



The Collaborative Care Model: An Approach for Integrating Physical and Mental Health in Medicaid Health Homes

**Webinar Transcript
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Allison Hamblin: Good afternoon everyone. My name is Allison Hamblin, I'm with the Center for Health Care Strategies and on behalf of the Integrated Care Resource Center and as partners of the Centers for Medicare & Medicaid Services (CMS), I'm pleased to welcome you all to today's installment of the Exploring Medicaid Health Home series.

Today, we will be focusing on the collaborative care model, an evidence based approach to integrating physical and mental healthcare that may be useful to states developing Medicaid healthcare models.

For those of you who are new to the Integrated Care Resource Center or ICRC as we often refer to it, it is an initiative sponsored by CMS to provide technical assistance to states pursuing health home models as well as states pursuing integrated care for dual eligibles.

Technical assistance under ICRC is led by Mathematica Policy Research and the Center for Health Care Strategies and includes an array of activities related to individual, state, technical assistance, group learning collaborative, excuse me, and a growing resource library.

That said, in the near future, some important changes are coming to the Integrated Care Resource Center. ICRC will continue as the resource center for activities related to integrating care for dual eligibles.

The health home resource center, however, will be soon moving to a new home on Medicaid.gov. The same technical assistance team and the same in-depth technical assistance resources including this webinar series will be available to see under the newly titled Health Home Information Resource Center.

That related resources will now be housed on Medicaid.gov instead of under the ICRC website. Please stay tuned in the weeks ahead for more information as this transition occurs.

And one more update for the states on this call, as you may know CMS is in the process of launching a new online system for health home state plan amendment submission.

The new system includes a number of important enhancements such as the ability to accommodate multiple SPA submissions concurrently and the inclusion of more structured data fields rather than pre-based entries.

It's important to note that there are trainings being offered to states next week on how to use this new system. And ICRC has shared information on the trainings of all states as of the past couple of days.

If you have not received this information, please feel free to contact me or anyone else on the ICRC team and we can provide this information with you and your state colleagues.

So now coming back to this event and the exploring Medicaid Health Home Webinar Series, this series is a monthly webinar that provides a forum for states to share details on emerging health home models or as with today's event to discuss the designing implementation of specific health home elements with key subject matter experts.

HEALTH HOME INFORMATION RESOURCE CENTER A Centers for Medicare & Medicaid Services initiative to help states develop health home models of care for Medicaid beneficiaries with chronic conditions. Technical assistance is coordinated by Mathematica Policy Research and the Center for Health Care Strategies. For more information, visit <http://www.Medicaid.gov>.

Notably most of the webinars are open to only state participants, however, as with today's event, we occasionally broaden participation to include other interested stakeholders where the topics lends itself to doing so.

Physical behavior health integration is clearly such a topic and today, we are pleased to have on the line representatives from states, healthplans, providers and an array of other interested partners.

Before we get to our main topic, I'd like to present a quick snapshot of where we are in the national landscape of health home activity. There are currently 12 approved state plan amendments for health home across the eight states listed here.

And there's another large group of states in various stages of health home development. About half the states overall are actively pursuing health homes at this point which is just wonderful to see.

And to note, there's additional state activity that is not reflected on this map, as this map only includes states that have had some formal interaction with CMS to date.

The scope of health home development is just one reason that physical behavior health integration is garnering significant attention across the states. As one of the core goals of health homes is to improve the integration of services across the broad array of needs for individuals of chronic conditions.

Importantly, health homes create a compelling opportunity and a new authority for states to pay for services that are key to the physical behavior health integration that historically have been difficult to pay for.

The care management services, the care coordination that are necessary to connect what is most often a complex system of physical health, behavioral health and social service delivery.

That said, to fully capitalize on this opportunity and ensure that health home models will achieve their goals of improved outcomes and reduced cost, states are very interested in implementing evidence-based approaches to health homes.

And that is our goal today -- to present one approach to physical behavior that has particularly strong evidence based behind it, the collaborative care model.

Future webinars may highlight other models and the link included on this slide contains an array of resources that can be helpful to states in designing strategies to promote integrated care.

Please also note that we will releasing a paper in the near future to compliment today's webinar. So please stay tuned for that as well. So without further ado, it's my pleasure to introduce the agenda for today's event.

We will begin with a detailed presentation by Dr. Jurgen Unutzer, a key architect of the collaborative care model. And following Jurgen's presentation we will begin the discussion with a group of individuals who have had experience implementing the collaborative care model from an array of perspectives ranging from the specialty mental health system to primary care practices and from a carrier perspective.

And so collectively, they will be able to comment on the value of this model and their experience with it towards the goal of better integration of physical and behavioral health care.

The last thing I want to say before turning to introduce our key presenter is to give you all instructions on how to submit questions during the webinar. To submit a question as indicated on the slide, please click on the question mark icon located in the toolbar at the top of your screen.

You can feel free to submit questions throughout the course of the webinar and when we get to the open discussions portion of today's event we will fill the questions on your behalf to our presenters and panelists.

And now it's my great pleasure to introduce Dr. Jurgen Unutzer of the University of Washington. Dr. Unutzer is the professor and vice-chair of the Department of Psychiatry, and, among other things, the director of AIM center at the University of Washington which is the center for advancing integrated mental health solutions.

Dr. Unutzer and I will turn it to you.

Jurgen Unutzer: All right, good morning everybody or good afternoon depending on I think where we're at. Can you hear me okay?

Allison Hamblin: We hear you great. Thank you.

Jurgen Unutzer: All right, very good. Well Allison, thank you for the nice introduction and for inviting us to spend some time talking with you today about collaborative care which is one evidenced-based approach to bringing together the integrated physical and mental healthcare in the context of health home and now we're talking specifically about Medicaid health homes.

If you could go to the next slide please. As Allison mentioned, I'm based here at the University of Washington. I direct a program called the AIMS center which is a group of clinicians and researchers that have worked together over the past 20 years to really do research and practice development in this area of integrated mental or behavioral healthcare.

Next slide please. I'm going to give a brief overview of what I'll try to cover here. I will make the case for collaborative care. I will spend a little time on talking about the core elements of a collaborative care programs that we have evidence for.

I will review briefly the evidence based for the collaborative care model focusing on what we can say about patient and provider satisfaction as a based program, about clinical outcomes and also about the cost effectiveness and cost outcomes with programs like this.

And then I'll finish up by talking a little bit about what is now a pretty robust experience implementing collaborative care programs in particular for safety net population.

Next slide please. I'm going to start with a slide from here in Washington just to kind of think a little bit about what is the role of mental or behavioral health conditions in a Medicaid population.

This is a slide prepared a couple of years old now by David Mancuso who works at our state DSHS research and data analysis division and what we did there is we had a look at Medicaid claims for behavioral health services in Washington State duly eligibles and there's two types of duly eligibles: the aged and the working-age disabled. And what we are looking at here are the numbers and the proportions of the beneficiaries who in any given year had a claim with a diagnosis for mental health substance abuse problem or a prescription paid for a mental health medication.

And what you see here is in the aged group; just under 50% of all of the beneficiaries had at least one claim for a mental health diagnosis and at least one prescription for a mental health medication.

On the younger side, the working age disabled, these numbers are even higher. So about 2/3 of all the beneficiaries had a claim for a mental health diagnosis and a claim for a mental health medication and this is I think a pretty conservative estimate because we're just looking at Medicaid claims data here.

