Amy Kilbourne: As David said, I’ll give a brief update on what we have doing in HSR&D as I’ve been acting director and then I’ll talk about QUERI and I confuse the two, my apologies in advance. Sometimes I wake up one day and I forget if I’m doing HSR&D or QUERI or both or one and the same, but that’s actually a good thing because there’s so much synergy and that’s probably something we ought to do more of.

I want to talk about some of our new HSR&D initiatives and things that have been very exciting that have been percolating this past year. The first has been Prime Care and Dave Oslin is our PI of this initiative. By the way, this is one of these areas where I think HSR&D has really jumped in early with clinical precision medicine, how to actually do it in the real world and moving beyond the data collection to actually understanding what it takes to provide return of results to patients and the provider communication.

By the way, although this was a very large initiative with 19 places and sites involved, the nice thing is that is the only Veteran program that paid for this initiative, so thank you MVP. In addition, we’ve launched several randomized program evaluations. These are really special in a couple of ways. One is they started before they were officially funded as service-directed research projects. They were funded using planning grant funding mechanisms. A way of starting things early, a way of engaging the partners sooner rather than later and in general I think that’s really going to be the way to go in the future, for us to just move forward and get these done.

And so, just to highlight that the four that are in the process right now we are conducting a randomized evaluation – or actually the PI’s are conducting a randomized evaluation – of the opioid risk management school, STORM and then in addition to that the suicide risk prediction model, Veteran-directed home and community-based services and then mobile apps. These four PI’s have done a terrific job and they’re supported by two great QUERI centers, PEPReC and CAPER, who are focused a lot on this evidence-based policy work on randomized evaluations.

Another area we’ve been wanting to highlight is our role in basically developing an implementation toolkit for engaging Veterans in research. I really have to thank the leaders of this, Sarah and Justine, for really pushing this forward and making this happen in our research community. And then in addition to that, we also have the community shared planning grants that were launched this year thanks in part to the leadership of Denise, Kristen, Michelle, Todd, Amy Rosen, and May Denning and folks from PEPReC, Steve Pizer and Austin Frakt and also from our Community Care, Leo Greenstone and Embalia Helia [?] and others. This has really been a very exciting and challenging adventure in understanding what it’s going to take data-wise and network-wise and understanding how to actually implement and understand what’s going on with Choice Action Community Care implementation. We’re really excited about launching this as well.

In addition to that I just want to acknowledge and congratulate our new researchers and residents. And so, many of you have had operational partners for many years and had your operational partners paid for an investigator here and there to be embedded into their program office. This is a formal way that HSR&D can invest in this type of mechanism. This is a formal way of making that matchmaking happen sooner rather than later and so we have folks involved with pharmacy benefits management, rehabilitation and prosthetics services, and a Veteran’s justice program. It’s a really great way of being able to add some resources into making these partnerships work.

This was a terrific opportunity for them and also something that was honed in on at the career development meeting yesterday as well. Dave alluded to some new ideas for funding opportunities and these are just things that have been happening in the last year or so and also things that may be continuing on in the horizon. I mentioned earlier the idea of having planning funds, the idea of having and starting out with this, and this is something that our VA cooperative stays program has done this already and so we’re just sort of replicating that, but it’s also done a lot in policy work, in national work around education, randomized program evaluations, and so forth, the idea of getting out planning funds first, getting technical assistance out with those planning funds to understand and make sure things are working and then going with the full-fledged grants.

And then in addition to that we are also planning as a first step what our implementation supplements and how are they operationalized. The idea is that; okay, you’ve finished your merit review, so now what? Can you have some additional resources to go out and implement it at scale and spread and maybe essentially get this plugged into your program office and so forth? In addition to that we have the RFA for suicide prevention – and by the way, from the career implementation supplements I really have to thank Courtney Windruff [?] for her leadership in making that happen – for the suicide prevention RFA, Bob O’Brien really took the lead on making that happen as well.

Our million-Veteran program data initiative; this is basically doing the deep-dive analyses of our MVP data resource and Mino Tanaka [?] has really been a great help in making that happen in terms of Dan Hages, our R&D connected and our NIH/DOD VA Pain management, we could not have done this without Ron Gionna [?]. This is a collaboratory RFA that came out this past year and we hope to continue further collaborations with NIH and DOD in terms of funding as well.

