

Unperfected transcript – The Future of Health Services Research Webinar

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J. MICHAEL MCGINNIS

Welcome to everyone to this web cast on the future of health services research advancing health systems research and practice in the United States.

Today we're going to hear from leading experts responsible for using producing and funding health services research about the, about the future directions for this critical field of research.

I'm Michael McGinnis at the National Academy of Medicine. It's my pleasure to serve as the moderator for today's conversation.

The discussion builds on a recently released the National Academy of Medicine Special Publication about the future of health services research, which was based on a symposium convened on February 26 and 27, 2018 as a full publication is actually available free of charge on the NAM website at nam.edu/HSR.

To the agenda. We will first going to hear an overview of the field of health services research from Carolyn Clancy of the Veterans Health Administration. Carolyn served as the Deputy undersecretary for discovery education and affiliate networks. Prior to her current appointment she served as the undersecretary for health and organizational excellence overseeing VHS performance quality, safety risk management, systems engineering oriented and oversight ethics and accreditation programs. If that sounds like everything it pretty much is. She actually just prior to this position was the executive in charge of the Veterans Administration overseeing \$68 billion dollars and programs and 9 million beneficiaries. So, Carolyn, we're, we're very pleased to have you not only because of that, but also because you served for 10 years as the director of the Agency for Healthcare Research and Quality.

I'm going to run through the various presenters and then turn it to Carolyn to kick things off.

After Carolyn we will hear from Lisa Simpson, the head of Academy health, who will provide an overview of the key themes from the symposium, and the resulting publication. I should mention and underscore the fact that Lisa was substantially responsible for the implementation of this activity. She suggested it and partnered with a number of key organizations and individuals to ensure that has happened. Lisa has been the President and Chief Executive Officer of Academy health since 2011. Before joining Academy Health Dr. Simpson spent eight years, as Professor of Pediatrics as an endowed chair and child health policy at the University of South Florida and then as the director of Child Policy Research at Cincinnati Children's Hospital Medical Center and the University of Cincinnati. She served earlier as the Deputy Director of the Agency for Healthcare Research and Quality from 1996 to 2002 so we have two individuals to lead us off, who have been key leaders and health service research for the last nearly three decades in one fashion or another.

Following Dr. Simpson's overview we will turn to a reactor panel of experts that represents different key stakeholder groups will share their perspective on the key priority for the field of health services research over the next decade and their, perspectives on necessary action steps for moving the field forward and achieving the priority that the field certainly deserves.

We have on that panel Dr. Joe Selby. Joe is the executive director of the Patient Centered Outcomes Research Institute. Joe is a family physician and clinical epidemiologist and health services as a researcher with more than 35 years of experience in patient care research administration, including vital leadership shaping Kaiser Permanente is very strong capacity in that respect and leading to a number of breakthrough insights and methodological advances in the field.

In addition to Joe and the panel we have Gopal Khanna who is the current director of the Agency for Healthcare Research and Quality. He was appointed to that position in May 2017 so AHRQ is very well represented on this panel and the AHRQ, as most of you know has the mission of producing evidence to make health care safer higher quality more accessible equitable and affordable. And it works as the key agency in that respect in the US Department of Health and Human Services and with other federal, state and local partners to make sure that evidence is understood and used - the mission of ensuring that health care in America is based on evidence

Tim Ferris is a practicing primary care physician and CEO of Massachusetts General physicians organization which is the largest of Harvard Medical School faculty position groups. As senior vice president for population health at Partners previously Tim led the design and implementation of system wide care delivery changes to improve patient health reducing of the health care costs burden and also was a key member of the National Academy of Medicines consensus study committee on vital signs.

Mary Applegate serves as the medical director for the Ohio Department of Medicaid and is responsible for implementing the Medicaid quality strategy to improve health outcomes across the state. She's double boarded in pediatrics and internal medicine and has been in rural primary care practice for over 30 years still carrying is this day for newborns and mothers in her region.

And our final panelist is Eleanor Perfetto who is the senior vice president of digital initiatives for the National Health Council. She holds a part time faculty appointment as well at the University of Maryland, Baltimore School of Pharmacy where she's professor of pharmaceutical health services research. Eleanor's research and policy work primarily focuses on care quality patient engagement in comparative effectiveness and Patient Centered Outcomes Research.

This is a really stellar group of folks, all of whom are important to the leadership in the field and also the development of the NAM Special Publication the last part of the webinar will be reserved for questions and answers.

While the presentations are going on. If you have a question for the speakers. Please type that question into the Q&A box on the webinar platform and during the Q&A session. Daniel Whicher, who is the senior program officer here in the National Academy of Medicine responsible for the project will read the questions for the speakers to respond to.

I should note in advance, we will have to be judicious in our choice because this is a record setting attendance for a National Academy of Medicine webcast, where there were 1000 participants. We're delighted that you've joined and looking forward to your input, both now and after the end and after the webinar.

Before turning things over to Carolyn, I want to extend a special thanks to the following organizations for their support and leadership throughout the process: Academy health I already mentioned is led by Lisa Simpson; the American Association of Colleges and nursing; the American Board of Family Medicine; the

American Society of anesthesiologists; the Association of American Medical Colleges; the Federation of American hospitals; and the Robert Wood Johnson Foundation.

All of these organizations have been key to the implementation of the meeting and the execution of the publication with their support and advice along the way. I'd also like to thank the members of the of the planning committee. Andrew Bindman, Carolyn Clancy, Ellie Dehoney, Adaeze Enekwechi, Lee Fleisher, Sherry Glied, Atul Grover, Sandra R. Hernandez, Charles N. Kahn III, Gopal Khanna, Suzanne Miyamoto, Robert Phillips, Alonzo Plough, Joe V. Selby, Lisa Simpson, as well as the NAM staff who've been involved and also the Academy Health staff who were involved in the effort. So thanks to all for your leadership in this effort.

And as I turned the agenda over to Carolyn, I'll note that Carolyn will speak for 10 minutes Lisa will speak for 10 minutes and the panel discussion will then go on until 205 and then we'll move to questions and answers at that point. So we have a fairly tight timeframe. Again, thanks to all for your participation. Carolyn, let me turn the floor over to you.

CAROLYN CLANCY

Thanks so much, Michael, I want to thank everyone for taking part in this webinar.

To highlight the National Academy of Medicine Special Publication on the future of health services research I'm quite honored to join my colleagues today.

And I have to say, I've had a long standing interest in health services research having spent most of my career working to improve the quality of safety and health care provided in this country.

When I was at AHRQ for many years and director for over 10 I learned a lot about measuring patient outcomes developing practice guidelines and systematically reviewing evidence and it gave me the opportunity as well to work with large databases to get a picture of what primary care practice look like in this country.