We're really not looking at the Medicaid data for example or in other ways in which mental health services might have been financed.

And so the point here is for a high risk Medicaid population, disabled health conditions are a very, very common problem and also a very persistent problem.

Let's go to the next slide. So I'm going to say a little bit now about how we are organized across the country to try to take care of the existing mental health needs, behavioral health needs.

And this is the slide from a large study done a couple of years ago that looks at people who living in the community, in the United States who have a diagnosable mental health problem. The study took a look at if you're an adult living in a community with a diagnosable mental health problem, what is the likelihood that you've had treatment for a behavioral health problem in the prior year and the answer on this slide.

It's basically found that almost 60% of all the patients with a diagnosable mental health problem had no treatment whatsoever in the year prior, 41% so for 4 out of 10 had some treatment for a mental health problem.

And if we asked where that treatment occurred, 56% of the treatment was in general medical settings and 44% was provided by a mental health professional. And that's kind of striking to those of us who are mental health professionals because what it basically tells us is that, in any given year, only 2 out of 10 patients who have a diagnosable mental health problem will ever see a mental health specialist.

That's where we are and this is in part what has led us to the conclusion that most mental health services actually if they are going to be provided, they're not provided by mental health professional in a specialty setting, but they're provided in general medical care.

And in as far back as the mid-1980's people were realizing that in the United States really primary care is the de facto mental health system for a large group of patients.

Let's go on to the next slide. Now from a patient's perspective, the picture looks a little bit like this. So I'm trained as a mental health provider. Most of what I worry about, think about is, what is the patient's mental health or substance abuse problem? That's kind of my lens that I look at the world through.

And the reality is, my patients may have a mental health or substance abuse problem but they also very commonly have other chronic medical problems. They may have diabetes, they may have heart's disease, they may have Parkinson's disease or epilepsy or another neurological disorder, they may have cancer.

Many of the patients that we see who have emotional pain and distress associated with a mental health or substance abuse problem also have chronic physical pain. There's a very, very big overlap between these two.

And along with all of these, we have very high rates especially in the patients with mental health and substance abuse problem of what you might call unhealthy behaviors. High rates of smoking, high rates of obesity, very high rates of physical inactivity.

And in many ways, this is sort of a snapshot of what the reality looks like for a Medicaid client who might have a mental health problem. They have that mental health problem and they have a number of other problems.

And this is from my perspective as a clinician the single strongest argument I can make for why we should have the care for the mental health problems and the medical problems better integrated than what we have now. Because this is what the patient has and this is what the patient needs.

And if we break all of that up, it doesn't work all that well. If you could go to the next slide. So what I've drawn here is a little bit different. This is sort of my caricature depiction of how we're actually organized to provide care to that patient who has all of these overlapping needs.

You know we set ourselves up, in a very, very style old healthcare system. So the patient - I'm thinking now about a particular patient who may be a person - a Medicaid patient in his 50s who has a serious diabetes, has maybe developed a serious depression after a loss or some other stressful life event, may have a problem with alcohol and what we would do for that patient, we will say we have primary care services for you.

If you're diabetes is too difficult, we'll send you into a diabetes specialist in a different place. If you have serious mental health problems, I will send you to a community mental health center.

If your drinking is too much of a problem we will send you to yet another place that will provide alcohol and substance abuse treatment. If you're having needs around social services, we will send you somewhere else for getting some social services. If you're unemployed because of this terrible constellation of your diabetes and depression that you're struggling with, you know, we send you to vocational rehabilitation services.

And there's a whole range of other community based social services that this patient might need. And the way we organized ourselves is, sort of the opposite of what we are hoping to do these days which is to be patient centered.

I think we organized ourselves to be provider centered. These are all drawn in little silos. I grew up on a farm so I like agricultural metaphors. And in every one of those silos, what we do is we provide very good care for one little piece of that circle.

One of those circles that I showed you on the earlier slide but it doesn't add up very much and it's very, very expensive way to do it, and our patients are - this is a quote from a client of mine a couple years back, what they're saying to us is, "this seems to work for you but it's not working very well for me" and besides everywhere I go I'm pretty much being asked the same questions, don't you guys talk to each other?

So this is a very strong reason for me to say, is there something we could do where we would organize our services so they are a little bit more patient sensitive and when we do that, might it be better for the patient, might it even be more cost effective and that's what we're going to talk about for the rest of the morning here.

Let's go to the next slide. I'm going to pick out one common mental health problem and sort of say a little bit about how we actually provide care today.

I'm going to pick on depression. Depression is a common problem and if you're a person living in the United States today, with a serious diagnosable depression, a clinical depression about 10% chance in any given year, you will see a psychiatrist.

There's about a 4 out of 10, so a 40% chance that you will have some treatment for the depression in the primary care doctor's office. So much more likely to get treatment in primary care than being seen by a psychiatrist or a specialist like that.

In fact the modal treatment for that person is either no treatment or if they're going to seek treatment, they will be one of almost 30 million people who walk out of a primary care doctor's office with a prescription for an antidepressant medication in any given year.

The sad part of that is, so there's a lot of prescribing and these prescriptions aren't always cheap but if we follow those 30 million people out, the research we have available will tell us that only about 1 in 5 of these people will really get a lot better, the 20% will get better. So the caption on this slide, I don't know if you can see it on your screen, is of course you'll feel great.

These things are loaded with anti-depressant. So we do lots and lots of drug treatment. But it's not always all that effective.

Let's go to the next slide. This is perspective from our colleagues in primary care. They will all say we know that we have all of these patients. They come in to us, they're asking us for help and when primary care providers were surveyed a couple years ago about their satisfaction with access to mental health services for their patient, 2/3 of the primary care providers surveyed that I have lousy access to mental health services for my patients.

The caption here is, we couldn't get a psychiatrist but perhaps you'd like to talk about your skin. Dr. Perry here is a dermatologist. So lots of complaints from primary care about poor access for specialty mental health services for their clients.

Next slide please. So we need to do something that works better than that because we have a lot of need, we're spending a lot of money in a lot of these different stylus and we need to try something more effective.

So let's think about what might work better. I'm going to start with a slide on what I'm calling now good ideas that we actually now know don't work. So these are things that I have participated and research on, others have done that are done a lot and when they're put to a tough test, it turns out they are good ideas but they really don't make much of a difference.

The first one is the concept of screening for depression or other common mental health problems in primary care so there's been a lot of studies and a lot of money spent on things. Well let's just put mandatory screening for common mental health problems into every primary care provider's office as we train all of the primary care providers to do screening for depression.

And it turns out, there's some 20 years of research on this and the bottom line here is, it's a fine thing to screen for depression or alcohol abuse or another mental health problem in primary care but if you can't provide good treatment for that problem, just finding it isn't going to get the patient better.

And there's a Chinese proverb that a friend of mine shared with me a while back that says well that's not a big surprise. And the Chinese proverb is, you can't fatten a cow by weighing it.

So it doesn't matter even if I screened you five or six or eight or ten times a day, you're not going to get less depressed because of that. So screening is a very good idea but it needs to be followed by a really good treatment.

And I'm saying that, it sounds kind of obvious now but I'm saying that because a lot of money is actually being spent on screening programs that I don't think have good treatment following it.

The second thing that there has been a lot of research done and lot of well-intended efforts including some of the work we have done here over the last 20 years is on training primary care providers and mental health providers to be better at what they're doing.

