# 2018 PCORI Annual Meeting

**********

# Breakout Session
# Addressing the Opioid Epidemic with Patient-Centered Research


**Presenters:**
Beth Darnall, PhD
Monique Does, MPH
David Gastfriend, MD
**Moderators:**
Christine Goertz, DC, PhD
Elisabeth Houtsmuller, PhD
**Discussants:**
David Kelley, MD, MPA
Travis Rieder, PhD


## SESSION TRANSCRIPT

---

This is being provided in a rough-draft format. Communication Access Realtime Translation (CART) captioning is provided in order to facilitate communication accessibility and may not be a totally verbatim record of the proceedings. Names might be misspelled.

Opinions, positions, and statements presented are those of the individual participants and not necessarily those of PCORI, its Board of Governors, or Methodology Committee, unless so indicated.

---

>> Welcome to the PCORI Annual Meeting.
I'm Christine Goertz, the vice chair of the PCORI board and have the honor of being the chair of this really important session this morning.
As you all know, our country is facing an unprecedented crisis with opioids.
There are a lot of ways to look at that crisis and PCORI has a full portfolio of approximately $100 million looking at that.
Last year we focused on non-pharmacological treatments for pain and how it might help address the opioid crisis.
This year we're looking more at medication, assisted treatment and other related therapies.
So we really appreciate your time and interest.
In addition to being on the board of governors.
My day job is a 25-year career doing Patient-centered comparative research effectiveness looking at non-pharmacological treatments for chronic pain.
I'm the Chief Executive Officer of a place called the Spine Institute for Quality.
I'm conducting several NIH and DOD comparative effectiveness trials looking at conservative treatments for chronic and acute low back pain.
It is my pleasure -- what I'm going to be doing here is each speaker, as they come up, is going to be loading their slides.
So I'm going to introduce each person while they're loading their slides.
And our first speaker today is my co-chair.
An associating director of Healthcare Delivery and Disparities Research here at PCORI.
Prior she was managing editor at Hayes, Inc.
Before that, she was an associate professor at Johns Hopkins University School of Medicine where she served as Principal Investigator on several research grants.
Her work has been published in numerous papers, book chaptering and health technology assessments.
She's also in charge of PCORI funding announcements focused on treatment of opioid abuse disorder.
Welcome.
>> How is everyone enjoying the meeting so far?
Good.
Good.
We're having the speakers present in this panel, but at the end, we'll also have two discussants and then open it up for questions.
We're -- really looking forward to hearing what you have to say during the discussion portion of this session. ELS?
somebody told me not too long ago that it used to be that the most common line in the world was the check was mailed yesterday.
Now it's this was just working a minute ago.
[Laughter]
I swear that we thought her slides were loaded and they were just working a minute ago.
All right.
I think we're ready to get started.
>> Thank you.

Thank you Christine and for all of you for being here.
I don't need to repeat anything about the incredible importance of this topic, given the opioid epidemic and the many, many challenges we face with it.
Let's see if this works.
I have nothing to disclose.
What I want to do is briefly give you an overview of the PCORI portfolio in the area of opioids.
We really have thought about it in a number of ways.
Addressing it from different angles and that's what I want to briefly show you.
So as of actually yesterday, October, PCORI has awarded $88 million to fund 16 comparative effectiveness studies.
There are approximately 170,000 patients involved in these studies.
This includes active participants in research studies who are having visits and being tracked.
But also patients who have consented to have their administrative health data used in research.
So when we started funding opioid studies, we really wanted to make sure that we addressed the research needs across the whole care CONTINUUM.
So that includes prevention of unsafe prescribing, alternative treatments, non-opioid treatment options for pain.
Because we know by now I think, that some large part of this epidemic resulted from well-intentioned prescriptions of opioids for pain.
Also, the management of long-term prescription opioid use.
And finally, the treatment of opioid use disorder.
So this just lists the number of targeted funding announcements that we've put out in the past couple of years.
We started with strategies to prevent unsafe opioid prescribing in primary care.
That was focused primarily on patients who had not yet been prescribed opioids.
We then had a funding announcement for clinical strategies for managing and reducing long-term opioid use for chronic pain.
For those patients who have been taking opioids and are often on high doses.
And in the last two years, as Christine also mentioned, we have focused on treatment of opioid abuse disorder.
We had one that focused on pregnant women and their infants.
The most recent one released this year focuses on comparative effectiveness of different psychosocial interventions that are part of medication assisted treatment.
So I want to just give you a sense of the number of studies that we've focused -- what happened?
Oh.
In each of these areas.
So the first one is prevention of unsafe prescribing.
And I have listed here and I don't expect you to read through every title of every study we have funded in this area, but I want to give you a sense of the studies that are currently funded and producing results in this area.
So they include naturalistic experiments, they include interventions focused on provider behavior and also interventions focused on patient behavior.

The next sort of bucket that we think about in terms of funding studies is the non-opioid treatment options for pain.
And in that one, we have funded a number of studies.
The ones -- we actually have a lot more studies that address pain, but the ones that address pain in patients that are receiving or would otherwise receive opioids are listed here.
And the first study.
I do want you to take a look at.
Because we have as a speaker, the PI on that study.
Beth Darnall who is here.
And she will be speaking about a study that has a component that is the comparative effectiveness of cognitive behavioral therapy.
Comparing that to chronic pain self-management.
But the aspect that she's going to talk about specifically today is the context in which these interventions are being compared.
Which is opioid reduction for patients.
The third bucket is the management of long-term prescription opioid use.
Those are the patients who have been taking prescription opioids for pain.
And here you see a list of the different studies that we've funded in that area.
And the one that I would like you to pay particular attention to today is a study looking at prescription opioid management in chronic pain patients that looked at a Patient-centered activation intervention.
One of our speakers today, Monique Does, is going to talk about the patient activation and patient engagement parts of that study.
Finally, the treatments for opioid use disorder.
We funded a number of studies.
Some of them, the bottom two here, are focused on pregnant women.
But the first three are really focused on different populations.
The first one is prisoners who are getting released from prison.
So before reentry, they're treated.
The second one is one that I would like you to pay particular attention to, again, because we have David Gastfriend here who will talk about the trial that he is running that looks at offering medication assisted treatment and a number of psychosocial interventions in FQHCs specifically.
And that gives you a quick, broad overview of the PCORI portfolio.
Without saying anything more, I want to give the floor to our actual investigators.
>> Christine Goertz: Great.
Thank you very much.
As she uploads her slides, I would like to introduce the first of our three panelists.
Dr. Beth Darnall.
She's a Principal Investigator for national pain and opioid reduction research projects with a collective funding of $13 million.
Her work focuses on investigating scalable treatments to reduce pain and opioid use.
Her disseminating scale of community-based Patient-centered opioid tapering research was published in JAMA internal medicine and received a national research award.
She leads a study on compassionate Patient-centered opioid tapering and comparative

