNS: Thanks.

CO-CHAIR KELLERMANN: Next, we we'll get the monosyllabic grunts and then we are there. Any other comments or observations

on this general topic?

Hearing none, I believe that our last items of business, but an important one, is NQF Member and public comment. At this point, the hardcore observers in the room have just as much right to search the microphone as those of us who have been wearing them out at the table.

And anyone at the table who has an issue that they didn't feel was adequately addressed or commented upon earlier today that they would like to bring up, this is where oftentimes committees say any new business.

So if there are issues that we have not addressed over the course of this conversation, and I particularly want to invite individuals who are either in the audience or listening in on the telephone, Dr. Boyd, this would be a good time to speak up. I want you to tell David I specifically asked him in case he had been on the phone.

Going once, going twice. Everyone

feel, at this point, that they have been able to express -- again, at the risk of beating a dead horse, this is a very high-powered group. And I think we have had a really highly productive discussion today.

Chuck is still smiling sort of. And I think staff have gotten a lot of notes, both on their laptops and in recording. But I do want to make sure that given the rigors that everyone went to to come to this meeting, that your perspectives and those of your respective disciplines and background have been adequately represented in the discussion up to this point.

Obviously, we have got some opportunities to reflect tonight and again to re-engage tomorrow, but I want to make sure we have covered the grounds today.

I think there were perhaps some questions you wanted to ask people to mull over?

MS. TURBYVILLE: Yes.

CO-CHAIR KELLERMANN: Back to you, Sally.

MS. TURBYVILLE: Okay. That sounded like a cricket. A couple of things as we close out for today. One, we did hand out the packets to each of you for the work groups assignments tomorrow. They are meant to both reflect what we know about your expertise and some of your recent efforts, as well as still trying to construct representative work groups from the Steering Committee itself.

We attach to our best that we could -- the relevant component of the framework for the domain that we ask you to look at, so hopefully that will be helpful and I think it's good for you to have ahead of time an idea of what work group you will be participating in tomorrow. We're really looking forward to the outcome of that.

And then concurrent with this, we are going to have Chuck and Jeff start thinking about the new domain, and we don't

have a lot of time to do that, but have a lot of knowledge to pull from. And so we will still take advantage of that time tomorrow to push that sixth domain forward.

Some of the things that you may want to think about as we push, especially, the domains and the sub-domains that we have talked about this evening -- and feel free to jot these down as you watch the news later on tonight or as you wait for our dinner later tonight -- is to think about what has worked as far as measurement in the system or the regionalization so far and what should continue to be supported, so, you know, thinking about examples of successes, what do we have now in terms of measures and platforms or systems?

And I'm not talking about the systems that you have identified here, but the systems that allow for measurement that should be encouraged to assess the system, so perhaps the measures are too discrete right now, but

potentially could work in the context of regionalization.

So in thinking of your experience, are there measures that you think we should -- and we don't have to name the measures, but types of measures, process measures, for example, that may be easy to adjust into regionalization or not, and areas that we know require measures that don't have any at all right now.

And for those that don't have any at all right now, thinking about why not. Is it the lack of data or the lack of integrated data? Sometimes we know we have a lot of data, but it's too fragmented. Is it a certain emerging clinical area and so it just hasn't had the opportunity for measures to come about, the clinical evidence, what have you, and others.

So to not just think about areas where nothing is there, but really start to push this Committee to think about why not.

What is it in infrastructure or the point in time in which the regionalization that has prevented that from coming about?

And I think that will take us a long way while we have you all together in getting your reactions and take advantage of the dynamic communication.

So I think your homework for tonight is to think about everything that was talked about, think -- kind of mentally prepare for your work group tomorrow. We really do want to get as much as we can out of those domains tomorrow, so that we can turn another draft around for all of you to react to.

And then these questions about the reasons why we don't have measures where we need them. What measures do we have now that could adjust? And what is working right now and should be encouraged to continue to work? That's it.

CO-CHAIR KELLERMANN: Thank you.

With that, we will adjourn for the day.

MS. TURBYVILLE: Oh --

CO-CHAIR KELLERMANN: Oh, what?

MS. TURBYVILLE: We're not going to adjourn. Well, we can close the public comment.

CO-CHAIR KELLERMANN: Okay.

MS. TURBYVILLE: But we do want to -- I'm going to hand --

CO-CHAIR KELLERMANN: Executive session.

MS. TURBYVILLE: Yes.

CO-CHAIR KELLERMANN: Excuse me.

MS. TURBYVILLE: Yes. I'm going to hand it over to give us an update on those of you who want to have dinner with your colleagues, et cetera.

(Whereupon, the above-entitled matter was adjourned at 4:06 p.m.)

H

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Regionalized Emergency Medical Care Services Steering Committee

Before: NQF

Date: 05-23-11

Place: Arlington, VA

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

Neal R. Gross

Court Reporter