And it turns out, you know, just knowing what to do for depression is often not enough. As the providers really need systems to help them carry out the treatment. It's not good enough to teach them this is how you treat depression.

The last thing I will call out as I think something that is very tempting and very compelling when you hear the story is the notion of telephone based disease management and the reason I want to call that out is because there's a lot of money being spent including in virtually every Medicaid program in the country that I have talked to over the years on some form of telephone based disease management. So the notion here is, I'm going to have a small bank of nurses with a good protocol and a computer who will work behind the primary care doctor, behind the scene, there's a client to make sure that their disease is managed well.

And it has been studied and there are now some very, very large studies of these purely telephonic disease management programs including some 16 studies with about 300,000 Medicare recipients.

The conclusions are very clear. These programs are not helping get a lot more patients better and they're actually also not saving costs despite what the industry might tell you and I will put two references there.

One of them from the New England Journal of Medicine and one of them from (Gemma) and I would invite you to read those papers if you have doubts about that.

So these are things that seems like a great idea, were well tested but they don't work. I want you to think about that a little bit because I would bet that a lot of us are doing a number of these things.

So now let's go to the next slide. I'm going to introduce now a concept that has been tested that actually does work quite well and on this slide here are some of the key references if you look to get into the evidence based.

There are now over 80 randomized controlled trials. So these are large studies where we make an experiment where half the people will get, you know a new intervention and the other half get a usual care control intervention.

Of a concept called collaborative care, that I'll talk more about, and when that has been tested, it has been shown consistently to be more effectively for the treatment of common mental disorders such as depression and anxiety than what we currently do which is our care as usual.

And that literature got some rights very nicely a couple years ago by a British researcher in the archives of internal medicine. This past year, there has been an update of that meta analysis that included some 70 studies done and commissioned by the CDC that was published in American Journal of Preventive Medicine.

And this year they copyright and collaborate it in the UK, did a very nice meta analysis that looked at 79 randomized controlled trials with over 20,000 patients that basically concluded that there is a very strong evidence that well integrated collaborative care is much more effective for treating a common mental disorder such as depression or anxiety than the care as usual that we currently we provide.

There's also a data on cost and the conclusion is also pretty robust that collaborative care is more cost effective, a way to try to provide services than sort of the current fragmented care as usual. And I put some references there for you to look at as well.

Let's go to the next slide. So let's talk a little bit about, what is this collaborative care how does this work and I'm going to try to explain that around the picture that you have on your screen here.

One of the 79 studies was study that I had the opportunity to lead some 10 years ago. It was very large, randomized controlled trial called the IMPACT trial. And what we said there is many of these patients are not coming to mental health specialist. They're presenting in a primary care doctor's office with often a number of medical problems and maybe a severe depression on top of that.

And what can we do to help support that primary care provider to be more effective in treating this depression alongside the medical conditions they need to be treated.

And the model we tested is, the collaborative care model and what we did there is, we took in 18 primary care practices in 5 states around the United States. We did an experiment there.

And so we trained a staff member in every one of those 18 primary care practices to work as a mental care manager and that could be a nurse or a licensed clinical social worker or a psychologist whose job was to work in the primary care practice alongside the doctor to help the doctors or the nurse practitioners there - take care of a panel of patients who had an identified mental health problems such as severe depression.

And the way it would work is, the doctor would introduce the patient in the clinic to the care managers, say this is our behavioral healthcare manager who works here with me in the clinic to help me take care of your depression.

And what those care managers will do, they would spend time with their patients doing some patient education. They will use standard outcome rating measures. In this case we use a tool called the PH29. Every time they would have a contact with the patient, they would assess to see if this depression is getting better.

If it's not getting better, they would know we need to do something very different. And this is very different from how we practice the care as usual today.

In care as usual today, we might start the patient on treatment and then when they come back we would say how are you feeling? And often times you're a nice doctor and the patient is a nice patient and they say, I'm a little bit better. And you would say, that sounds good. Keep taking your medicine.

It turns out, that's not good enough because oftentimes the patient may not be all that much better. And if we do a good rating and that can be done in a couple minutes before the office visit even, we will have much harder data to say, well the patient is a little bit better but they're still struggling with a lot of depression symptoms.

And when that is the case, we taught all of these providers in these 18 clinics that we work with to use some standard treatment protocols that involve brief evidence based counseling or psychotherapy technique or medication management, where the primary care provider would use evidenced based strategies to use anti-depressant medication.

And the care manager would follow closely with the patient to make sure the patient is taking the medications, they're not having side effects. And then we added another component to this model and that is we said not all these patients can see a psychiatrist.

But what we need to do is, we need to have a psychiatrist available to this team when the patient is not getting better to say, what are we missing? What else do we need to do here? So the way this was set up is, we put all these patients into a web-based, electronic registry database.

So when you had a patient in your primary care panel, they were tracked in this database. And the care manager would see when patients are not improving and once a week, we had a designated psychiatric consultant who would either in person or on the telephone look at all those patients that were in the database that were not improving and would make recommendations to the primary care provider about what to do different. So psychiatric consults were also available to the practice by telephone if there were urgent questions that came out in between.

And about 10% of the patients, after being reviewed by the psychiatrist, the recommendations would be I can't make a good recommendation. I need to see this person for a consultation or they may need referral to a higher level of specialty for mental healthcare.

So that's the basic model and the study we did was we took 1800 patients in this 18 clinics and we randomly assigned every other patient to have access to this care management resources in the practice, backed up by the protocol and the consulting psychiatrist and the other patients we're seen in the same practices by the same doctors without the access to the care manager or the consulting psychiatrist.

So it was a randomized control trial. And if we can go to the next slide, if we follow that group of patients 12 months and we did independent assessment to see how well is their depression improving? What we found is, very interesting.

So remember all these practices, half the patients are in care as usual control, and the other half are getting the impact care management services, the collaborative care.

And if you look at the blue bars on the slide, a year later on average 19% of the patients who were getting the usual care were substantially improved with regards to their depression.

When we add it, the systematic measurement tracking consultation by the psychiatrist in treatment changes when patients were not improving, we more than doubled that to around 50%.

So putting this kind of collaborative care model in placed in these 18 practices more than doubled the likelihood that the person was no longer depressed a year later.

If we go to the next slide, we also look at what does this do to patient's physical functioning because this was group of patients who didn't just have depression, they had depression and diabetes or depression and heart disease, on average 3 1/2 chronic medical disorders which is pretty typical.

And what we found is our usual care patients experience the gradual decline in their physical functioning over the next 12 months. Whereas our patients who were getting the integrated care management, the collaborative care for depression, they actually saw improvement in their physical functioning.

And this slide shows you the data 12 months, that we actually published in the British Medical Journal, even 24 months out, we still saw a much better physical functioning in the patients who had had the collaborative care for depression.

Now the next slide addresses this from a healthcare cost perspective and I'll spend a little bit of time on that. So what we did is, we followed all the patients in this study for four years and looked at their total healthcare cost.

Now half the patients in this program, in this trial were in a capitated healthcare arrangement. So HMO like Kaiser for example or a VA essentially capitated. The other half were in more traditional fee for service arrangement, Medicare, Medicaid and a very small number of patients also in commercial health plan.

When we look at the total healthcare spend over four years, it turned out this is now about six or seven years old, this data. So the numbers are probably a little higher today. It was about \$30,000 for the average client.

And we broke them up into the folks who saw our intervention and the people who were in the usual care control group and what we found out is, it cost about \$522 for us to provide for the average participant a 12 months' worth of collaborative care.