effectiveness of self-management and treatment for chronic pain.
She's authored three books and spoke on the psychology of pain relief at the 2018 world economic forum.
She's been on BBC, Washington Post, and in nature.
Welcome Dr. Darnell.
>> Thank you.
Good morning.
Thank you so much to everyone.
These are my funding from PCORI and the NIH as well as some consulting.
As was mentioned, I have authored books for patients, also for clinicians and focused on training healthcare clinicians about how to best treat pain.
I'll move through this very quickly.
In a fortuitous stroke of luck and fortune, my op-ed on patient-centeredness as a critical pathway to address the dual crisis of pain and opioids published last night in the hill.
I just wanted to give a public shout-out to Christine S. for her support and assistance on getting this out.
This is a very timely topic as you all know.
Most recent data suggests up to 100 million Americans are living with some type of pain.
This is roughly one in three individuals.
This is true worldwide.
Pain touches all of our lives.
Many of us in this room probably are living with pain.
If you are not personally, you probably have a family member or loved one who does.
We want to focus on how we're treating pain.
Historically over the past 15 years, there has been an over focus on prescribing opioids to treat pain.
Such that currently, roughly 5.5% of the U.S. population or almost 18 million Americans, are taking long-term prescription opioids.
Right now.
And this is problematic.
Although some people definitely need prescription opioids to be one part of their care plan, this overemphasis has conferred risks to certain patients.
You've all heard about mortality related to prescription opioids.
While this is largely fueled by illicit opioid use, this has conferred risks and even mortality to patients who are taking their opioids, their medically prescribed opioids.
So the question is how do we treat pain best and how do we help keep our patients safe.
There's been an increasing focus on non-pharmacological pathways to address pain and also as a pathway to mitigate this over focus on prescription opioids.
Now it's not just about opioids or no opioids.
This binary reductive focus.
Ultimately, we want to help our patients live better with complex medical conditions, with the pain that they have.
And this is really where the rubber meets the road.
Multiple national agencies such as the institute of medicine, the NIH, the CDC, and

even PCORI, have called for the better integration of evidence-based psychological and self-management strategies as a pathway to help people better manage pain and ideally, reduce reliance on a purely pill-based approach.
This dovetails with what we know about how pain is best treated.
Using a bio psychosocial treatment approach.
And this is really at the core of Patient-centeredness where we're fundamentally treating the person who has pain, not just the reductive symptom of pain.
This hasn't always been the case, even though we've known that the bio psychosocial model of pain treatment is superior, we have over the past decades been overly focused on a bio medical approach that fails to both characterize and attend to the individual needs of each patient.
When we take a look at the actual definition of pain, what we see is that there is the person in the definition.
This is a definition from the international association for the study of pain.
Pain is defined as both a negative sensory and emotional experience.
It's fundamentally a psychosocial experience or psycho sensory experience that includes the psychology of the individual.
But we don't often treat it that way.
Again, we tend to emphasize a biomedical reductive model that supports prescribing as the main emphasis.
If we think about pain.
I like to describe pain as our harm alarm.
It's designed to get our attention, to alert us that there's danger or a threat that is afoot.
And that we must attend to it, and it motivates us to escape whatever causing the pain.
Because that's a potential threat to our survival.
It works really well.
If you place your hand on a hot stove, you're going to feel that sensation and be motivated and prepared to escape the cause of the pain.
But what happens when we have migraines or fibromyalgia or lower back pain or sickle cell disease pain or any of the numerous pain conditions people are living with today?
Real world patients.
When that harm alarm rings and that motivation to escape pain comes into play, you can't readily escape pain that's coming from inside of you.
So this creates a tension and a lot of distress for people who are living with pain.
Because we're all born with the motivation to escape pain, but we are not born with the understanding of how to modulate pain.
The distress it causes us, and how it alters our lives.
But this can be learned and this is really the realm of pain psychology and self-management.
Where we teach individuals information and skills so they become equipped to best manage their own pain and symptoms.
Not necessarily to the exclusion of medication.
But it's a critical, foundational information that helps them live better.
Cognitive behavioral therapy for pain is typically comprised of a host of different topics and skills that patients acquire over the course of up to 8 weeks of treatment.
And this is true for the chronic pain self-management program too, which uses, applies

many of these same principles and information.
But the chronic pain self-management program is typically delivered by two trained peers.
People with lived experience.
Whereas CBT is typically delivered by psychologists.
Now we want to take what we know about these evidence-based treatments for pain and think about how we can apply them to facilitate opioid reduction.
This is a topic fraught with complications and fears.
If you ask patients what's their number one concern about reducing their opioids, they're going to say pain.
They're worried about having pain.
That's a legitimate concern.
They're also concerned about having withdrawal symptoms.
I'm talking about people who are taking daily prescribed opioids.
Some of this fear is born from personal experience.
Because if you're taking opioids regularly on a daily basis, if you miss a dose of medication or you forgot your prescription at home or maybe you tried to taper your opioids on your own and stopped the medication too quickly, you're going to experience withdrawal symptoms.
Including increased pain.
But when we take a look at the data around opioid reduction, we see that when opioids are reduced the right way, that pain doesn't actually increase.
In fact, pain improves.
On average.
Now this isn't to say everyone will have reductions in pain.
But on average, pain improves with opioid reduction.
The question is how do we scale a program for community based out patients.
Because almost none of the patients we know are going to be able to access these costly in-patient programs.
As a prequel to my funded PCORI project, we conducted a study in community outpatients taking prescription opioids and invited them to participate in a Patient-centered opioid tapering program.
This was voluntary and we did not request that patients taper to zero.
Rather, we asked them to partner with their doctor and reduce their opioids to the lowest comfortable dose over a four-month study period.
We invited 110 patients to participate.
68 accepted and 51 completed our program.
There was only one variable that distinguished completers from non-completers, and that was depression.
These are the variables.
These are our sample characteristics.
You can see people who have been on opioids six years, and the morphine equivalent daily dose was almost 300 milligrams.
This was a real-world sample.
We found over the course of 4 months, people cut their doses by about in half.
And here are the actual great.