So, what have we learned from this whole process? I have to say that there are probably some lessons here that I think are going to pertain to what David said earlier and then moving forward. It’s really not just about getting involved with one operations partner. It’s oftentimes that we are the glue between different operations partners to make some of these big initiatives that are essentially what the VA is prioritizing happen. Essentially, sometimes you just have to get in there and work with different operational partners and build that coalition. That was something that we also learned from the core experience as well.

The planning phase and the technical assistance from our folks in central office and from partnered evaluation resource centers like PEPREG have invaluable at getting these planning grants up and running with these groups of investigators and teams of investigators, team science in terms of this process as well. The ability to adapt and to meet the needs and challenges of these new priorities are just permutations of existing priorities and what’s really on the horizon in terms of the VA and in terms of what’s happening with the transition to Cerner and also finally finding that story, so essentially every project you do has a link to a national priority goal and you can actually benchmark it with some impacts.

I mean this sounds a lot more complicated than what research used to be when I started in the VA like 18 years ago or something, but I think it’s also a very exciting opportunity as well. I think it reminds ourselves that not everything we do is going to be in this one-year path as well.

So, now I’ll go back and talk about QUERI. What have we done in the last year or so? Maybe you know our mission; we’re about improving Veteran health by more rapidly implementing research and practice. In our strategic plan we’ve had three goals. I’ll talk a little bit about how we’ve made progress on each of those goals. Last year, we’re really excited to report that we’ve implemented over 50 complex evidence-based practices in one year alone.

I say complex and evidence-based for a reason, complex because in many respects it takes teams of providers to make something happen like collaborative care, behavioral health integration, tele-health for PTSD and so forth. These are really important initiatives linked to national priorities and things that our QUERI program centers have been working on and we’re really excited about moving forward on these very quickly.

We’ve also been a part of major, national policy evaluations. There are over 50 bills right now in terms of Veteran’s health in some way, shape, or form. Some of them are more informed by evidence than others and it’s very important to have our QUERI investigators be involved or lead on to make sure that there’s evidence-based policy happening if we can. Finally, the implementation QI expertise; we’ve developed a very robust learning community.

I’m seeing Russ Plasco in the audience there, and it’s really exciting to have him involved and at this meeting because I would say that, one of the things – Russ, you probably mentioned this at the NIH DNI meeting a few years ago – how QUERI was one of the top achievements of implementation science. Thank you very much, but I have to thank the investigators who have made that happen because I have to thank the implementation science brain trust-wise in our national network of programs and partnered evaluations.

So, I’ll move on and talk about how we measure success. This is just something I want to touch upon and these were the impact measures that we’ve also in part adapted with our health services research and development centers of innovation in trying to align those with the thinking of what would the secretary or under-secretary want to know about what we’re doing. I think the most important area of our audience, of our chief customers as QUERI is that we want more front-line providers implementing evidence-based practices using implementation/quality improvement methods.

I think we want to have that goal really crystal-clear because in many respects we have QUERI focused on the patient care experience and patient involvement and sometimes the health system involvement, but I think the front-line providers are really the keystone between making things happen: big data implementation, Cerner – essentially we can’t have access to care without provider satisfaction. That’s something that Dr. Shulkin, Secretary Shulkin has mentioned over and over again, that provider satisfaction is important.

We’re also obviously very interested in the fact that are we leading to not only better care but policies are increasingly at the national level dictating what Veterans are getting in terms of their care: Choice Act, Comprehensive Addiction and Recovery Act – these are bits of legislation and QUERI in the process has really focused a lot more on not just evidence-based care but evidence-based policy for that reason. We really need to be at that table making the difference there.

Finally, is Veteran care improving? So, moving on I’ll talk a little bit about what our QUERI programs have been doing and just to announce it again, we have up to 15 programs with really innovative stuff happening here. I think one of the major transitions that have happened since our QUERI centers a couple of years ago are the fact that they’re working in very cross-hugging and high-priority goals. Maybe to highlight one in particular you’ve heard about earlier today is the Measurement Science QUERI, which is developing under Mary Foley’s leadership a common data model, OMOP, that was a very pressing idea a couple of years ago and is something that will be very important as we move forward with the transitions.