And then we looked at every other category on healthcare cost and we see - do we see changes in the healthcare cost? And what we found is, over this 4-year follow-up period every single category of healthcare cost, we actually see lower cost in the folks who had access to the collaborative care than those who were in our usual care group.

And at the end of the 4-year study, what we saw is actually a \$3,000 savings. Even after we account for the cost of the program. So from an ROI perspective, we find about 6 1/2 dollars saved for every dollar invested in this collaborative care program.

We go to the next slide. So what we learned from this is when you do this work in a much more integrated collaborative way where you have somebody in the primary care practice, who can work alongside the medical provider and provide good integrated services and has access to a specialist who can back them up when there are difficult questions. You can more than double the likelihood that the depression gets better.

You can also find and I didn't present this data but we published it in another paper in (Gemma) less physical pain, better physical functioning, a better overall quality of life and when patients and providers were surveyed they were much more satisfied with the collaborative care approach than with the usual care approach.

And finally we found that in fact this was not only more effective, this was in fact more cost effective because we've got more satisfied patients, better health outcomes and a substantially overall lower total healthcare cost.

So we didn't know this back then, this is what of course we're all calling today the triple A. The patients who were very happy with this but I think this is a fine example actually, a pretty hard data in fact, if you do this right, you can really go and get to the triple A.

Let's go to the next slide. So we finished this very large study. This is one of 79 trials that essentially tell us the same story and we have done a number of other studies in other high cost populations. We have looked

at this in diabetics with depression, in cancer patients with depression, in patients who have arthritis and depression and in patients who have heart disease and depression and the studies are always telling us the same thing.

These are the studies we've done since the original study, that this kind of a collaborative approach, the caring for the mental health and the physical health problem will get us better outcome.

Let's go to the next slide. So this is an effort on my part to try to summarize what we've learned from, you know, a good number of years of work in this area and that are, if you ask me today, what are the principles - the key principles that you know, underlie an effective integrated behavioral health program, I would say these are the five.

The first one is the notion of patient centered care or collaborative care and the point I'd like to make here is collaboration is work, it's not just having a mental health provider co-located in a primary care setting.

There are many examples where people have co-located a mental health provider into a primary care setting and if they're not actively collaborating, we're not seeing the same benefits that we saw in this collaborative care study.

The second one is the notion of population based care. It's very important that we actually keep track of patients to see are they getting better or not. Because many people come in, they start a service, they don't follow up. They're out of sight, out of mind. Those are the patients that are very expensive and we don't do very well with them.

The third core component is the notion of measurement based treatment is targeted. The key here is that, we're not just starting treatment and saying let's see if it's better or not. We're actually systemically measuring every single time the patient comes in, is this getting better and if it's not getting better, it's not am I a bad provider or do I have a bit of patience?

It's basically, what else do we do? That's when we need our specialist to consult with, that when we need to use a different protocol. And if we pursue that measurement based treatment to target strategy kind of relentlessly, we can get a lot more patients better even with difficult mental health problems than we do in our current approach.

The fourth key point is the notion of evidence based care; we need to use treatment that are evidence based. There is much treatment that still happens in the area of mental health that we really don't have strong research evidence for that it would help even under ideal circumstances.

The last point is the notion of accountable care. I'm a very strong believer that we need to find ways to help providers be accountable and reimbursed not just for the volume of care they're providing but also for the quality and the outcomes. And I'll show you a couple of slides at the ends of this presentation that will speak to that.

Let's go to the next slide here. So we've talked about a bunch of research. I think I've made the case. I hope I've made the case. There's a very strong evidence -research evidence that these approaches work. And I'm going to talk a little bit and finish up with some comments on how do we take this knowledge, this research and translate it into practice?

And this has turned out to be I think harder than to do the original studies. You know, large scale practice change are very, very hard. So I have a quote up here that a friend shared with me when I complained about how hard it was to help large healthcare systems, taking kind of evidence that we produced these researchers and put it into practice.

I would say sort of the last 10 years, most of the work in our group has not been on doing these studies but really figuring out what it would take to implement and scale up programs like this in a big way. So I'll say a little bit about that.

Let's go to the next slide. We have in our center here work with a little over 600 clinics just in the last couple of years to try to implement these kinds of evidenced based collaborative care programs. We've trained well over 5,000 clinicians in this approach now.

And I'm going to share a little bit of that experience with you. If you can go to the next slide. There are a couple of large scale implementations that I would you know, point out to you and some of them maybe in areas where you're at.

We have a very large example of an integrated care program like this here in our state in Washington called the mental health integration program. This is essentially a managed Medicaid population.

What we provide these kind of integrated collaborative services in a little over 130 clinics and we have data on how well that works on about 25,000 clients to date from this work over the last couple of years.

There's a program in the state of Minnesota that is also a collaborative care program that is drawn on the exact - built on the exact same evidence base and that's called the diamond program. This is a program that's supported in Minnesota by six commercial health insurance plans. And they are providing these integrated services in 86 clinics with a little over 400 doctors and they have served about a little over 10,000 patients.

We've also worked with large healthcare systems in California, in New York, in Texas and in Alaska. I'm going to just give one example just to give you a bit more of a sense of what this might look like outside of a research setting and more in a real world setting and I'll talk a little bit if you could go to the next slide about our Washington state mental health integration program.

This is a program that is funded by the state of Washington as a managed Medicaid program and it also receives some funding here Western Washington from the largest county here in our state, that's King County, that's the area around Seattle. The public health department here in King County adds some funding to this program through a tax levy.

It's administered by a health plan in our state called the Community Health Plan of Washington. It's a non-profit health plan and in partnership with us here at the AIM center and we initiated this program in 2008 in Western Washington - urban Western Washington and King and Pierce County. That's the Seattle and Tacoma area.

We started it in about 29 clinics and then over a year or two have expanded it to well over 100 community health centers statewide and we now have some data on about 25,000 clients served in this program. There's a web link if you'd like to learn a little bit more about this particular program that you could take a look at, integratedcarenorthwest.org.

If you could go to the next slide, this is a picture of our state and this is a slide I've got from the community health plan of Washington. This is the network of clinics. You see most of them are concentrated around the big urban areas in western Washington, Seattle, Tacoma, Everett and the rest of our state is very rural, in some counties a frontier and we have at least one community health center in virtually every county in our state where we have implemented this kind of a collaborative care program.

And over the last couple of years, we have served about 25,000 clients with what amounts to about 5 FTE consulting psychiatrist. And the reason I'm pointing that out is that's a very, very different way of using an expensive specialist.

You know this is much more a public health or a population focused model. So there's no way with a small number of psychiatrist, I could serve a group of patients that are that spread out over a very large state. And really make a difference.

But in this kind of a systematic approach where we have protocols and train people in place in the clinic and the psychiatrist role is really to systematically review it, back up and when it's too difficult, see the

patient. You can actually leverage what is an expensive limited resource especially in our area which is a rural area, very, very effectively.

Let's go to the next slide. The way this looks like in the clinic is, we have in every amount of the clinic, this basic structure in place. We have the primary care provider and a patient. We add two new roles to this team in the clinic.

All of these clinics have a trained behavioral healthcare manager and each of these teams is appointed to a consulting psychiatrist whose job it is mostly to work with that care manager but also to work and consult to the primary care provider who's doing almost all of the prescribing for these patients.