But most importantly, it gave me a very clear eyed view of what it would take to actually get with the people who would use evidence based information to improve care to crystallize and distill the most important questions and to figure out how to collaborate with them to make the output such that they could put it into practice.

Now it's for its own sake, as it says on every national academy publication - It's not enough to know, we must do. So I want to share just a brief overview of HS are which is decidedly my own opinion or informed by my own biases.

I think there's broad agreement that the fields really emerged in the mid 60s, more or less concurrent with the dawn of passage and then implementation of Medicare and Medicaid. Suddenly huge expenditures investments in healthcare from the federal budget and with that many questions about what are we getting in return for substantial investments.

Fast forward to today, and we would say, it sure is a multi disciplinary field of scientific investigation that studies how multiple factors affect access quality and cost of health care, which I usually shortened to say what works for which patients under which circumstances and why.

Those are the big questions I predict that in the coming couple of years, we're going to continue to have big debate about the role of government in healthcare. And frankly, what is the policy goal.

Some of you may have seen (unintelligible) blog posted yesterday on Health Affairs, which I thought was a really terrific example of that.

So just to talk about some specific topics. One of course is metrics. Some days it feels like we're report card crazy in this country. But I think that we will see into the future, a continued demand for an interest in metrics. So the NAM report on vital signs was very important even better than metrics, though, would be metrics linked with strategies to improve performance.

You know, if you're using Google or some other GPS like tool when you're driving and you take a wrong turn it reroutes you or let you know you are really going the wrong way. To really just be in the business of developing evidence based metrics, with great precision to tell people that they already didn't do the best job they could shouldn't be the Everest of our ambitions. And of course, if we're going to use that information timely feedback is usually important.

A second area of course is health IT. We've been at this for a long time, but we're now starting to see as cheap as computer power has gotten ever less expensive the power of artificial intelligence and machine learning and deep learning and so forth.

We've seen how well what a vital part this is of improving health care at the VA for well over 20 years because our patient record is available to any provider anywhere in the country, which gives us an enormous opportunity to reduce duplication of testing and fragmentation of care and service is a very rich source of patient data.

For investigators and third area, of course, related to health. It is informatics and this gets into the issue of how do we take full advantage of large scale databases derived from electronic health records and other applications to really get a handle on how do we manage the health of populations and that may means connecting with other sources of data that have nothing to do with the delivery of healthcare.

Our biggest (unintelligible) in this area at VA has actually been developing what I believe is now the nation's largest genomic database where we have genomic information from 720 5000 veterans also connected to their clinical longitudinal electronic record, but we're going to need a huge amount of collaboration to figure out what are the best methods to analyze that. And frankly, which, how should we set priorities of space.

A fourth area is evidence based practice, it's no surprise that there's, there are continuous debates about the ever increasing amount of medical data and information and advances in informatics and it, you're probably only going to accelerate that trying to figure out how we make it easy for clinicians to have the right information. When they need it at the point of care or point of decision making, I think, is going to be a continued area of enormous interest.

A fifth area is health care delivery a casual observer of health statistics will see they're pretty soon. It'll be really hard to find hospital. So we'll have many fewer of them and they will look very different than hospitals, certainly when I was training.

Advances in information and communications technology has made it possible for us to deliver so much and military bases. And virtually and we have a lot of work to do to figure out how to use that technology is wildly wisely and judiciously as possible. So that's just a brief overview and I know that Lisa from Academy's health will actually have a whole lot more specifics. Hers is the preeminent organization for this field. I want to just talk a little bit about stakeholders.

Investigators in this field comes from nursing, political science, epidemiology, public health, medicine. Just to name a few. There are a number of federal health agencies, including NIH or the CDC, CMS, Health Resources and Services Administration and of course VA.

We have an entire office focused are devoted wholly to the health services research and we have a huge advantage of being able to close the loop because our investigators are in an integrated delivery system. There are also a number of foundations and I could never, ever forget to mention the Patient Centered Outcomes Research Institute which has really I think pushed the fields hard to make sure that patients are part of this equation and process at every step of the way.

You know, there are so many innovations in improving patient safety and quality that have come out of health services research. My favorite may be to re engineer discharge more because of how clever the avatar was that the investigators developed but there are. That is just one of many, many patient safety initiatives to reduce for example; catheter late and bladder infections and healthcare facilities.

We were able to put that into practice right in VA. And so a decline in these infection rates by about 22% so huge opportunities in frankly I think huge opportunity for everyone. It's so importance and quantum leaps forward in health of the population in this country. I want to finish my brief remarks by quoting a portion of what's called the modern Hippocratic Oath. (unintelligible) And what he said was, I will respect the hard one scientific games of those physicians who steps I walk and I gladly share such knowledge as mine with those who are to follow.

I will remember that I do not treat a fever or a cancerous growth, but a sick human being who's illness may affect the person's family and economic stability. To me that is, that reframed Hippocratic oath is the essence of what health services research is all about. This pledge certainly remind us for this field is so important. And that the outstanding work that our scientists conduct daily is vitally important, and it's vitally important to continue our efforts.

So again, thank you for the opportunity to be here. I am beyond thrilled that so many people have joined this webinar today and very much looking forward to hearing your questions.

J. MICHAEL MCGINNIS

Thank you. Carolyn, and thanks for your leadership as well. And thanks for sharing that those wise words from Dr. Tanya.

And in many ways, the fundamental charge of this effort is to ensure that the systemic influences that are brought to bear on patient care are allowing that kind of perspective to prevail and now to lead us through the themes of the of the publication and the discussion that led to the publication. We're very pleased to have Lisa Simpson who is I mentioned earlier with a key driver in the organization of the effort, Lisa.

LISA SIMPSON

Thank you, Michael.

It has been an honor and a pleasure to work with you, Danielle, and the rest of the NAM team to organize this important workshop and report.

I'm also honored as Carolyn to join this distinguished panel on today's webinar. And I would point to the slide that I hope everybody can see that I do have a Twitter handle. And I think the more we do as a field of health services research reaching the broad community, the better. And that's a message that I think many of the speakers today will echo.

As I think many know Academy health is the national professional organization supporting the fields of health. Thank you.

So right now I just want to set the stage, reminding folks that Academy health is the national professional organization supporting the fields of health services research and policy, and as such are nearly 4000 individual and organizational members care deeply about the future of this field its challenges its priorities and given the wide gap between what we know works in healthcare, and what is actually achieved strengthening the pillars of the nation's capacity to assess and improve health system performance is absolutely essential.

It is therefore ironic that at a time when appreciation has never been higher for both the need and potential from health services research. The political and financial support for sustainability and growth have been intermittent at best and sometimes under siege.

Indeed, in the current policy environment, questions have been raised about the scope scale structure and function of government support for ages and that's a result.