Each point is an individual patient -- data.
Each point is an individual patient.
You can see the individual dose did not predict taper response.
Our data suggests we have a formula that can help patients even on high-dose opioids.
The really important slide.
The pain did not increase on average.
You see a couple dots up there, and that stands as a testament to our need to be Patient-centered in the application of these approaches.
If you look at the data as an absolute change in morphine equivalent, pain improved as people reduced their opioids.
We want to help people live better, not just reduce their opioids.
This is the comparative effectiveness study we are conducting right now.
Funded by PCORI.
The empower study.
The logo and the branding of this study was created and supported by patient advisers.
We are studying almost 1400 patients taking long-term opioids for chronic pain in four states.
Seven different clinics.
And we are carefully selecting the patients who enter our study to make sure that this tapering program is right for them and we monitor them very closely to make sure we are attending to any discomfort and symptoms that may arise.
Everybody who comes into our study engages in a voluntary patient-centered opioid tapering program and then they're randomized to either eight weeks of CBT, six weeks of the chronic pain self-management program or just the taper only.
We hypothesize these pain reduction classes will optimize patient response to the taper.
I want to emphasize a critical portion of our study is training physicians in how to partner with their patients in a Patient-centered way.
This is a pragmatic study, which means that we're going into seven different clinics and we're fundamentally altering clinical care, and then we're studying the results of that.
So really paying close attention to the doctor-patient relationship and equipping physicians and prescribers with the skills to conduct Patient-centered pain medicine and opioid reduction, is a critical element.
I just wanted to mention our study is now live.
You can go to the empower.
You can go to empower.Stanford.edu if you would like to see our website.
We utilize the voices of patients with successful lived experience with opioid tapering as a critical element of engaging patients, their interest and their willingness to enjoy the empower study.
I want to give a shout-out to all my colleagues and collaborators I work with.
Here is the study website.
If you have interest in learning more.
With that, I will say thank you for your attention.
>> Thank you.
I'm going to invite our next speaker to go up and load her slides.
Ms. Monique Does has more than 20 years of experience managing multisite observational studies, behavioral interventions and clinical trials.

Her current research interests include chronic pain, prescription opioid use, patient-reported outcomes and medical cannabis use.
She manages studies on opioid use and addiction at Kaiser Permanente Northern California's Division of Research including a recently completed PCORI study of a behavioral intervention in primary care for patients on longer-term prescription opioids.
Her own experience with chronic pain and her positive experience with patient partners has led her to her sustained commitment in Patient-centered research.
Welcome.
>> Thank you.
First I want to say I'm very honored to be here.
Being involved with this PCORI study has changed my life and has had a positive impact on the work I do in my own life.
Thank you to the PCORI staff who put together the panel.
I'm a project manager at Kaiser in Northern California in the Division of Research.
I'm going to talk a bit about the study.
This is a PCORI study that has been funded.
We're finished with data collection and I'll talk a bit about our results.
I have nothing to disclose.
For those of you who are trying to get continuing education credits, I hope that by the end of this session, you'll be able to talk about how one PCORI-funded study addressed the needs for Patient-centered research when treating chronic pain and primary.
Thank you Beth for a wonderful overview of the opioid epidemic in the United States and the prescribing and some of the Patient-centered work you're doing.
It was really wonderful.
I won't talk too much about, but I will say that as we can see, opioid prescriptions are declining nationally.
Despite that, there's still a lot of concern over the high rates of abuse and overdose.
And there's a lot of efforts to combat this.
One are local initiatives and health systems.
Kaiser is one of those.
And interesting sort of side note, as we're beginning our study at the height of the epidemic in 2015, Kaiser had rolled out a big safety initiative.
Which had some interesting challenges for the implementation of our study.
In addiction the CDC put out guidelines in 2016 that had an impact.
As you can see by this recent paper published last month, the results are coming in to show the 2016 CDC guidelines are affecting opioid prescribing rates.
They are all going down.
I want to highlight in this paper in yellow the outcomes they measured.
Although declining rates of opioid use are excellent for population health and policy, what do they say about the patient perspective and how does that affect patients?
Does declining opioid use necessarily good for the patients themselves?
As Beth indicated, a lot of patients use opioids and need them to manage their pain.
The people in our steady, on -- study on average, were living with chronic pain for over 15 years.
So this is a substantial impact on one's life quality.
I'm looking forward to seeing more studies come out that show the affect on patients

and Patient-centered outcomes on some of these initiatives.
I'm going to turn to some of the evidence gaps that we were facing.
Five years ago.
Keep in mind, this study we were designing it five years ago.
What might have been an evidence gap then might not necessarily be one now.
We were really interested in looking at primary care and noted a need for evidence based research for effective approaches to treating chronic pain in primary care.
Why primary care?
Mostly because the majority of prescriptions come from primary care doctors for opioids.
Lots of patients have an established relationship with their primary care doctor.
So it's a good starting point to have a dialogue, to learn how to speak with your physician about your healthcare needs and your pain and your opioid use.
We found a lot of patients didn't necessarily want to go to a multidisciplinary pain program.
They didn't need one.
There was stigma involved with that in some healthcare systems.
So we decided on primary care.
We also decided to look at some of the self-management and education movements that were going on in other chronic health conditions.
For example, diabetes and heart disease.
There's a lot of movement towards engaging patients to take their own healthcare into their consideration.
So we wanted to see if we could apply that into the world of chronic pain.
And lastly, we were interested in bringing the patient activation paradigm into the world of chronic pain and opioid prescribing.
And we based some of this work on a study we did at the Division of Research called the Lincoln study, which was based in substance abuse treatment.
It was an activation intervention.
It was six sessions designed at activating patients to get them to become more involved in their own healthcare.
It was based on Judith Tibet’s work.
Her definition of patient activation is understanding one's role in the healthcare process and having the knowledge and the skills to manage one's own health.
This was something we were really interested in looking at.
Does activating patients to become more involved in their healthcare around their pain and opioid use, would it improve outcomes.
So I'll talk a bit about our study called the activate study.
Again, it was a Patient-centered activation intervention based in primary care.
The Principal Investigator on the study was Cynthia Campbell.
It was a randomized pragmatic trial, pragmatic in the sense we implemented in a primary care setting, a real-world setting.
Little exclusion criteria other than being on opioids for three months.
We randomized 376 patients into a usual care arm and behavioral intervention.
We collected data at surveys, baseline 6 months and 12 months.
The intervention itself was brief.