In some clinics we have other behavioral health clinicians. We might have a chemical dependency counselor or a social worker or another kind of mental health professional depending on the clinic.

And then are patients that are just still too challenging even for this kind of an augmented team in primary care that really needs you know more in depth, more sophisticated specialty mental health treatment, substance abuse treatment, you know, services in community mental health centers if you have a patient with a severe persistent mental health disorder.

Well we might start in primary care and we might realize we need to get extra help and then what we would do is, and this happens about 20% of the time in our statewide program we would then refer to these extra services.

But we would still try to coordinate the behavioral healthcare manager in primary care. We'll then still want to try to coordinate the services that are provided in these specialty mental health settings with the services that are provided in primary care so that we don't become this very fragmented approach.

Let's go to the next slide. In this particular instance, we use our web-based registry tool to track all of these populations of patients across all the 130 participating clinics and that helps us keep track on whose getting better, who's not getting better.

If patients aren't getting better, that helps us identify those folks who really need to have those psychiatric consultation. And that's been a very, very helpful thing to have.

Let's go to the next slide. Very good. So a little bit of data on who we have seen so far. This is a data that we've presented a while back in our state. What we're finding is, the majority of patients we're serving in this program have a real mixed of chronic physical condition, mental health condition and alcohol and substance abuse problem.

This is a model patient. And this is the best argument I can make now that we've done this for a number of years of why we need to have these services be better integrated because you see the tremendous overlap here between these circles.

It's the rare patient who has only a mental health problem or only an alcohol problem. This is a strong argument from my perspective of why we should have these services more integrated.

Next slide please. These are the diagnosis we're seeing in our Washington state program. We're seeing a lot of patients with depression, anxiety disorders. We've seen a surprisingly high number of patients who have serious post traumatic stress disorder and some of this is - most of it is not combat related. You know its other serious traumatic life events that people have had, that had a big impact on not only their emotional health but also on their medical health.

We see patients who are primarily struggling with alcohol and substance abuse problem and we have a surprisingly high number of patients who have pretty serious mental health problems such as bipolar disorder. About 45% of the clients that we serve in this program have thoughts of suicide at the time that they joined the program, that they come into the program.

And the reason I'm pointing that out is this is not a group of worried wealth who'd like to access mental health services in primary care. This is a group that has serious mental health problems they are really struggling.

Let's go to the next slide. The last couple of slides are trying to think a little bit about the concept of accountable care and what might it mean in the context of a program like this.

One of the experiences we had when we launched this Washington state program is we started that program in 2008 and we trained providers in 29 clinics. We started seeing patients and we looked at the outcome data that we were getting and we said this doesn't look quite as good as what we saw when we were doing this in a research setting.

And as a researcher, I said, look that's just how it goes. You know, you test an idea, it looks good in the research and then you put it out in the real world and it's not working all that well. There's a big voltage drop.

And one of the things we struggled with is how do we help make this very real world program, a very, very real world patient as effective as what we might have seen in our research programs. And one of the things we worked on with the health plan in this case is, let's put some of the payment - in this case 25% of their payment to the clinic for providing the services at risk for making sure that the patient's get better.

And so what we did is, what the health plan did is starting in 2009, 25% of the clinic payments were put at risk for meeting a number of quality indicators. And they were basically straightforward indicators that said you got to have at least two contacts a month with every patient who is active, involved in the program.

You either show us on the standard ratings scales that we're tracking in our tool that the patient has gotten better with their depression or if they haven't gotten better, that you've got them on this psychiatric case reviews and we've made a change of treatment. Because a lot of what we saw is, patient get start on treatment will continue treatment and we're paying for a lot of treatment but the patient doesn't get better.

And what we would say here is, it's okay if you have sick patient who doesn't get better but you just can't keep doing the same thing. Show us that you made a change.

And then finally, one of the quality indicators was about medication reconciliation. Doing that at least once a month because we have a lot of patients who were getting a lot of medications from different providers that we're not well coordinated.

So let's go to the next slide and see how well that works. So what you see on this slide is, and we published this in the American Journal of Public Health in 2012. What we have is two curves here. This is what's called a survival analysis.

This is looking at a large number of patients in the program with depression. And we're looking at the number of weeks it takes for the depressed patient to get better and the blue line is what we saw in this program with 1800 depressed patients before we made this pay for performance a change.

And what we saw is eventually if you wait long enough, we could get about 75% of the depressed patients better but it could take a long, long time. So for half of them to get better, it would take over a year, over 64 weeks.

And after the pay for performance program was put in place these clinics worked the program a lot harder, they made a lot more of these psychiatric consultations. They made a lot more active treatment changes and the curve shifted quite dramatically to the left so what we saw was that 6000 patients that constitute the red line, this is after the pay for performance change we now see the patients get better but they get better much, much faster.

So for 50% of the patients to be approved, it now only take 24 weeks and that's a huge difference for somebody who struggles with this and in terms of the cost effectiveness of the program, when you have that person better, you can go on and take on your next patient.

Let's go to the next slide, the bottom line here is what we have learned from this work over the last 10 or 15 years is this approach of integrating mental health and behavioral health care using very good systematic collaboration between mental health and primary care provider is cost effective way to try to address the big mental health burden from both mental health and substance abuse needs that we see in Medicaid and other high risk population and I believe that state Medicaid program can leverage health homes that we're now building as an opportunity to try to help implement these kinds of evidence based collaborative care program.

Next slide. I think that's my last slide. Thank you for taking time to listen and I look forward to hearing from the rest of our panelist. Thank you very much.

Allison Hamblin: Thank you Dr. Unutzer for presentation rich with information and there's a lot to get through there so I really appreciate your hustling through it and sharing as much as you could in a timeframe that we had.

So as mentioned at the outset, before we jumped into the open Q&A from our webinar participants today. It's my pleasure to introduce an initial panel of discussants who will share some thoughts on their experience implementing the collaborative care model. And I know have the pleasure of introducing each one.

So first Dr. Benjamin Druss, a professor at the Rollins School of Public Health at Emory University who among other things have extensive experience as a researcher specifically looking at integrated models for individuals with serious mental illness. So it will be truly interesting to hear Dr. Druss response to how the collaborative care model can apply and be used to improve integration of care for individuals with serious mental health needs.

We're also joined by Dr. Henry Harbin, an independent consultant and formerly the CEO of Magellan Health Services and manage the Hebrew Health Organization.

Dr. John Kern who is the Chief Medical Officer of the regional mental health center in Indiana who has extensive experience implementing the collaborative care model in community mental health settings and can speak from that perspective.

And finally Dr. Virna Little as the senior vice-president with the Institute for family health in New York where she has been involved in implementations of the collaborative care model in community health center settings.

So as suggested we have representation in our panel here from really the span of pairs with interest of the model and stuff for implementation experience in both the primary care system and the community mental health system. Both serving and taking that population. So welcome to all of you and Dr. Harbin, I'll start with you.

Again as our sort of representative payer in the mix here, health home models as you know are currently being developed and deployed across the country in Medicaid programs. From a payer perspective, can you speak to the value of implementing the collaborative care model under Medicaid health homes or other contrast?

Henry Harbin: Thank you Allison. Yes, this is Henry Harbin. I believe there is a couple of points I think from the payer perspective, especially from a Medicaid directors point of view. As it is well documented what Jurgen presented that patients have physical medical patients that have one or more chronic medical problems who have a co-morbid psychiatric or substance abuse disorder, significantly add to the medical cost, to the physical cost of these patients.