Now is a critical time for the field to reflect on its past accomplishments identify shortfalls challenges and priorities and investigate ways of organizing to effectively and efficiently address those challenges and priorities.

So the workshop was organized to answer several key questions, including what have been the contributions and impact of agents are building on the comments that Carolyn Clancy started us with: What are the challenges and opportunities for the future, including how the agencies are funded organized and created And finally, focusing on the future, what should be the priorities to really drive a 21st century health system. Next slide please.

So first, we were able to hear during the workshop and reflected in the report from many stakeholders who benefit from health services research across the full gamut of policy and private sector and public working to advance health care and their reflections on the impact and sometimes the shortcomings of the fields impact to date.

With this report and workshop did not allow for systematic assessment of the full impact of the field. And so we are eagerly awaiting the results of work currently underway by the Rand Corporation, which has been contracted by the Agency for Healthcare Research and Quality to provide a fuller assessment of all federally funded health services research since 2012 and that study was requested by Congress.

So regardless, however of the method of assessment, it is clear that federal and non federal funding for health services research has supported a number of efforts that have had a significant impact on health and healthcare policy and the way health systems operate.

That impact is so significant. So much so that today we take some of the fields insights as givens: cost sharing matters, quality and access vary, and health disparities continue to be a pervasive feature of American healthcare. So we know these things.

But there's a lot of science behind those. And in fact, the report summarizes three main areas where health services research has contributed So you see here on the slide. The principal. It is a principal tool.

You have back a slide please. A principal tool for determining the performance of health systems practices technologies and strategies. It has, the field has provided important contributions to policy areas such as cost sharing and quality. More recently, payment models and continuing to focus on patient safety.

And the field has focused, not just at the level of large health systems and policy at both the national and state level and I'm delighted that Dr. Mary Applegate is joining us today.

Because of the importance of both federal and state use of health services research and also looking at the specific implementation of evidence in particular context, I think, an area where we have more work to do.

Excuse me at the workshop. Others commented, and I think you'll hear more today at health services research has been less influential in informing the nuanced management and implementation decisions that health systems face.

I think this reflects in part the fields development over time as it moves from its beginnings of documenting an understanding of system performance and the reasons for the shortfalls in that quality, safety, outcomes.

And the field is now much more focused on identifying designing and testing interventions to actually improve care and outcomes. Next slide please.

So looking at the challenges and opportunities in the field. The workshop and the report cover several aspects. First, the funding as I noted earlier, this has been challenging. And in fact, the report provides quite a bit of detail on spending trends and funding for health services research. And concludes that a very small percent of the total research and development spending in this country across public and private sectors, thanks to work by Moses and colleagues published in 2015 and is that it is very small proportion and if you then compare it to the amount of spending on US healthcare, it is actually less than 1% point 3% further analyses of the database that the NIH National Library of Medicine supports.

Our process shows that the actual number of projects supported by the top funders of both top funders in the public and private sector of health services research has dropped from an overall 20% between 2005 and 2011.

Total federal funding for the latest year available for health services research is in fiscal year 2017 and across the many agencies does amount to about \$2.9 billion.

Timeliness is another issue that was identified by the workshop and the report and, of course, we understand that the disconnect very aware of the disconnect between the pace of change and the timeliness demands of policymakers and system leaders and how often traditional research methodologies are not able to respond adequately.

And so the report underscores the need for us to focus transmission communication and implementation as well as rapid cycle research projects, new tools and technology, or also discussed and really the opportunity to build on recent investments in such a new large data resources such as data standards and many other aspects really help accelerate and expand the types of research that can be done across many sets.

Of course, the focus on social determinants and bridging the health and social services gap came up repeatedly. It is a keen focus of national health policy state health policy and health systems leadership as we move towards more focus on population outcomes and value based payment and it really calls for the field to expand beyond the focus on just healthcare settings to other areas. The final challenge and opportunity we addressed was the issues around data access and data quality.

Recognizing that many of the barriers are actually not technological but much more sociological and the issue of aligning regulations, cultural and political climates.

To really enhance data address legal challenges and manage the proprietary data and the many issues that come up around sharing of not just HIPAA data that's collected under HIPAA, but all of the activities that we generate as individuals in our daily lives, which are now being capitalized on to better understand health outcomes and healthcare interventions. Next slide please.

So to close. I want to just touch on some of the 10 recommendations that came out of the workshop these are, you know, really areas that are important for the research field to consider as we look forward

I'm just touching on some of the 10 clearly expanding the vision to account for a full range of all the health system forces in play to move from this disconnect between research enterprise and care and policy to advanced really a an ecosystem of continuous learning and sharing to foster the development of the data infrastructure for real time insights to create really a working network of stakeholders with shared goals and processes.

So that the research that is done is relevant and useful to those stakeholders and finally to really emphasize the need for dissemination communication of the contributions and to disseminate those to all the stakeholders, but also our members of Congress who need to understand just what significant lead and impact there is from health services research. Thank you very much.

J. MICHAEL MCGINNIS

Thank you very much. Lisa for a real splendid overview of the discussion and the publication and you captured the potential as well as the challenge is very clearly. We now turn to a panel of experts from different stakeholder groups, all of whom have been and are leaders in health services research and health systems research.

And each of them will take up to five minutes to give a sense of their of the key priorities moving forward over the next decade. And we're going to begin with Joe Selby, Joe.

JOE SELBY

Yes, if you can hear me. Thank you very much, Michael. Thanks to the National Academy of Medicine and to Academy health for the invitation to be on this webinar today and thanks to everybody who joined us this exciting to be able to talk to so many people in this field.

Carolyn and Lisa really laid out a lot of what we as panelists are going to be expanding on and really give you a great description of what was covered at the meeting.

We were each asked to comment on a couple key points from the meeting and from the report. There are so darn many good points and issues in the report that was difficult to select so we counsel with each other and exchanged emails and I'll just say before I start with my to that you're going to hear from others about the critical importance of getting the questions right for the end users. That is the decision makers of engaging patients and and systems leaders in your research toward that end of getting the questions right and getting them disseminated.

Considering the entire spectrum of research from maybe clinical research on one and through health services research to Public Health epidemiology and public health involving the community and studying the social determinants of health as major parts of the clinical and health services and of the importance of data. Now that we have so much of it that of artificial intelligence and machine learning and the role, it's going to play in targeting healthcare.

More precisely, towards people who can benefit from it and hopefully in the process, addressing disparities along the way so you'll hear bits from that, from the other panelists.

I'm going to focus on to the first one is if it's important to engage patients and it obviously is, it was clear at the meeting. And you'll hear more about it from other panelists today.