Four, 90-minute sessions.
The goal was to empower patients to take an active role in their pain management and their overall health.
It was led by a pain psychologist and designed with input from patients.
The sessions focused on three main things.
One was non-pharmacological strategies for managing pain.
A brief introduction to chiropractor, acupuncture, massage.
We did guided imagery and mindfulness activities.
We also focused on teaching people about the online resources.
Kaiser is well known for its online portal called K.P..org.
We had a lot of evidence to show that people were using kp.org, but not to its full capacity.
So we did hands on activities where we showed people how to track their lab results and e-mail their doctors and schedule appointments and things like that as well as show them a wealth of online resources on health and wellness.
We also focused on communication skills.
As you can imagine, there are a lot of difficult conversations that have to happen between a patient living on chronic pain with opioids.
Especially in this stigmatized environment.
The goal of the intervention wasn't necessarily to test self-management of care or to look at any particular thing.
It was to try to see if we could activate patients and intervene upstream in primary care to get patients to be more involved in their healthcare.
Really quick, a mention of our study team.
In addition to our 11 clinical stakeholders that we had, we had five patients involved in the study.
We recruited them early on from pain programs throughout California.
It was a very important part of our study design to have patient input from the beginning.
Here you can see their pictures.
It was particularly important because of stigma and marginalization to have their constant input in every stage of the study.
From the recruitment activities to data collection all the way through dissemination.
I want to point out one thing that was a little unusual at the time is that we involved patients in the data analysis phase.
And we thought this was really important because we wanted them to be involved throughout the life of the project.
And often there's a drop-off with patient engagement towards the end phases of a study, because it is hard to engage people with different education levels and different experiences.
So we did a series of eight data lessons with our patients teaching them about statistical modeling and all sorts of things that would enable them to feel more comfortable.
This was a worthwhile and enriching experience for everyone and I'm happy to speak more about that at the end with anyone who is interested.
We randomized 376 patients and looked at outcomes at 6 and 12 months.
Although we saw a decline overall in pain severity in opioid use over the course of the study, we didn't see a significant difference between the usual care arm and the

intervention arm.
However, we noted with regard to some important Patient-centered outcomes, we did note that the participants did have overall higher health scores, lower depression scores and higher function scores.
By function, I mean the ability to engage in your normal activities.
Social activities.
Climbing stairs.
Grocery shopping.
Things lying this.
A lot of these outcomes, we use the promise measures.
But these were developed by our patients as to beings Patient-centered, as to what mattered to the patients.
Pain is important.
But the ability to live your daily life is also important.
We also know some increased use of the online portal, particularly with the health and wellness resources available.
An increased use of self-management skills.
Particularly mindfulness and meditation.
So in summary, what we showed was as a result of the intervention and participation in the intervention, there was an increased self-care and a greater engagement with the healthcare system.
Even despite the limited intervention and being in an integrated health system, we're optimistic that even this small intervention could help engage people in their own healthcare and managing their own pain.
Many study participants saw this experience as a stepping stone.
Here's one quote from one of our participants.
I'm going to ask my doctor to refer me to the pain program he's been trying to get me to go for years.
I'm thinking of the experience as a stepping stone.
The experience of being in the study empowered the patient partners.
Some have gone on to be engaged in more Patient-centered research after the study ended.
Some of the curriculum that also has been adopted by some of our clinical stakeholders in the Kaiser system.
A quick shout-out to the researchers and collaborators and patient partners.
Lastly, we are one of the studies that have wound down and gone through the whole cycle of PCORI through our peer review.
Last week, our research summary was published on the PCORI website.
Thank you very much.
>> Thank you.
[ APPLAUSE ]
>> Our final panelist is Dr. David Gastfriend, who is an addiction psychiatrist and assistant investigator of the PCORI-funded PATH Study.
He directed the addiction research program.
His American Society of Addiction Medicine or ASAM criteria research contributed to endorsement by states.

His CONTINUUM, the ASAM criteria decision engine is being adopted nationwide.
His cofounded DynamiCare Health, a technology for contingency management won Harvard Business School's New Venture Competition global grand prize.
He's served as a consultant to Belgium, China, Iceland, Israel, Norway, Russia, and the United States.
>> David Gastfriend: Thank you very much.
When we look at the patients who have not been able to diminish their opioid consumption and who end up with an opioid use disorder.
We see a very diverse population.
And the treatments available to them are still way too limited and utilization is way too low.
And that is fostering a persistence of the epidemic.
Even while prescribing has started to come under control.
The current practice is specialty counseling in community addiction treatment programs with detoxification from the opioids.
There is a rising utilization of opioid-based medication treatments.
OBAT.
But the absence model remains dominant.
The problem with that is it's not the most effective approach.
There is increase in motivational enhancement therapy utilization, which is a Patient-centered approach.
But even that is limited in its efficacy in this population in the absence of integration with medication.
The American Society of Addiction Medicine publishes criteria that says you need to have multidimensional assessment, because so many different domains of need occur in this population.
And need to be cared for in an integrated fashion.
They specify six dimensions of withdrawal.
Biomedical problems, psychological problems, problems with readiness, relapse potential.
By and large, the field of addiction treatment is aware of these criteria but not yet really using them in a systematic fashion.
And their point is to use the least intensive resources known to yield optimal outcomes.
Responsive to patient needs for effective treatment, but also resource limitations.
My colleagues, Dr. Adam brooks, here in the room, conceptualized a personalized addiction treatment to health model.
This was years ago.
About five years ago now.
We were funded by PCORI with a large pragmatic study to randomize 800 patients comparing the PATH model to the community standards specialty addiction programs.
And we decided to invoke a number of evidence based treatments and I've organized them here according to the vectors of a public health epidemic.
Which starts with the agent.
It's not a virus or bacterium as a typical epidemic.
It's the drugs of abuse.
Heroin, fentanyl and their congeners.

So what modalities are evidence-based for addressing the problems of the agent?
Well, we have several F.D.A. approved medication assisted treatments.
M.A.T.
The agonist.
Methadone is well established for decades now.
Partial treatment with Buprenorphine.
And although this is newer, there is a very solid evidence base for improvement in reducing overdose and death.
We now have an antagonist approach.
It can be administered not as a daily.
But an extended release injection that lasts a month.
Two comparative effectiveness trials head to head between extended naltrexone own and bop morphine show you get similar outcomes if
The patient succeeds in starting on the medication.
Contingency management is a very different approach.
But it essentially is a physiologic response approach.
It actually pays patients money for adherence and retention.
And abstinence.
And that addresses not the cortex of the brain, the outer brain here.
But if you see in the host model of the brain, that pink region, which is representing the reward center.
So contingency management works at a level below consciousness, directly at the reward centers' function.
But we also have to address consciousness and learning and changing behavioral patterns and cognitive behavioral therapy is a well established modality in general, although that not at effective by itself in addiction treatment after detoxification.
So it's being used in combination with CM where we see the best results in the literature.
The patient's interaction with their environment is critical in this disorder and peer support has a lot of face validity and early evidence for being effective for that need.
So I just listed a whole bunch of different approaches.
And they're available here and there, sparsely, in the community.
But in very disparate locations.
And that fragmentation is absolutely the worst setup of service delivery for a degrees that disrupts -- disease that disrupts the patient's motivation to get well.
90% of people with opioid use disorder don't seek care or get it.
And the resources are limited when they want it.
The access is sparse.
And their motivation is impaired.
And society doesn't understand that disruption of motivation.
The rest of us, when we get sick, we seek wellness.
We hurt.
We want to enter the Dr. -patient relation -- the doctor-patient relationship.
That's not the case for someone in the throws of addiction.
The highly fragmented system needs to be essentially defragged.
PATH is personalized addiction treatment to health.