Both in terms of their not getting better, quicker to their additional expenditures on both in patient, pharmacy and out-patient cost. So we know this is a big problem and this is not just a problem in terms of impacting medical cost from people with severe mental illnesses but also people with more common, let's say in a mild to moderate behavioral disorder category.

But the second point is that we have a lot of health problems that we know, that we have in the general health care system. One of the nice things about this is, we have a problem but we also have a fix. This rarity that we have such a well-researched and well-documented evidence based intervention as we do here with collaborative care intervening with primary care that with 80 plus randomized controlled studies and multiple studies from a prospective basis that show these savings that Jurgen outlined in one of these but there are several others that showed medical cost savings as well as improvement in outcomes.

So I'd like to look at this from a payer point of view that we actually have a low tech and low cost well documented intervention that when applied will significantly improve the clinical quality outcomes but also save a fair amount of money, 6:1 investment is a pretty good savings.

The third is well why, what is the payer contribution? How could they do more particularly on the MCO or the Medical Care Organization and the Medicaid agencies to facilitate adaption of this?

Well one of those is the need to be flexible in reimbursing for the several categories that aren't routinely reimbursed in a fee for service environment on the health care side. And those three areas, they are all covered but these are the areas that generally are not reimbursed.

One is the cost of screening and tracking of outcomes like using a PHQ9 for tracking depression as well as other instruments that are standardized. That's the cost to primary care clinic. It needs to be reimbursed like a lab test. It's not very expensive but that is also a barrier to implementing this evidence base program.

The second is the cost of the care management services particularly those that are none face to face. This is traditionally not reimbursed in a fee for service environment.

And then thirdly is reimbursing for the psychiatric consultation which usually a phone based not face to face and this is often not reimbursed. Now these are not costly services but in order for a payer to implement them, they need to have flexibility of payment and this is probably one of the biggest barriers to reimbursement.

I think I'll add one other element that has I think made it difficult for Medicaid agencies in particular to implement this model which would have significant savings on the general health side, general physical health side.

And that is often the Medicaid agencies, you know, rely on their state mental health or county mental health behavioral health leaders to guide them on priorities and whatever the state practices to implement.

And often the public mental health leaders, this is not true across the board but many of them are not as aware of this collaborative care intervention with primary care. So that they often bring this up to the director of Medicaid and other Medicaid MCOs for implementation.

Another is that many of the public mental health leaders have been more of an advocate for the dollars for the seriously mental ill or serious substance abuse folk which is an important priority. This population which doesn't totally only include that population, sometimes doesn't get as much attention when the leaders that are going to stay for a county or coming forward to their Medicaid agencies.

So I think it's really important that they'd be exposed of this from the similar part and other pieces of information that this could be actually one of the things that you could do in the behavioral area which will probably have the biggest impact on your medical cost. Back to you Allison.

Allison Hamblin: Thank you Dr. Harbin and given your important points in particular on some of the limitations in reimbursement that exists for this model historically is such an opportune time to highlight that to the

extent these types of models can be implemented under a health home construct. There are new flexibilities available to states and our partners which is one of the reasons that we are excited to take care of this model under the health home rubric for this event so thank you for that.

And of course Dr. Harbin you'll stay with us and should feel free to chime in as we move to the rest of the discussion. I will ask the panelist when I'm not directing a question to you; you can please mute your phone so we don't get any background noise, thank you.

So Dr. Druss, turning to you again as researcher with particular interest in the population with serious mental illness. There's been including in Harbin's comments a lot of thought and I'm sure reactions and questions in the minds of participants about how this model relates and can be used for individuals with serious mental illness and how these can relate to efforts to promote integration that are happening within the specialty mental health setting.

And so my question to you to kick this off is can the lessons from research on collaborative care be applied to improved care for individuals with serious and persistent mental illness?

Benjamin Druss: Yes Allison, they can for the most part approaches to improving physical health and healthcare for individuals with severe and persistent mental illnesses are similar to the collaborative care models used to improve treatment of common mental disorders in primary care.

And the five core principles that Dr. Unutzer described applied to provision of good care for person's with severe and persistent mental illnesses just as they do for people with depression treated in primary care.

The similar team based approaches to improve care, of course the focus in specialty mental health settings will be on improving medical outcomes, those will be the target, hemoglobin A1c, blood pressure, serum cholesterol and often the center gravity of work here is provided is in these community mental health clinics for patients receiving mental health services.

There are some ways in which improving health in individuals with severe and persistent mental illnesses isn't just a mirror image of treatment for depression and primary care, poor physical health in these patients is partly due to lifestyle factors such as smoking, exercise and dietary behaviors so interventions commonly also target these health behaviors along with improving medical care.

And also people with severe and persistent mental illnesses have high levels of poverty stigma, other forms of social disadvantages. The models often incorporate a focus on these social determinants and look beyond the formal health care system as well as improving care within the formal healthcare system.

So it will be looking at issues like helping patients address basic social needs, helping them to find affordable healthy food safe options for exercise, getting to it for medical appointment.

But I would say those basic principles that Dr. Unutzer outlined apply really to care across the full spectrum of population and mental conditions.

Allison Hamblin: Thank you very much that's very helpful and I'm going to ask you one more question and I'll start with you and then I'm interested in hearing from a response from Dr. Unutzer as well.

And that is again first to you Dr. Druss, today, when it comes to health home implementations specifically, a common approach for states has been to develop one health home model for the specialty mental health system and another model based on primary care.

Again there are exceptions to this, I'm sure we're looking at different approaches, but this is one common approach that we're seeing play out across the country.

Can the principles of collaborative care be used in both settings or to bridge both systems?

Benjamin Druss: Absolutely. Health homes for people with serious and persistent mental illnesses typically need to span more than one physical space or one organization. Typically they include a mental health provider organization, one or more medical provider. It may also include community agencies as well.

And an increasing number of safety net medical and mental health facilities are now developing collaborative relationships to allow more effective coordination of care across the populations that they serve.

The models that currently in most widespread use, uses a partnership between medical and mental health safety network organization. Primary care organizations such as the federally qualified health centers sets up a satellite clinic inside of a mental health center providing primary medical care.

So it's staffed by a mid level provider such as a nurse practitioner or care manager but then they have the administrative and clinical support of the larger primary care organization so if there's a patient who needs dental care or an x-ray they can be referred back to the main primary care facility.

So it's not an either or question of specialty versus primary care but increasingly it's how those two types of organizations can work together to provide care across populations.

Allison Hamblin: Great thank you. Dr. Unutzer any quick thoughts, just on looking at where we are on this. We'd love to get your thoughts on this one, before we move to our next discussion.

Jurgen Unutzer: I see very much the way Dr. Druss described it and I think that's how it's playing out in the better example that you see. In our statewide program, we have gone to partnership approach so 130 some community health centers are closely partnered with some 30 community mental health centers and we in fact share a good number of client across these two settings of care and we use the web based registry tracking tool to actually help make sure when people move back and forth between those two settings we're all looking at the same dashboard, we're looking at the same outcomes.

We really are looking together across these two settings to try to make sure that the patients are getting better. The other examples I have seen at times seem very, very good examples of a community health centers, you know, extending their scope to be able to provide pretty robust mental health services for say, 60, 70, 80% of mental health needs and then partnering very well with a community mental health center that may be the site of most of the care for 20 or 30% of the population but then bringing some of their staff that can provide good medical services into that community health center.