It is at least as important and maybe more challenging to engage frontline clinicians in health services research in any kind of research in most settings. It's difficult to get their attention because in most sense. In most settings clinicians, whether they are nurses or pharmacists are physicians or others are under intense time pressures and yet it is so essential to get to getting the questions right certainly to getting the results listened to and implemented.

And my theory is that it's important for workforce burnout in the part of the clinicians to. So I would just say that from the perspective of health services researchers thinking about getting clinicians involved in your research. Be that frontline clinicians in the institutions where you work, or in allied and community based institutions be that clinician organizations.

Critically important possible approaches we as funders can require clinician engagement in funding opportunities that we post and in the research projects that come from this though. We can sponsor training grants, (unintelligible) and archive sponsor together to train system based clinicians, as researchers. In turn, I would hope that these trainees could take up the challenge of getting their colleagues within the healthcare systems more involved in asking and answering questions.

We can define health learning health systems, a little more precisely to be just those systems that make time to engage clinicians in relevant research. And we, as well as you. The researchers can work with professional organizations to elevate the role of research among their frontline members.

Eleanor Perfetto on this panel reminded me this morning that PCORI has an award to the association of black cardiologists and the National Health Council and day together our recruiting and training front line cardiologists from this organization to learn about PCORI and to bring their own patients into the PCORI process so that could be done. I understand now from our engagement people that we have about five of these awards. Two different clinician organizations to bring their members into research.

But I can't overemphasize how weird it is that we're all doing research, we may be talking to patients, we may be talking to system leaders, but if we're not involving those frontline physicians I think we're going to find some hurdles in getting the research, listen to an incorporated.

So now I'll go on to the second one and it's completely different.

I'm going to urge you to do something that health services researchers have been doing since I would say probably the mid 60s as Carolyn's started at pointed out when Medicare and Medicaid started and to continue addressing questions of payment and payment perform. We do this at PCORI and you heard Carolyn talk about at the VA. We keep generating new evidence on how we can decrease waste in appropriate care and appropriate utilization. I just can't tell you how many records, publications.

Now turn out to be more patient centered and in the process of getting the care right the first time downstream utilization goes down. The big question is, who cares do health care systems really care about this so and I think if you are at a place like Kaiser Permanente where I came from, or if you're at the VA, you will probably be interested in those findings, but if you are in systems that are still predominantly making their money and their revenues keeping their people employed on a volume based reimbursement model. And most people tell me that that's still the vast majority of American healthcare.

The incentives are just not yet there to change. So the research question would be if we are moving away from fee for service and volume based reimbursement, what are we moving toward how far do we have to move?

Is there anything that is going to truly be effective in incorporating this evidence about how you can reduce wasteful utilization between fee for service at one end?

Strong risk substantial risk sharing on the other. Are there tipping points at which organizational or system behavior actually begin to change to become more supportive of prudent evidence based care. So here possible solutions would be in most of these I'll admit are on the plate of researchers themselves to propose these and foundations to some extent.

PCORI would fund these but studies the range of value based purchasing arrangements to compare them to more extreme risk sharing. Always the question being, in terms of clinical outcomes and patient satisfaction as well as cost saving do some of these milder versions.

In these real world settings we still face at the have the anticipated hope for effects studies successful models of greater risk sharing, such as one that really intrigues me are bundling and paying for care for all patients with a condition, not just that subgroup that has already been referred for a costly procedure or has already experienced a costly complication.

Study the range of possible incentives and cultural changes at the organizational level and the individual provider level that could identify those types of incentives that are associated with positive changes in costs and use.

Study the drivers of high unit high unit costs for services in hospital services versus outpatient services. Why do they differ so much?

Help the world understand and help patients understand why things cost two to three times as much often in the US as elsewhere, and in some settings in the US versus others.

And lastly, continue to build this evidence and this is probably mostly work because it comes in. That more patient centered care more thoughtful care can actually improve patient outcomes clinical outcomes, while reducing utilization and associated costs. Those studies are out there to be done, and although it may feel like you're banging your head against the wall.

The as the evidence continues to grow as the environment is filled with the understanding that, you know limit endless utilization and cost is not the only way I think that it will change the dialogue and begin to change minds.

And again, as I said, this latter type of patient centered research is probably more where we're, PCORI can be helpful. So I will turn it to the next panelist, I believe that is Gopal Khanna from AHRQ.

J. MICHAEL MCGINNIS

Go for it with your five minutes.

GOPAL KHANNA

Thank you, Michael.

And thanks again from them for carrying out this study, and for the report, as well as the categorical support for this incredible effort, you've taken all of us a great deal to think about.

Today's webinar is really a terrific opportunity to discuss the issues raised in the report once that Michael Joe and Carolyn and Lisa and you have so nicely framed for us.

As we look ahead, we need to take into consideration the changes and disruption in the entire health care ecosystem and society at large, as well.

What you're seeing is an unprecedented realignment in healthcare delivery systems do mergers and acquisitions increasing Volume, Variety and Velocity of data flowing into and through healthcare demographic changes and the pressures that resulting from an aging population and of course the great impact of technology internet of things and digital of every day.

For us at our care services research, along with practice improvement and data and analytics is one of our core competencies. We take the findings of this report very seriously actually – I can't make this next point strongly enough. And if there's one message I want to emphasize it this as the meeting funder.

HSR must drive the field to become even more responsive to its end users and systems leaders in healthcare professionals physicians and clinicians, the ones who put each of our findings into practice to improve the lives of patients.

We must adopt a consumer driven approach to research the fees must be thinking of healthcare professionals, along with patients as our customers.

We must focus on what health systems need to improve design research on that basis. Lisa's community needs to understand their pain points because delivery systems are the engine of Healthcare Improvement.

As a founder AHRQ must improve how we guide the field, including rethinking our approach to ensure that research outputs are more directly usable in the delivery of patient care.

(unintelligible) I have begun hosting roundtable meetings with (unintelligible) and health systems leader to better understand their needs and how we can produce results that will try to change.

Additionally, I see two other important priorities for the field that are contained in the support that I would like to highlight.

First, we must continue to expand the amount and type of data available for research, we must develop data sources and put in place philosophies, to give researchers unlimited access to data that matches the inputs required for consumer driven content disciplinary whole person research.

This means expanding upon narrowly defined data typically used for it. Just saw more limitless data sources.

At AHRQ, we are already working to expand the data included in maps and make them more easily available to health systems and health services researchers second he saw must evolve in must involve other research disciplines.

As we move towards care of the whole person, the research community needs to think about how to take a multidisciplinary or trans-disciplinary approach to research.

Research teams should more systematically include the social and behavioral sciences, healthcare Informatics and public and disciplines to have a more well rounded approach. To provide care for the whole person researchers need to consider all of the factors that influence a person's health status.

You see, we cannot find innovative health systems research. If you do not receive innovative investigator initiated applications.