We have the ability to offer multidimensional assessment and evidence-based treatment with each of these components.
By defragging the system and invoking the primary care model and offering long-term collaborative care, the hypothesis is that we should get as good or better outcomes than the specially system.
But when it comes time to advising patients and helping them make choices, it turns out to be really tricky in this disorder.
For one thing, there's a tremendous range of variation among patients and they're needs.
They have different types of opioids that they use.
Prescription, heroin, or fentanyl.
There are different routes of administration.
Smoking, snorting, oral use, injection.
Patients with youth are most common in the epidemic at the moment.
But the fastest rising subgroup is the elderly.
An impact on the patient's level of function is an issue.
Prior treatment experience and what phase of recovery is the patient in.
Because that can change their potential interest and suitability for these different treatments and their combinations.
If the patient has chronic pain, it substantially complicates how we're going to treat them in their opioid disorder.
It may not be just how much pain they objectively have, but what is their orientation to pain.
Are they preoccupied with it, obsessional about it?
Co-occurring disorders of mood, psychosis, have significant impact on people's ability to engage in these treatments and what treatments should be effective.
And social chaos or disenfranchisement.
Sometimes we offer treatments, they are afraid of discontinuation.
Going off some of the medications can involve withdrawal, and I hear that it can be difficult.
So the literature does not guide us on selection factors.
Therefore the best method or approach for selecting between these medication approaches, methadone, Buprenorphine may simply be patient preference based upon the features, the side effects.
The way these medicines work.
We need more evidence how to guide initiation and how to guide termination decisions.
Another problem is adherence and persistence over time.
Long-term treatment is most effective, but patients don't tend to stick with these medicines.
So we have different models.
Harm reduction which is permissive and engaging versus the recovery model which is constraining and sets firm expectations for treatment participation and performance in terms of abstinence.
Schedule treatment versus flexible approaches.
And how do you design a study that will offer flexible Patient-centered approaches and yet not standardize what's being delivered.

How do you statistical comparisons when you have that model?
Yet the best basis seems to be patient preference for what we know now.
We have completed a pilot phase of the study.
In the four FAQHCs we have some substantial learnings where we have operated the studies.
They're challenging.
One thing we find is many Buprenorphine waivered who have the ability to prescribe it, don't prescribe it.
More people who have the waiver don't prescribe than are willing to prescribe.
Naltrexone is limited, there are protocols, but not being used.
Group therapy and peer specials are important to successful outcomes but many are not reimbursed.
Contingency management has federal HSS office of the inspector general policy obstacles.
We are working for solutions on those, but they have inhibited our ability to get these studies started.
Primary care tends to have behavioral care and is focused on short term.
But we need to have a long-term focus for this disease.
And one thing I will say that I thank PCORI for its influence on, consumer input.
Peer mediated street recruitment was recommended by our community advisory board.
And my co-investigator has doubled the rate of recruitment.
So there's a lot of opportunity for impact.
FQHCs are numbering over 1300 in the country.
1 in 12 Americans has access to an FQHC.
If we can show better outcomes or even similar outcomes with the PATH, because then we could dramatically increase access to care.
And that's the goal of this study.
Thank you.
[ APPLAUSE ]
>> Christine Goertz: Thank you very much.
And thank you to all of our panelists.
Now we're going to turn the podium or the microphone to our two discussants who I will introduce them both at the same time.
You're welcome to either remain seated or give your marks at the -- remarks at the podium.
First, Dr. David Kelley who oversees Pennsylvania's medical assistance programs, providing health benefits to more than 12.5 million recipients.
Their recent accomplishments include participating in a multi-payer medical home collaborative, initiating pay for performance programs and developing a multi-state application for the Medicaid electronic health record incentive program.
Previously Kelley was the medical director responsible for utilization of quality management in Pennsylvania.
Served as assistant professor and director of clinical quality improvements at the Pennsylvania state university's college of medicine.
He's board certified in internal medicine and geriatrics.
Our second is Dr. Travis Rieder.

Dr. Rieder is a philosopher by training and a bio ethicist by profession.
He writes and speaks on a variety of ethical and policy decisions.
This came after a motorcycle accident when he took too many pills and found himself with a profound dependency.
In the wake of the experience, he was driven to discover why the practice of medicine struggles to deal with prescription opioids.
He wrestles with those questions and several academic and popular publications and an upcoming book to be published in 2019 to be published with HarperCollins titled "pain in America."
>> Thank you.
As the Chief Medical Officer for Pennsylvania Medicaid where we have done Medicaid expansion of over 700,000 individuals that previously had no health insurance.
I will say that probably over 150,000 of those individuals have been able to have benefits that include fairly comprehensive treatment for opioid use disorder.
One of the biggest challenges that we face in Pennsylvania is we have a crisis.
13 Pennsylvanians die every day of opioid use disorder.
That to me, is an emergency.
And unfortunately, what we see too often is stigma throughout the community.
At the provider level, at law enforcement level, the legislative level.
I think we're starting to see some decrease in that stigma, but it's still there.
What's vitally important really, is the Patient-centered approach that PCORI brings to the table.
And the research that you've heard about is vitally important to our Medicaid program.
I will say that there are some programs that we've tried to do over the last two or three years to address the opioid crisis.
We've developed centers of excellence.
A model where there's Patient-centered, person-centered approach.
We are paying for care management teams including peer recovery specialists.
We also are funding other hub and spoke models that have been published in other state Medicaid programs.
We're trying to disseminate that hub and spoke models.
We're very much so expanding medication assisted treatment over the last five years, we have seen a large increase in the number of individuals that now take advantage of both methadone, Buprenorphine, as well as injectable naltrexone.
We have seen the numbers go up and have seen a fairly good duration of treatment.
Because we think for folks to move towards recovery, you have to stay in your treatment course and move towards recovery.
The Patient-centered, person-centered approach is vital because in the healthcare delivery model, one thinks in the context of medical care.
And we know that everyone's lives focus on more than just the medical system.
And that social determinants of health, if they're ignored, we're never going to come up with great solutions.
Really need to be paying attention to not just the medical model of care, but all those social determinants that affect our daily lives.
Corey's approach is very person-focused and takes into account all those other variables that happen on a daily basis.