That might be a nice segue for a going to John Kern who is a medical director of a large mental center in Indiana actually has been working that kind of approach for the last couple of years.

Allison Hamblin: Thank you for making my life so easy Dr. Unutzer it's great. I appreciate that. So Dr. Kern straight to you, here's your question as a medical director of a large community mental health center, what has been your experiences specifically with implementing these model?

John Kern: Thank you we've had experienced doing it in both directions and thinking about how to expand it out as Jurgen was talking about. The first thing we did about - for about five years, we've been running a behavioral health consultant program very much on an impact model where we have onsite staff and structured registry organized approach to the care of patients and psychiatric consultation with me as the consultant.

And we've been able to spin this up in a partner FQHC to the point we're seeing about 4000 events a year in our community and probably about in any given year about 1500 individuals in our county who wouldn't have been seen at all otherwise. Because most of these people are not interested in going to the community mental health center.

As Jurgen said, we've been able to expand out into - out from depression anxiety into the care of bipolar disorder and we have decided that there were many, many folks out there who needed care for this, who were never going to make it to our CMHC and we've been able to systematically take care of close to 500

patients in our setting fairly successfully. Because there are a lot of people who won't go to the CMHC or a lot of people who just somehow never make their way there who have been sort of drifting.

On the other side, we've also been a primary behavioral health care initiative grantee and so we have implemented a very similar but reversed model of care for the medical problems center for severely mental ill clientele and we've viewed the registry style approach and what Ben Druss talked about with the onsite primary care partner and that's been real successful.

And our most recent QI data showed 80% of our cases in our program have been able to document communication of some kind between our community mental health center and the primary care provider who's providing - wherever it maybe.

In our case we have somebody on site but lots of people get other care in the community.

The things that have really transformed our home business have been you know, the really very positive experience with the use of a systematic approach, with the use of consultation, with the use rating scales which I never really used before. And we've become more engaged with our community mission.

We were a community mental health center but you know, you're only our patient if you walk in the front door of the community mental health center and that's transformed to situation where we're beginning to make plans to think about how we can actually reach out to everybody in our community who's potentially our case.

In our county there aren't a lot of other providers. We're now - I'm now considering implementing a BHD program actually in my CMHC where we've been considering a merger or with our partner of FQHC or as we're doing right now actually applying to the FQHC ourselves so we can kind of spin this both ways in our own house.

The last thing I wanted to say is that in general these programs have been so well received by both providers and by patients that we stopped doing satisfaction surveys a long time ago.

It was no real point and several of the primary care providers that our partner placed where I'm going as soon as I hang up, to make a visit, are talking about maybe they want to be a psychiatrist because they think this is so cool. This is such an interesting work.

So the CEO over the FQHC is not too happy about this but I think it's pretty neat that the psychiatry has the promise of becoming a more interesting and attractive specialty at a time when we're really having difficulty recruiting an adequate number of folks into psychiatry.

Allison Hamblin: Thank you very much Dr. Kern. I'm looking at the time and I had a number of questions queued up for Dr. Little but I'm going to be very specific Dr. Little in turning to you.

As a director of behavioral health for large community health center program in New York. New York as you all know is one of the first states to implement a large scale health home model and then New York health homes are not tied to a specific place. They include networks of providers and are really meant to foster the types of community integration across provider settings that we've heard other discussants referred to.

So in this context, do you have experienced of the collaborative care model? You are operating in a state that has health homes up and running, can you speak to how collaborative care fits within broader requirements of health home to coordinate the full spectrum of medical and behavioral health and social support services?

And can you just talk to how you have applied this model in your health home implementation in New York?

Virna Little: Yes thank you. And I will try to be mindful of time. I'm actually in a unique position because we are and I am also operating a health home or one of the health homes in New York state and been involved in those initiatives across several counties.

And so I think for us it's been incredible opportunity to be able to really collaborate with community based organization and bring them into the network for the health home and really combine that with the collaborative care teams that we have in our medical centers.

And that's been a really interesting process because what's it done is allowed us to be able to engage the community network partners into some of the works that we're doing in the centers and particularly training around how to watch outcomes and the kind of rigorous care management that we've learned to do in the collaborative care model.

And really being very proactive in tracking outcomes. You know specifically you know, we talked about the PHQ9 and that's been I think something that has been very well received by both the network partners and the collaborative care teams in the centers.

And I think one of the things to be able to try to do going forward is to really involve the health home work with the collaborative care work and try to bring those two initiatives together so that we can really think about extending because to me, what the health homes do in many ways is to extend the collaborative care work that we've been doing in our medical centers into the community and involving network partners and community partners in a very different way than we have in the past.

And this has been incredibly well received by the primary care providers in our centers as well and we'll have always been very receptive to you know, the collaborative care work and really felt like the care management that we've done as a result of that work has been an incredible asset and really allowed them especially now when they're so overwhelmed with all of the measures and with the volumes of patients and also you know with the shortage of primary care providers.

You know the ability to have the care manager's work with them on the collaborative model and then now also to involve the care managers in the health home has really been an incredible experience and I think that there's a lot of ways we're going to be able to bring those two together.

Allison Hamblin: Thank you so much for that. We are now going to open up the discussion with our key presenter and our panel to the group and I thank you all for all of the questions that have been pouring in throughout the presentation. We are clearly not going to get through all of them but we will do our best to cover what we can and to respond to some of the key questions that we don't get to in written form as a follow up to the webinar and we'll make those available to you.

So please be patient with us and thank you for that.

So one theme that's come through a lot of the questions and Dr. Unutzer I'll first field this to you is, how this model can be implemented in rural settings in particular given the unique challenges associated with provided access to service and service provision in rural settings? Can you speak to that? Can you speak to any changes or use of tele-medicine or any other enhancement for the model that are needed or that you've seen to be relevant in rural setting?

Jurgen Unutzer: Yes, I'm happy to talk about that, you know, we're the only medical school here in very large rural area in the pacific northwest, in a five state region that covers 28% of the landmass that the continental United States so we deal with this all the time.

And when you look at very rural settings, the access to specialty mental health care is very, very bad and so this is actually one approach where you can't take a mental health specialist that might be based in a more central area and in a sense leverage them so they can be helpful to you know a rural provider.

So in many of the counties in our mental health integration program for example, we train a staff member in the primary care clinic who may not be doing this full time but might be doing this part time. Or we might have a staff member that's shared across two or three rural smaller rural primary care clinics.

And working as the care manager, we train them up and we support them using evidence based protocols and a weekly review of all of their cases much of which is done over the telephone. And it can be hours away. It can be even across datelines in some cases in our case.

Where we have the capacity to review everyone of their patient who consulted the primary care providers and when we're stuck, we would probably add - and we do, do this a tele health consultation or we might say we've heard a lot about your client, we're not really sure what's going on schedule the client for a tele health appointment.

And then it's very easy for me actually from my office computer to be able to actually go into that primary care consulting group and then actually see the client, ask them some targeted questions and make a better assessment, a specialty kind of assessment and get the primary care doctor back in the room at the end of the consultation to say, what can we do here? How can we help?

And that can be a very, very effective way of leveraging a limited mental health specialist.

Allison Hamblin: That's great thank you. So a related question and I'm trying to combine some questions here to get too many of your needs in the audience as possible. And that is not too distant from the rural theme is, can you speak if there - in terms of scaling this and in terms of sort of core infrastructure required, is this model only viable for processes of the physician's size and scale or is this a feasible model for smaller practices as well?