I strongly encourage researchers to consider the recommendations of this report and incorporate them into their research teams. He said designs and research applications. I and my colleagues will be listening closely as the field response to the recommendations of this report.

We look forward to continuing to be partners with the HSR community and delivery systems leaders and conditions as well as policymakers at the National, state and local level.

So that together we can spend timeliness and impact of it just all once again, Michael, thank you so very much for including me in this conversation and I look forward to our discussion.

J. MICHAEL MCGINNIS

Thank you very much Gopal for reminding us of the importance of the issues, the commitment of our to lead progress and the rapid pace of change that accentuates the importance of our strengthening the field.

Now we're going to turn to Tim Ferris from Massachusetts General Hospital.

TIM FERRIS

Thank you Mike. And thanks to the team who's put this together.

I'm very pleased to provide a few comments regarding my thoughts on this and feel very honored to be part of this process.

I characterize health services research broadly, and this is of course an oversimplification into things that HSR has done really well get given A grade, two things they've done pretty well give a B Grade, and things in the past we haven't done well and I think we should do better in the future. And I would say I would give an A grade to HSR are his ability to provide point estimates on deficiencies in the delivery of healthcare.

That those many, many studies that are provided concrete information of deficiencies with precise point estimates have been remarkably important for changing policy and addressing issues through a whole host of specific healthcare issues and really has been instrumental. As Lisa pointed out in her remarks and major changes in our system.

I would say health services research gets more of a B Grade from me on policy development from evidence, it's challenging to translate evidence into policy and I would say it again to some of my predecessors on this webinar. There's room to do a better job there. But I would say, particularly as a manager and a delivery system I would give health services research a C or maybe even a D on the usefulness to the delivery system of what is mostly being produced in health services research and I want to focus on some of these.

Some of the things I think we have to overcome in the future on this third point so how can we improve on usefulness going forward. I think there are three issues that at least three, but I'll just mentioned three that are pretty substantial barriers to getting useful information of health services search for managers.

The first one is you know, our methods for assigning causality are difficult. It's difficult to assign causality to a particular intervention, when in real life in the delivery of healthcare. There's a lot of variables changing at once and similar to clinical trials where there's a criticism of clinical trials because they're not generalizable to the real world.

I think the same holds true and health services research and I think we need to address that.

The second is again, it's the use of standard epidemiologic methods applied in health services research but you know healthcare delivery is most often not like a pill and that the exposure to the intervention in

a pill is quite measurable and generally quite constant or controllable. That is generally not true in delivery improvements.

And yet we adhere to the same standards for evidence when we know that the exposure to the delivery is highly variable in a complex system and how we're going to incorporate this problem. And I just want to drill into this one more layer and say that in the real world managers who are implementing changes are not going to intend not to hold an exposure constant, just to let the experiment play out.

In fact if they see that the exposure is limited in some way, they're going to make changes. So they're in the real world, you're making continuous changes to improve and that runs up against this epidemiologic standard that is so pervasive and I think that will need to be addressed.

And the third is what I would refer to as the possibly premature or the timeframe over which results are often published.

I get there's a push to publish early results, but making changes in the delivery of services is a generally a multi year process, and especially at the scale of the kinds of changes like finance changes to what Joe Selby was talking about.

And so we've seen a press coverage of early results where it actually does a disservice to the efforts of change when in fact that timeframe over which real change occurs hasn't been allowed to play out and that tension is I think an issue in health services research for the delivery of health services for to the managers of delivery systems.

So all I think we have to overcome these various challenges and and i look forward to the next generation of health services researchers finding ways to overcome them, and I'll close. There are my comments. Thank you.

J. MICHAEL MCGINNIS

Thank you very much. Tim, especially for identifying some of the barriers that need to be engaged the challenges and need being engaged, many of which are, in fact, were in fact addressed in the course of the conversation during the meeting and reported in the publication.

So you're underscoring them as all the more important and it also draws attention to the changing tools available as we move to a real world evidence continuous learning modality, and the advent of application of AI and machine learning and so forth.

And now we're going to turn to Mary Applegate who has a special challenge because it looks like she's going to have about 30 seconds for each slide that she's gonna show but Mary, you're going to tell us the story from the front line. We look forward to it.

MARY APPLGATE

Yes. Thank you.

I do want to thank Academy health as well as the National Academy for allowing me to present a state view of what we makes me an end user for health services research. Next slide.

So I'm just going to cover four topics and actually I have visuals that go with this. So don't actually panic. I'd like to suggest that with measures, we can do cross state benchmarking and we can leverage a distributed Research Network to actually accelerate our understanding of what's going on in different states and why.

So I think there's opportunity to get out of our little box of a largely single entity of sub specialists and really together work at population health outcomes next does was referenced earlier.

In the value based purchasing arena, lots of assumptions have not been tested. And so you see, states trying to contain costs without really good evidence, and this actually may be part of why the policymakers aren't honoring as much of the evidence that exists.

Because we haven't been able to be in front of what is actually needed. We must get comfortable with measures that are good enough and not perfect. And we actually can't wait three to five years to get them.

Next I'd like to suggest harnessing it as earlier speakers mentioned. And I'll give you an example of predictive analytics at the point of service. And lastly, to Lisa Simpsons comments.

The Medicaid agency in particular is very tuned into social determinants of health and it could be that the models of care that we've developed do not sufficiently honor the impact of health and outcomes as it relates to social determinants of health. Next slide.

What I show you here is an example from our supplement State University partnership Learning Network, which is anchored. I'd say primarily at the University of Pittsburgh and you see several of the participating states which are largely in the Midwest. And what you see is a population view of the percent of Medicaid recipients that are affected by opioid use disorder. And you'll note at the bottom that we have a couple of different data definitions and the results are slightly different.

So just the whole idea of measures informing this just the state of the universe and then in the next graph comparing for example, those who are receiving medication assisted treatment for those who have opioid use disorder. And what you can see here is that state. He who has the lowest prevalence of opioid use disorder also has the lowest uptake of medication assisted treatment, but you'll also notice that there's perhaps a to twofold difference.

And so, evaluating the state's policies and implementation may be important, but having this kind of benchmarking so that we're looking to other states and researchers for effective interventions is likely an untapped resource moving forward. Next slide.

An earlier speaker talked about other sources of data. This is data from our prescription drug monitoring program and you'll see on the left three states and we have the the number of patients per 100,000 population receiving opioids. What you can see at the bottom is that Kentucky looks like the best out of all three of our states but Ohio, which is a red light improved the fastest. So again, benchmarking against states is helpful because we also have to manage what's happening around our borders.