There are other programs that we've implemented.
I'm not going to sit here and talk about them.
But I think the most important message I have is we are in the middle of an opioid crisis.
We need to be compassionate.
We need to reduce stigma.
We need to make sure that individuals that are on chronic opioids, usually no fault of their own, that they need to be treated compassionately.
They need to be offered innovative programs, some of which you have heard about.
And from a Medicaid standpoint, at least in Pennsylvania, we're very open to developing these new models of care that are very person-focused.
So thank you very much for the opportunity to be here and to be able to share my thoughts with you.
Thanks.
[ APPLAUSE ]
>> If all you heard is I'm a philosopher, don't worry.
I won't talk about any of that with my few minutes today.
I'm here mostly as a patient and as a story teller.
I've been doing a lot of story telling over the last few years since I had my motorcycle accident.
And the reason I've been telling this story.
It's a strange experience to be the inducted into the healthcare system.
I'm research faculty at johns Hopkins.
It's a little surreal to develop personal knowledge of things you might study in a textbook.
One of the things I discovered is that opioid withdrawal is not like the movies.
If you have seen someone go through heroin withdrawal in a movie, it's a clip of shivering and sweating and then to the next day... And thank God they're through that.
I ended up being put on high and escalating doses of opioids.
For very good reason.
I had my foot blown apart and many surgeries to put it back together.
But the problem was nobody was looking out for me as I got passed from provider to provider, through this complex system, from hospital to hospital.
At the end of months of this, finally somebody looked at my chart and asked me about my meds and said, that's too many.
We need to stop it now.
The problem is that nobody knew how to do that.
So I really appreciate hearing people like Beth talk about explicitly, here's how we taper.
One of the things you find out if you work with clinicians all around, in all different settings, is everyone who has the D.E.A. license that allows them to prescribe opioids doesn't know how to get a patient off them.
One would think that's a reasonable principle to adhere to.
If you can prescribe it you should be able to de-prescribe it.
So I go around and talk to clinicians and make that point and they go that's a really good point.
I wonder how we're going to do that.
Then there's the hard problem of establishing structures to allow that.

So I don't have in just a couple minutes' time to give you the gory details.
But the points I want to make -- well, if you want them you can go to my TED Talk.
I've done the 14 minute version where I try to make you excruciating uncomfortable by explaining to you what opioid withdrawal is like.
I was in it for a month because my prescriber said drop a quarter dose each week and four weeks, you'll be done.
That's the worst way to do it.
A high decrease by percentage.
And by percentage it gets more each week.
So I had terrible withdrawal that got worse each week, but it also lasted a whole month.
So it was just about the worst of both worlds.
By the end of the month I was actively contemplating suicide because I was in a deep, deep depression.
When I came out of this and started reflecting on the issue, there was this main idea that if you prescribe opioids, you really need to know what to do with them afterwards.
But in the context of what we've been hearing so far and about PCORI's very nice kind of funding chart.
I appreciate ells putting up these four quadrants.
The one point I want to leave folks with today is we talk about responsible prescribing in the context of an opioid epidemic with the language of we need to decrease opioid prescribing.
That's multiply NAME attic.
Patient centeredness requires you appropriately prescribe.
Sometimes that's less and sometimes that's not.
The other problem is writing the script is this one moment in the prescribing relationship.
And there's a whole bunch of other moments.
And some of that is counseling the patient beforehand and making sure they're ready for pain so they rely on the medication less and that you have an exit strategy.
And afterwards, managing the patient and the prescription longer-term to make sure you can de-prescribe as appropriate.
Here are two points on the nice PCORI pathway of the four quadrants.
You have prescribing and non-prescribing options.
That's upfront kind of supply reduction if we're oversupplying.
And then there's management of long-term prescriptions and that's part of management.
So Beth's work in particular is really important for this population of legacy patients.
Some of who are orphan patients now without a prescribing doctor.
Because we need to de-prescribe people on hundreds of morphine equivalents of medication.
That's an important part of not contributing to the epidemic.
Making sure people are not on dangerously high doses and can safely and effectively in a Patient-centered way, reduce that prescription.
But there's this category in the middle.
That's routine de-prescribing.
That's what failed with me.
And think how often.

Every orthopedic surgery, every cesarean section, every routine surgery of every kind that requires at least a few days of opioid analgesia.
Often times we're overprescribing and sending them two or three weeks, and that's bad.
Whether you're overprescribing or prescribing appropriately, you have to have a way to help your patient get off the pills you are prescribe.
That's all my time.
Thank you very much.
I'm happy to answer any questions.
[ APPLAUSE ]
>> Christine Goertz: I want to thank all of our excellent panelists and discussants for really teeing up what will happen next, which is a discussion with all of you.
So there are microphones in the aisles on both sides of the room.
I would like to invite you to come up with any comments and questions.
We have just almost a half hour before the session ends.
>> Thank you very much for this fascinating talk.
Really a lot of practical points for patients, practitioners and providers.
My name is Melia and I'm with the American institutes for research.
I'm curious to know, especially for doctors Darnell.
Can you explain what you have seen working with providers on both providing treatment for opioid use disorder and also with providing treatment, providing appropriate main management?
You did mention that the majority of physicians who have Buprenorphine waivers are not prescribing that.
I think, if you can tie that into how this could be linked to stigma within the delivery system.
Thank you.
>> David Gastfriend: The reason we think that most of the physicians -- and I'm talking about many thousands of physicians across the country who have been waivered but won't prescribe.
Seems to be one, the concern that they really don't know how to do it.
And if they get into trouble, they don't know where to turn.
It's a partial agonist.
So it has some challenging issues of initiation and dose management.
But the bigger problem I suspect is fear that they will become a magnet for difficult to treat patients who will alter the climate of their waiting room and scare off their other patients.
Vermont and other states, you just heard Pennsylvania is doing this, have developed a hub and spoke model where the specially hubs initiate the patient, stabilize the patient, provide the psychosocial grounding for the context of the medication.
And then they transfer the patient's direct care to primary care in the community, where a provider gets waivered and has support from the specialists day to day, week to week, month to month.
And feels that they won't be left adrift.
And they're getting a patient that's already stabilized.
That's a fruitful model for overcoming this problem.
I'm thrilled to hear Pennsylvania and other states are making use of this as well.