And I'm just going to attach on a second part of the question and that is, what are the requirements related to having electronic health records for implementation of this model? Are they required? How do they sort of fit in to the registry of course that you talked about and so forth?

Jurgen Unutzer: All right I'll start with the practice size. You know, there are efficiencies when you do a model like this that are better in a larger practice. So if you have - we have done this in some very, very large primary care practices as sort of 40, 50, 60 primary care physicians practicing under one roof. There you have a number of care managers and you could have even an onsite psychiatric consultant that you can have some very, very nice efficiencies there and really manage a whole panel of patients with behavioral health problems.

If you're in a setting where you have a very small rural or a non-rural practice with 1,2,3 providers you don't have quite the same efficiencies but it's still quite possible to do this.

So even in the original impact research, we had some very small 1,2,3 doctor practices. And so what you do there is you train one of their staff members to do the care management and you provide them the access to the psychiatric consultant via telephone and that actually works.

You know it's not quite as efficient in terms of the numbers - some cases I get for example we do it an hour but it's still quite cost effective to do that.

In terms of the EHRs I would say, over the last 10 years, it used to be you know, very few of the practices we worked with have them, we'd say the majority of them have them and some of the EHRs have the capacity to do good panel management, who have registries built into them where they can see very quickly who are all our diabetic patients.

The harder question to ask is, who are the diabetic patients whose hemoglobin A1c is not under control? You can do the same thing with depression. Who are all our depressed patients? Who are the depressed patients how PHQs are not better?

Those are patients you want your attention focused on. And so some of the EHR tools have that capacity, some of them really don't have very good registry capacity.

But having the ability to track a panel of patients and call out those that are not getting better is really a key requirement. And if you don't have that in your re HR, there are a number of ways of having registries, they could electronic. But there is some fairly low tech approaches that can actually get the job done as well.

I think it's important to have a registry to be able to say, who are the people who need attention. It doesn't always require a tremendous amount of technology but the technology can certainly help.

Allison Hamblin: thank you very much. I would love to just turn that either one or both of those questions to our clinicians on the panel who have been part of implementations in community health center settings or community mental health centers or both.

So Dr. Kern or Dr. Little if you're still with us, and have any thoughts on particularly the EHR question and how EHR have linked or the registry functions et cetera in your settings that would be very helpful.

John Kern: If you've talked about it, I have been completely sold on the usefulness of a registry on the impact side and now is all excited about implementing it going the other direction for it to improve primary health outcomes.

It's been actually quite frustrating to find a product. We're still working on it. And so we've been forced to do this for the last 2 1/2 years basically with a paper process in terms of the registry function.

It's still worth doing it as we still have registry in our head but I'm looking forward to their being a more widely available electronic product.

Allison Hamblin: Virna anything?

Virna Little: Yes, I think the use of the electronic health records, I mean I think it's wonderful to have a registry but I think as you're going ahead and implementing a collaborative model to think about how your entering some of the work into your electronic health record and using, you know, reportable fields in sort of in - to help you track your work as well.'

When we started doing impact you know, almost 10 years ago now, we put the PHQs scores in as lab values. And even, you know the electronic health records have gotten a lot more sophisticated but if you really think about, you know, how you're going to track some of the services so how are you going to enter you know, your care conferences and your consultation, you know, with your psychiatry provider so that you can track those services and be able to get some reports.

So I think there's two pieces. I think there's the ability and the development of a registry piece whether it's in our EMR or not. And sort of thinking about how you know, the providers are in your collaborative care team share information, share records, you know are able to communicate and that you're able to track some of the services you know billable or not billable that you're providing us part of this and being able to track, you know, outcomes.

Allison Hamblin: Very helpful thank you all. So the - I know we just have a minute or so left. And I'm going to try and group one more set of questions first to you Dr. Unutzer and then if we have time to get thoughts from Dr. Druss in particular and anyone else on the call.

And that is related to outcome. Obviously there's quite impressive amount of evidence surrounding this model. We've gotten a bunch of questions on whether or not you've been able to isolate outcomes of the collaborative care model for specific subsets.

So Dr. Unutzer, I'm going to throw out of you one is for individuals in fee for service versus managed care. One is particularly for individuals for co-occurring substance use if you've any difference in outcomes for them?

And then the third question and perhaps the one field to Dr. Druss or perhaps Dr. Kern is specifically at looking at evidence for the model for those who have been served in the community mental health settings where the elements of collaborative care have been applied?

Jurgen Unutzer: I'm going to start with the first two. In the original research, we had about half the patients in fee for service arrangement and the other half in managed care arrangement. And when the model was applied, you know with high fidelity, they actually did not see differences in outcome between the fees for service as opposed to managed care approach.

I will say that the well organized managed care practices, it was a little easy for them to find their way to this kind of a highly structured organized systematic approach to care.

But ultimately when we did collaborative care using this kind of a protocol of the fee for service based just as much improvement from this compared to usual care as to the capitated patients.

As far as other sub-populations that we can comment on, you asked specifically about substance abuse? Yes we do have data on that. If you have depression and you add a serious substance abuse to that, on average the outcomes aren't going to be less well.

But they're going to be even more less well if you're in the typical - usual care setting so what I'm trying to say is, the relative benefit of this kind of a collaborative structured model is actually greater for people who have comorbidities than for people who have straight forward diseases because for them that coordination is even more important.

The ultimate outcomes might not be as good because you have, you know, two problems to deal with than one problem. But if I had limited resources, I would say I would give it to that more vulnerable sticker, more complex populations because they are the relative value from putting these extra care management resources are actually going to be even greater than more straight forward cases.

Allison Hamblin: Powerfully said. Dr. Druss or Dr. Kern do you have any comments on evidence of outcomes for this model or for its more general principles when implemented in the community mental health center settings?

Benjamin Druss: Yes, you know the literature is somewhat newer and not as extensive for the application of the model in people put serious and persistent mental disorders. We've done a study at around the same time the impact was done that looked at a team-based approach to improving physical healthcare in a VA setting which found a significant improvement in physical health and that it was no more expensive to provide that care than for usual care that they were - you know the cost savings balanced out the cost for the program.

And we did another study specifically in the community mental health center looking at care management as the base model using similar principles to the ones that Dr. Unutzer talked about that again sound improved outcomes including reduced cardiovascular risk and evidence of cost savings when you went out a couple of years.

So what I would say is, there's every reason to believe that the same principles that work for the management of common mental disorders in primary care can also be applicable to improving health of the people with serious mental illness and there are other evaluations you know both more for research ones and then demonstration projects that will be making to build that evidence based as well.

Allison Hamblin: Thank you very much and Dr. Kern I know I indicated I was going to turn to you, I realize you were able to share some comments before and I'm just looking at the clock so I'll thank you in advance. We'll follow up and see if there are other thoughts that you would have had added to the response.

I want thank you all, all of our presenters for sharing just a wealth of information on this mode land how it has been applied and implemented for populations really across the spectrum of need when it comes physical and behavioral health comorbidity.

I also want to thank our partners CMS for sponsoring today's events and I'd love to urge all of our participants to complete the evaluation that will follow the information you give us and the feedback is just incredibly helpful as we develop and further prepare for additional webinar.

So a sincere thank you to Dr. Unutzer and the team at the University of Washington and to all of our presenters today. We will be sharing more information at paper on this topic as mentioned earlier and look forward to being in touched with all of you in the future. Thanks again.

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