So contiguous states are particularly interested In the on the graph on the right. What you see our opioid naive patients who are then giving long acting opioids for acute pain. So you'll see there's wide variation across states and really digging into policies and how Medicaid programs implement those policies

becomes important in helping the entire country move forward. So to that point about generalize ability. There's so much variation across states that working together. I think can accelerate improvements on behalf of the country.

So focus on a national agenda and a National Foundation of health services research, to me, is actually quite important. Next slide.

What you see here is an attempt for us to identify safe opioid prescribing again addressing a national and state public health issue and pulling it into the mainstream of how we pay for care, day in and day out. So this is a different idea. But in the end, you know, we've been paying for care and a fee for service way for decades. And then we point to public health. And say, oh yeah, obesity, smoking, drug use is your problem and you know they're largely grant funded. So I would challenge that that's not likely. The best way to improve the health of our population across the country.

So here I have four different episodes of care that we've done and what I show you is the Ohio median for a new opioid prescriptions for these procedures as well as the 25th and the 75th percentile. And the idea here is that in order to be eligible for game sharing, you must pass a threshold be better than the median, for example. On key quality metrics and this is a metric that we developed because the existing measure for opioids is way too high over 120 morphine equivalent and then we didn't necessarily have a new opioid prescription measure.

So what has happened is because we don't have the measures that we need to put into managed care plan contracts or to put money behind it value based purchasing states have actually needed to develop their own measures which then creates the problem of not having a uniform set across the country so at least with our university partnership we have eight states who are looking at some of the same measures. So that's a positive step forward.

On the next slide, what I show is this isn't the behavioral health universe, and I apologize. As I blew this up the arrows don't quite match. But one of the ideas and value based purchasing is as long as patients with behavioral health conditions get seen every month they get a monthly payment. So this is an alternative to fee for service and along the middle you see someone who's getting buprenorphine or methadone. You see all those pink dots and then above it. You see all the green dots which means they have an office visit. This is some somebody who was adherence to medication assisted treatment and psycho social services. So if you see that you realize you're taking good care of your population in an evidence way that evidence based way that actually could be in real time.

The only comment I have here is that bottom line of all the blue dots. Those are urine drug tests. So that does not look like a random pattern. Which is the best evidence, but at least they're showing up for care lower down. You see all these green Big Dots and those are inpatient stays that then have gaps afterwards. So this is somebody who was very ill last year, coming back and ultimately had an overdose.

And then farther down, just visually. If you see a white spot that maybe somebody who either got better or who's lost a follow up. And when we bring that directly to attention and real clinical actions they can take so I just like to suggest that data and measures with real time can be not just useful and patient outcomes but very useful and value based purchasing.

Next up, I want to give you an example of predictive modeling, so I won't read through this case, but the category is infant mortality. And everything and read our risk factors that we see built into a model that

actually showed that it was relevant. We did all this logistic regression work and I'll show you the math on the next slide so all of these factors translate into this equation.

Next slide, which then comes up with a real math probability of infant mortality for this patient. Next slide.

What we can do with all of those variables is populated into a screen something like this. And then what comes out of it is on the next slide, which essentially is the speedometer. So if you take your pregnant person, change one variable, smoking, non smoking, you can actually see what happens to the risk of infant mortality going from almost 46% down to 39%.

We could make a twin app for this that the patient could have that then is connected programming specifically designed for behavior change like smoking cessation, which then can be connected to pick your incentives so if they finished their smoking cessation module, they may be eligible for free diapers for X number of months, for example.

So this is one way to see the real impact at the patient. Level with patient engagement that was referenced earlier and connected to how we pay for care.

Lastly, I will just mention on the next slide, where we have information in the system we have all kinds of information related to health Conditions biology physiology when we all recognize that social determinants of health is the heavyweight in your outcome.

So to the earlier speakers comments. If we can work with partners who have different kinds of Information and figure out a way to leverage this to really cut to the chase of what's driving more outcomes that would be helpful.

On this slide, you see Ohio's example of the public sources of information that we have put into an opportunity index that we have then mapped.

Next slide. And what this shows us how the opportunity indices actually change over a period of time we are intended. this allows us to talk about the dynamic structural underpinnings as opposed to just speaking about race. So for us, this is a strategy to get to equity and disparities and outcomes.

The other piece here is that we will be overlaying this with readmissions and episodes of care, as well as Comprehensive Primary Care to actually see if a risk adjustment is done properly or accurately.

Some of those mechanisms for payment may simply highlight under resourced families as opposed to anything specific related to the healthcare system. So we do have to get to fairness. So with that, I think I'd like to thank all of you, but encouraged us all to think about creating the future that we would actually like to see and I do think that harnessing technology is absolutely one of the most promising paths forward. Thank you.

J. MICHAEL MCGINNIS

Thank you Mary for a vision and inspiring vision of what might be possible with respect to cutting edge health services research. And now we're going to turn to Eleanor Perfetto.

ELEANOR PERFETTO

Thank you, Michael. And thank you to you and to Danielle and the other organizers. I really appreciate being asked to be here today and being the last speaker of a panel I have the disadvantage and that many of the things that I am going to talk about have already been in some context mentioned. And so maybe a little bit repetitive, but I also have the advantage and being able to summarize what everyone else said in the way that I'd like to summarize it.

So I'm going to jump in and try to bring back, bring us back to something that I think is really important in this conversation. And that's the patient perspective and I think we all have come to know and understand that patient centricity and patient engagement that researches is no longer a novelty. It's not restricted to the research that funded by PCORI.

Thanks to Joe and his colleagues and their work over the last nine plus years. It's now very commonplace to have the expectation that patients will be engaged in research. And so one of the things that I want to bring home that point in terms of health services research, it doesn't really matter what the study objective is or what the research Design is in all forms of health research. It's become very expected that patients should be engaged, not as study subjects, but as research partners and I think we're seeing that more and more.

For example, we're seeing in randomized control trials for medical product development, more and more involvement of patients. In that process and to the point where we see that the FDA is now preparing numerous guidance documents because this has become such an accepted and expected, practice.

Since health services research covers access quality, cost value, all of the topics that the previous speakers have touched upon it. These are topics that are critical importance to the patient community. And when I talk about the patient community. I mean, patients, caregivers, as well as patient advocacy organization. These are topics that they care a great deal about that are important to their everyday living and survival and so they need to be involved from start to finish. In the study question formulation design and dissemination.

I think that we need to really have that become more part of everyday of health services research and I think it has become much more of the everyday but I think we can do even an even better job.