But it's a problem getting and having access.
>> I have two different aspects to my response.
The first is that the first main barrier is education.
Veterinarians receive 28 hours of pain education and training.
Physicians receive between 4-1 is hours across four years of medical school.
The physicians that enter our communities are ill-prepared to manage the complexities of people.
They're trained to deal with symptoms.
To write prescriptions.
That's number one.
It's not just physician training.
It's physical therapist.
Psychologists.
Psychologists receive zero pain education.
Systematically, throughout training.
So that's a lost opportunity to address the psychosocial dimensions because there's huge co-morbidity between pain and mental health conditions.
So that's number one.
Is education is needed.
And Travis also referred to the fact that once a prescription is started, physicians and prescribers lack the education for how to de-prescribe.
But the second piece to my response is there are barriers in terms of resources.
So we can train physicians and healthcare clinicians and they could say, great, I want to prescribe self-management or psychological approaches or an interdisciplinary approach.
Then we find there's barriers to accessing these evidence-based treatments.
So we can develop all the best treatments in the world, but if our patients can't access them it means squanto [ph.].
Care models of delivery that are truly accessible.
I believe that this will eventually come down to some of these more Internet-based approaches as a frontline.
And that was discussed in this session.
That's where some of my work is focusing as well.
Because we've got to transcend the current issues around proximity and also education.
>> Thank you very much.
>> Kevin Hanes, I'm a pharmacist and epidemiologist from the P.I. health plan research network.
I want to talk about the data gaps and being able to close them in evidence.
I'm also a resident of the commonwealth of Pennsylvania, so very excited to hear about the work done there.
When you have state prescription drug monitoring programs that have real rich exposure data, but then administrative claims, Medicaid, commercial claims, Medicare claims that have the rich outcome data that transcend healthcare systems.
For instance if I get a prescription at the hospital of Pennsylvania but have an opioid thing at temple, there's so much fragmentation in the healthcare systems to provide care management.

We need to link the data, and I'm finding it incredibly challenging for health plans to link into this high quality exposure data because we're missing the cash paid prescriptions.
We can't provide high quality care or education without data linkage.
I wonder what the panel and Dr. Kelley, from a state perspective as well.
>> Thank you.
That's an excellent question.
Unfortunately, in Pennsylvania we have an excellent PDMP that's been operationalized over the last two years.
I think overall prescribing of opiates is down at least 10 or 12%.
There's been a significant reduction.
Providers are using it and there's been a significant reduction in individuals that are shopping from provider to provider.
With that said, unfortunately, the law does not allow us, even as a Medicaid agency, I can go in and look at it and look at it on a case by case basis.
I push that data or information to our health plans.
We have a lot of claims data and we have worked the University of Pittsburgh to develop an overdose predictive model for who will have the next overdose.
And we ran that across our claims data.
I was told I could not push that out to our managed care plans, because of our state confidentiality regulations.
So we did give that model to our health plans and said go do it yourselves.
So there are some barriers out there, unfortunately.
We're trying to break some of those barriers down.
There was I believe, a bill that was circulating in our assembly to actually have our managed care plans get access to the PDMP information.
So there are some challenges.
On the other hand, putting on the hat of a consumer and a patient, confidential laws are there for a reason.
There's a lot of stigma, a lot of discrimination.
We have seen it, especially in the past with HIV patients.
We're continuing to still see that with opiate use disorder.
I understand it is a balancing act, but it would be nice if we could break down some of these walls where we could judiciously share information that's going to help patients and not harm them.
>> If we could get national data harmonization working with PDMP and privacy law work through to allow the data sharing that you're calling for.
We'd still have the problem of physicians taking the active role of checking the PDMP prior to prescribing and prior to refilling.
And we could get a lot of help if the join commission would undo the damage it had done when it invoked the requirement that you check pain as the fifth vital sign.
Which was destructive because suddenly every doctor working in a healthcare system was obligated to ask essentially, is your pain zero.
Because if it's not I should be prescribing some opioids for you.
That's inevitably what happened.
We're going to pay for that for another decade.
The joint commission could require the percentage of times that a prescription of an

opioid is associated with a check of the PDMP.
Simple, almost trivial electronic programming task.
So we could actually be reporting.
Obviously, every physician under those systems would then do it.
And it wouldn't have to be an active act.
It could be a passive reminder to the physician.
So it needs to be incentivized that physicians use the care and caution that's required in this kind of an epidemic.
>> Christine Goertz: Great.
Thank you.
Next question.
>> My name is David Iffgy.
I'm the founder of MCN.
It's a national care coordination in telemedicine network.
The reason I came today.
I want to hear from distinguished panel and maybe also the audience, how to implement that ongoing communication between providers and patients regarding the opiate use, after the treatment has been done or ongoing basis.
If there is practical ways how to do that.
What do you think could be those methods.
And second, there is currently any way to reimburse the providers for that extra time, which is ongoing, as I said.
>> Thank you for that question.
We do not have sort of an after-care component in our PCORI-funded study and the empower study, where we're following people for one year and they get our behavioral treatments and they're slowly reducing their opioids.
But one of the pathways under consideration, and we deliberated about this, was to integrate in peer support groups from the American chronic pain association.
These are free support groups provided around the United States.
So you can go to the ACPA.org website and learn about them.
This is not specific to opioid use disorder.
This is specific to self-management of chronic pain.
It was through the vagaries and complexities of research, it was not a good fit for our current study.
But we do offer that at the Stanford pain management center and around the United States.
It's free.
So the only burden is for the host to provide space.
The ACPA helps identify peers in the community who become leaders and support others through better management of main.
But as far as opioid -- pain.
As far as opioid use disorder, I would defer to other panelist.
>> Any other comments?
>> As a pair for telemedicine, I would -- payer for telemedicine, Pennsylvania Medicaid we have policies in place where we would pay for tell medicine done on an outpatient basis.

And we have told our providers that is something we are willing to reimburse for.
It's the typical billing requirements through E.N.M. code.
It is available.
We feel that the D.E.A., earlier this year gave guidance that brought down some barriers for doing M.A.T. via telemedicine.
So it is something that within the commonwealth, we have already put the policy infrastructure in place to make that available.
One of the issues though is that from a counseling standpoint, because we are very restrictive in Pennsylvania, you can't get drug and alcohol-related counseling unless you physically go to a drug and alcohol counseling treatment center.
So it's a huge barrier.
Even from a telemedicine standpoint, there are barriers to having that counseling portion done.
There are some caveats.
We always feel that face to face connection is the most important.
And we don't really want to see telemedicine replace that face to face.
But there's some rural areas where access is more of an issue.
Certainly we would advocate that folks use telemedicine.
But we don't want it to replace that face to face interaction that we feel is vital.
>> I'm on the steering committee of the newly launched national academy of medicine's collaborative to counter the opioid epidemic.
You have brought up so many rich research findings coming out of this.
The collaborative is about a public-private partnership to address and implement some of these findings.
I think it's a real opportunity for us to think about where can a public-private partnership, at least initially our workers will be focused on education and training and prescribing guidelines and standards and treatment and recovery with a cross cutting emphasis on stigma.
Your thoughts on where you see the critical linkage between this important research and how we can think about implementation rapidly to address the epidemic using a private public partnership with health systems all at the table together.
>> One of the remarkable things about PCORI funding that is so different from NIH funding.
Is that in our study, we were funded for a dissemination phase after the main trial.
So just to do an 800 patient randomized comparative effectiveness study is remarkable enough.
But then to have another year of funding to disseminate the results and to have a stakeholder steering committee from the inception of the protocol development, to bring together professional societies, patient advocacy groups, provider trade associations, funders.
In the oversight of a study from start to finish, that's something that you only get in a PCORI type of project.
I think what you said is really important, and I'm really grateful, because it stretches the researchers to realize they're not done when they publish the paper.
>> I think in addition to the implementation and I know PCORI does a great job with that piece of it.