We've had a number of recent conversations on a new project that we've been working on where we are talking to researchers who really are Health Services researchers who specifically focus on things like claims data analysis real world evaluation. And I'll have been talking to them about how they can use patient input in their work and we've had some remarkable conversations where they obviously said, gee, I never thought about it before, but now that you raised the issue. It's something that I think I could easily incorporated into the process that they go through and their research and one key example was on a database analysis of claims data, looking at patients with Atrial fibrillation and then and speaking to patients directly and hearing about their experience with their disease and realizing that so many of them had been either misdiagnosed, or I had had a difficult time getting diagnosed and that took anywhere from several years to sometimes 7 to 10 years for these individuals to get an accurate diagnosis and that if the analysis began looking at the individual from the first day that claim was seeing with a diagnosis of atrial fibrillation.

That the researcher would be missing that those individuals can actually had symptoms and issues going on for at least several years before and it would change the framing of the analysis. And so it's those kinds of examples that really bring home the point that engaging patients and having a good understanding of their patient journey and their experiences with their illness can really add rigor to every type of analysis and health services research.

So from my suggested steps to accomplishing patient centricity and health services, your searches on for us to continue to educate researchers on incentivize them to embrace patient engagement and health services research incentivize them in terms of on having the expectation that that be part of funding proposals.

Be part of dissemination planning. And so we really need to have that be helping to bring this to the attention of the researchers and the funding agencies that are out there. And then also to develop and disseminate case examples of patient engagement and health services research to highlight the patient's role their contribution and the impact that they've had on the research and with the idea that it will be very beneficial in terms of having findings that are important to patients, but also are more meaningful and are and have clarity to the clinicians who would be using that research in the policymakers will be using it with search.

I just want to touch upon one thing that Mary was talking about when she was talking about the social determinants of health benefits so critically important for the patient community to have the context. That they that they live in with their illness to be well understood as part of the research process, then it also helps to translate that into the context of care delivery and really doing a better job of personalizing cheer management for those individuals when we understand the true circumstances of their experiences and their journey which of course is reflected in social determinants of health. So I'll end there and go the Q&A session.

J. MICHAEL MCGINNIS

Thank you very much, Eleanor and all of you for layout really beautifully the key issues that and opportunities that are ahead. We're now going to move to a Q&A session. We have about 15 minutes and our facilitator will be Danielle Whicher.

DANIELLE WHICHER

Thank you, Michael. And thank you to all the speakers. This has been a great series of presentations.

We're going to start out with a question for Carolyn Clancy, the question is, what challenges does the VA face and conducting needed work and how can the veteran and military advocates in the health field assist in furthering the VA mission?

Carolyn, are you there.

We may have lost Carolyn or she's on mute. So, so let's go to the next one and we loop back with Carolyn.

Great. So the next question is for Mary Applegate Mary, can you please give us an example of artificial intelligence that you have seen adding value to primary care.

MARY APPLGATE

Thank you for the question. I'm not sure that I have an example that we're actually using currently. But I think what can happen is that picture with all of the dots that I showed you are essentially profiles and as more patients get seen we can refine the patient profiles to better than be able to predict who might actually be lost to follow up.

And I would argue that we have to include social determinants of health information, but all of the clinicians will tell you certain key things like the loss of a key relationship or a job or other sorts of things actually may way into that but that would be one example in which the more we use the analytic tools, the better they get and then the expanded use we might be able to derive from them.

DANIELLE WHICHER

Thank you Mary will direct the next question to Joe Selby at Joe. So the question is, we know the practitioner Centered patient centered approach is what's needed. Why is this work so undervalued. What if we flip the hierarchy and what if we prioritize our research over the laboratory based preclinical work that we know often fails because it is uninformed from reality.

JOE SELBY

Well, thanks. Danielle. Thanks for the question. You know, being at this end of the spectrum, along with the with the question, or it probably is tempting to go there, but you know, I think you'd only have to look at the increasing longevity and treatments for diseases that used to be uniformly lethal, and we all have friends who probably have benefited from those so we got to create a research world where both are funded.

We don't probably need to completely flipped the funding, I wouldn't disagree that that more attention needs to be placed on this and I think we're historically, at a time when more attention will be if we can produce research that in fact not only has interesting findings, but support systems in changing practice and leading to better outcomes. So I think we will continue to fight for, you know, funding of this kind of research and the survival of the agencies that fund it and hope that our best efforts can help to persuade those who make decisions about funding allocations that this is also important, and I will just say that as because these results have started to come out.

They are well received and they are well received on the hill as, as well as elsewhere, so it's you know we just, we, we need to do some of the things that have been said on the phone here today and try to always been our research towards answering relevant questions and changing practice.

LISA SIMPSON

Danielle. This is Lisa. If I could just build on Joe's answer.

I and especially given who asked the question, I think it's critically important for that the messengers who see the value in health services research to address patient needs and community needs are also vocal in their support for this work.

So as eloquent as Joe is and others are and and we at Academy health work hard to articulate the value of investing federal dollars and health services research, what is most powerful in communicating that message is hearing from the end users. The patient groups, the health systems, those who are in, you know, in the business of receiving or delivering care. Thank you.

DANIELLE WHICHER

Thank you Joe. Thank you, Lisa what any of the other panelists like to weigh in on this question?

Okay, so we will move on.

To a related question and maybe as we can direct this one to Mary.

There is the question is, there is an assumption that evidence should inform policy. What is policymakers were more explicit about what it is that they needed to know. In other words, policymakers could set goals and articulate challenges and empower the research community to determine the knowledge needed to address the challenge challenges.

MARY APPLGATE

That's an interesting question kind of turns things on its head. I think what I see this from policymakers is they get a little nugget of information that may have some evidence and then they'll say things like we want to, you know, triple or quadruple the children getting home visits.

And so in my mind, their question that I have back to them is which measures are you most interested in moving for children. Is this about pregnancy, outcomes infant mortality, school Readiness, literacy because not all home visiting programs were designed the same and certainly all the evidence is actually not the same either so oftentimes, what happens is they work on state and other budget cycles that are very short. So there's not enough runway. There's not enough lead time to be able to accomplish that.

So what they would like to see are results within a couple years, or at least a couple of years be on a trajectory that actually is clearly an improvement. So I don't think it's too much to ask for the health research community to fast forward and think about what would you need to pay for better value care three years from now, five years from now 10 years from now.

So, to me, it's actually clear. I think this group has articulated we have not included the social determinants of health adequately we and truthfully, those entities do not have the skill set and they're not necessarily data people in a homeless shelter.

So I think us getting outside of our offices and showing up and seeing you know what your work really matters would you allow us to help you with data collection. You know that's not necessarily a conversation that actually happens. So I actually think investment in prevention would be an interesting piece that is what we want and then actually looking at other sites of care like schools.

Children have to go to school. why not leverage what could work in schools and then let Medicaid and payers figure out payment mechanisms. Since we can't necessarily expect an education dollar to go for health outcomes. So I think it's a really interesting question and worth additional discussion.

DANIELLE WHICHER

Wonderful, thank you Mary. Tim, I'd like to turn things over to you and see if you had any, any thoughts about that question as well.

TIM FERRIS

Well, I'm in complete agreement. I think the work we're doing here using our combination of clinical data claims from a roughly 1 million population covered lives.

In our delivery system and creative use of socio economic data we are just to give you a sense of complementing the comments you just heard, we now our clinicians can see maps of the zip code regions of their patients differentially that show where we are, for example, not doing as well on him ago, many when see your blood pressure control. It's that specific, and then we as a health system are allocating resource extra resources in those areas because the improvement processes that work in a well resource neighborhood are really quite different than the approval processes and then under resourced neighborhood.

And so we had to health system seeking to have equally high quality across them actually have to not only, you know, have the data to show it but also tailor our interventions. That's a level of specificity that I couldn't have guessed, we'd be doing five years ago and it's all based on the fact that we now have the three critical forms of data and can merge them in as Lisa was saying earlier, the computing power necessary to do that this work is now easy to come by.

And so I completely agree with the other panelists about this is, this is where things are heading in it. I think it's quite exciting.

DANIELLE WHICHER

Wonderful. Thank you, Tim. Any other comments from the other panelists.

LISA SIMPSON

Sure. Danielle. This is Lisa, I wanted to add to both Mary and Tim's comments.

About, you know, how do we flip this model on its head and have policymakers drive the agenda. Well, I think we need to consider what are the current incentive structure for researchers?

They are not incentivized or rewarded for doing work that is relevant to policymakers, they are incentivized by traditional academic health system that is driven by federal funding for research that has historically emphasize new and unique questions that advance an individual career in research and promotion and tenure.

I'm oversimplifying, but the reality is that various efforts have been made to understand the priorities and information needs of policymakers. At Academy health we created listening reports where we actually asked state leaders about their information needs of for the next three to five years, because that's the window as, as Mary said for research needs.

But again, that's just unless we align the incentives, just like we are trying to do for providers and care unless we align the incentives for research. We are going to continue to have this gap, this chasm between policymakers health system leaders and what researchers are focusing on.

DANIELLE WHICHER

Thanks so much, Lisa.

Will turn to Gopal for the next question. The question is, I would love to hear the panelists thoughts about data liberation. That is how can we continue to garner higher cross cooperation from healthcare delivery system ensures in other stakeholders to share data that can enable the important and complex cross system and cross state analyses.

GOPAL KHANNA

Sorry, Danielle. That's a, that's a very good question.

I think recognizing the power of data and its usability and in every ability in the system for not just disruption, causing disruption, but also the opportunity for improvement is huge.

Some other question before us is how do we collaborate on all frontiers, it is not just being able to work with the states and local governments in terms of their data needs and how we can bring their data. And that's where, that's where are leveraging our next and each data sources plays a very critical and useful role in being able to link some to some of those data that sits there.

And create new ways of looking at data from a policy making perspective, but also making it available to the researchers. Now there's another dimension to the data us and in treating the power of what's possible with its uses.

The learning health system and trying a way to not only look at the EHR, but also seeing how other data can be used to provide new perspectives and help the systems leaders to move the needle on learning systems in their own enterprises. So the, the challenge is going to be accessibility and availability of data. Naturally, there are many barriers HIPAA being one and others just that data resides all over, but over a period of time I envision and I see one more - data being liberated and therefore the opportunities for us to all the players, by the way, in the field to take advantage and do more of data shifting as it is possible

JOE SELBY

Well, yes, good. I mean, I wondered if that question was a plant from somebody on the planning committee for one of the next NAM meetings which is entitled building stakeholder demand for data and, you know, right now, but patients themselves can't get their own data which is a huge challenge and certainly the questions arise.

Experience probably is the same as ours that there is so much inertia and there are so many barriers to getting data shared for the greatest and for the IRB approved research questions so and but when researchers asked for it. I think that there's a tendency many institutions to be just a little suspect.

If you've ever sit on IRB, you know, this suspicion that that that sits there. So this is about trying to get again patients and other others who maybe haven't really weighed in yet on the importance of liberating data, both for individual decision making, but for research as well. So we're hoping to have a meeting in June. It's planning is underway critical question people been trying to do it for years. The novel approach here is that perhaps if patients themselves and their caregivers are demanding it is that may add a new pressure to the to work against the inertia.

CAROLYN CLANCY

Carolyn. Could I just add one quick thing. I mean, I think this all converges on a point that many of the presenters made about a getting the question right and working with users of the research if a researcher approaches, or even a research funder approaches a healthcare organization and says, Gosh, could you liberate your data place. And by the way, we don't want to pay much for it. You know, this is not going to be what you would call a successful conversation. I just think there's an opportunity for the Academy to contemplate new ways that people are using this data, particularly in artificial intelligence because I don't think that the boundaries of that field have been well mapped or articulated.

TIM FERRIS

Well, I just wanted to point out as a, as a, I guess I'm a bona fide health services researcher who is now in management. One of the things that struck me to Joe's comment about liberating data is I have an enormous amount of data assets at my fingertips.

Much more than I can handle actually and it, it actually I have actually no barriers to using that data. However, I want the barrier comes in when you switch the frame. And so my analytical approach as a manager might be exactly what I would do as a health services researcher, but as soon as I want to publish it, it changes the game substantially.

And I think that is that's, that's another one of these barriers. There's a lot of data and analytics going on in the management of health services that doesn't see the light of day. I know there are methods to liberate those analyses we were talking about Joe was talking about liberating the data.

Liberating the data has some challenges but liberating the analyses is I think less challenging, but has its own set of issues. And I think there is a lot of work going on that remains unpublished and available to people who could use it.

And in that is another scene in this health services mine that should be examined.

DANIELLE WHICHER

Again, thank you to all of our speakers. This has been a really fabulous conversation.

Thank you also to everyone who tuned in. We received many, many questions for our panelists and I'm sorry that we were unable to get through them all, but we'd love to keep the conversation going. And in that vein, I'll turn things over to Michael McGinnis to close out the webinar.

J. MICHAEL MCGINNIS

Will be very quick close.

And not nearly enough time to do justice to the richness of the conversation and even more importantly, the significance of the issue. We've heard a lot about the fact that there's a small a very small percentage of research funding that goes to health services research or as the publication indicates health systems research as cost increases complexity and diagnosis and treatment increases as the tools available to us.

Increase tools like do coding, as well as the tailoring tools we have improved the importance of health services research as indicated by our panelists becomes critical. So we really appreciate all the work that our panelists have done and the intelligence and wisdom they brought to this conversation.

As Danielle mentioned, we are treating this as an ongoing set of interaction. So please, if you have questions or suggestions that you feel should be on the agenda, send them to us and the webinar recording will be made available at nam.edu/HSR so thanks to all, and to be continued.