There's an effort here to try to scale it as well.
So how do you move beyond what you've learned and think about how you scale it in a national level which is a part I think the collaborative would like to emphasize.
>> At least at the state level, we would certainly be willing to look at a lot of the research that's been done here to disseminate.
Especially when it comes to payment models and especially working with RFQHCs.
We have a great network of FQHCs in Pennsylvania.
We have had some discussions at the state level on how to widely implement it within our FHQCs.
We're already putting payment mechanisms in place for some of the care management.
It gets a little tricky because of how they are reimbursed.
But we would want to disseminate those findings.
I think the findings around how to treat chronic pain in a multidisciplinary mode.
We're already moving, Geisinger health systems put together two sites in rural areas.
Allegheny network system in Pittsburgh have put together multi-disciplinarian outpatient pain management clinics that hopefully have been very person-focused.
So we really want to see the dissemination of those models.
We've tried to expand -- we allow our managed care plans to pay for acupuncture, we pay for chiropractic.
We have tried a host of things.
But the state at least is very much so interested in being able to disseminate these concepts.
I think nationally, our Medicaid medical directors are here this week for the next two days, rather, to talk about the opioid crisis and other topics.
One of the things we're going to have discussions around is how do we, how do all of my counterparts, and there are 46 states that will be meeting, that will be represented.
How do we disseminate those things, not just in the state of Pennsylvania, but in these other state Medicaid programs.
We're very much so interested in taking what this research shows us and disseminating it.
Especially in state Medicaid programs.
>> I would just like to add to that, while there's a huge emphasis on treating pain better, one of the keys is how do we help these 18 million Americans currently taking prescribed opioids and reduce their use.
So we really need solutions urgently, because there have been -- there has been advice from the CDC and other agencies to reduce opioid prescribing.
It puts our patients at risk yet again when we're not tapering the right way.
I believe part of this private partnership, what we need to be focusing on is developing online implementation strategies that use best practices.
Their physician portals, prescriber portals.
Also has a patient-facing website and resources.
So that we can rapidly scale and address the needs of Americans today.
Not a decade from now or a decade and a half when medical education catches up with what's happening right now.
>> I also would like to add.
Thank you, David for mentioning the PCORI emphasis on dissemination.

We do, as one of the criteria for review, we look at what is the disseminatability, I don't know if that's a word, of this intervention.
Should it show effectiveness and also how scalable is it.
If the answers to those are, well, probably not going to happen, then that really kind of stops the whole process.
>> Hi, my name is Katina Lang Lindsay, and I am a kidney transplant patient.
I'm a part of the ambassador program here.
And also, I am on a study called -- PCORI study, called putting patients at the center of kidney care.
But also I am a professor at Alabama State University in the social work department.
I don't think I have a question, but I think more of a consideration.
And my consideration is have you considered social workers as being persons to help with the psychosocial components of what you're doing.
And the reason why is because clinical -- social workers have clinical social workers who are able to play more than one role in the whole capacity.
We both could help with the psychosocial and then we can also help with the resources.
That serves its own entity.
But not only that, we are able to bill at the clinical level and be able to help.
So we are a resource that can be used.
And I think sometimes, it's unfortunate that we do not get an opportunity to be used.
I think that's a big part too as it relates to being a part of the multidisciplinary team is that if you consider that aspect, then I think it will be helpful.
Also, my last comment is in regards to telemedicine.
A colleague and I are working towards now telemedicine, meant health, in rural communities.
That's one of the things that I believe that we could also be used in.
I know that we could also be used in that area in terms of billing.
I think.
And with the federal community health centers, we could also be an asset to them in getting those mental health services that otherwise could not be gotten for those persons in rural areas.
>> Thank you.
We have time for one final question or comment.
>> Thank you.
Jassing, University of Alabama at Birmingham.
Commissioned researcher.
Very nice presentations.
My questions are frequently, and I think as one of the discussants brought up.
After elective surgery or surgery in general, patients get two or three weeks of pretty good doses of opioid medications.
And when they're left right there, either to seek that back from their primary care physicians and/or figure out how to get them off.
We know that the training of clinicians is limited with regards to opioid prescription.
So what are your thoughts about what sort of models.
Because here's a challenge about inadequate knowledge, transition of care, major surgery, patient grappling with all these things.

So as a system.
And there is transition of care occurring.
Good example is joint replacement surgery.
1 million knees done in the U.S. in the elderly population.
And some get opioids and others have had that experience.
What do you think, what sort of model might work with this transition of care, opioid prescription challenge?
>> I have a couple of studies that are targeting this exact issue right now.
They're not funded by PCORI.
What they involve is training the unit staff, the physicians and the nurses on how to talk to people about pain and how to address pain, non-pharmacologically.
That's not to the exclusion of opioid medication.
It's equipping providers for how to treat pain multi-modally and how to empower patients to go home and reduce reliance on the opioids they may have used in the hospital.
That's one piece.
The other is we have developed digital behavioral medicine treatments.
So when a patient goes to surgery, we can characterize their needs and we can deploy an e-mail to them that includes a behavioral pain medicine intervention, which they can receive before a surgery or after surgery.
These are some scalable options we're focusing on.
>> Dr. Rieder did you want to make our final comment?
>> One quick thing.
So I've worked with a couple hospitals on this sort of question.
So one, private hospitals, orthopedic surgery hospital.
One of the things we learned quickly is one, it has to all be contextual.
So what works at Johns Hopkins, which is hugely different from the this specialized orthopedic hospital.
Not going to work in the same way.
It's not clear there will be any right answer but it has to be addressed structurally.
In this hospital, one thing was talking about training those who do a lot of the discharge prescribing to do the sort of exit strategy mapping, follow-up care.
Scripted conversations that can identify behavioral health assessment needs.
That is not clear that is the only solution.
Given that orthopedic surgeons not going to be spending their time doing this.
>> Thank you so much to our speakers once again.
A round of applause for our speakers and to all of you in the audience for participating today.
[ APPLAUSE ]