In addition to that, we’ve had a number of clinical impacts. I’m very excited about what virtual specialty care has done with the scale-up and spread of tele-psychiatry for PTSD or tele-health mental health, I should say for PTSD, what the Hero [?] health QUERI has done for peer support integration, improved QUERI, our pain and opioid management best practices – I can be here for hours – I probably can’t mention every impact every QUERI program has done, but these are just a few highlights. We really kind of have to say that each QUERI program is really touching upon each of the five secretary’s goals that Dave alluded to earlier.

I think in addition we also have to acknowledge our evidence synthesis program centers that QUERI supports. They’ve done a lot of high-profile reports this past year. I remember in particular one where we were asked at the time when we presented the Prime Care Clinical Precision mental health study at the time for the under-secretary Dr. Shulkin and he’s like; when’s the press release? So, basically at the time we were very lucky to hand to him an evidence review that EST had done on this very topic and at least to assuage the very important but patient ways things are being approached these days.

In terms of our partner evaluations, I think a lot of the action here has really been based on the fact that there’s a lot of talent in our QUERI community and a lot of need in our program offices for really good evaluation work, really rigorous evaluation, not so much research, but rigorous evaluation and working with over 20 operational program office leaders we’ve funded a number of new partnered evaluation centers. These are matched funds, so it’s that the operational partner has contributed to these funds.

A couple of them I’ll highlight in particular are with the two areas of innovation that the VA has invested in, the diffusion of excellence, a Shark Tank initiative. We’re doing a deep dive evaluation on that and also the VA Innovators Network. There are over 20 sites around the country that are funded by the VA Center for Innovation, not to be confused by our own coins, but this is really a parallel initiative to get private sector and innovative thinking around developing new technologies and doing a lot of these rapid-cycle testing and things like that. We’re on top of evaluating that process.

We’re also really excited to have a new Center for Access for Policy Evaluation and Research, CAPER, which is really taking the bull by the horns in understanding what’s going on with the access questions as well. These are just a number of new centers starting. We do the evaluation implementation because there are these laws that are on the horizon or have been passed.

I just mentioned the comprehensive addiction and recovery act work and many of our QUERI partner evaluation centers are working on understanding what’s going on with the implementation of complementary integrative health, the Veteran’s Choice act and the comprehensive assistance for family caregivers that was the caregiver support program evaluation that Courtney and then Halton had led for the past couple of years as well. There was some really important and insightful work from those evaluations.

In terms of our other operations support work in evidence-based policy, we’ve had the partnered evidence-based policy resource center for the last couple of years now. It’s really been a crucial support mechanism for these randomized program evaluations in aligning what the operational partner wants and really addressing the decisional equi-poise [?] issue that David, you brought up about what kinds of questions are they really interested and also being able to align that with the researchers in the field to conduct these randomized evaluations. Also doing a lot of high-priority, very quick policy briefs and getting the word out to our operational partners with Jada and summaries about what is the lay of the land in terms of policy and utilization in Veteran care and demand models and so forth.

Moving on into our implementation science, I’ve used the terms implementation and quality improvement interchangeably these days because in many respects we often talk to our front-line providers and we’re talking about the same thing. We want to improve the process and practice. Sometimes we use implementation and sometimes we say quality improvement. I think in general we have our program implementation cores. Each of the QUERI programs, the 15 programs, really serves as a national network of implementation labs really testing these different strategies to implement research into practice.

We have the robust learning community as I’ve mentioned. I want to also highlight a couple of new initiatives and resources. I really have to thank David Jantz [?] and Lisa Rubinstein for their leadership in putting together what has been a very refreshing toolkit on what is QI/non-research versus research and the idea about how to actually understand where that dividing line is. This toolkit is available on our QUERI website for those of you who are ever pondering whether something is or is not considered something that might be non-research and what the policies are.

And then also, there’s CEIR, our Center for Evaluation and Implementation Resources. This is in response to the fact that even with our partner evaluations, even with our quality improvement projects we’re still not fast enough for some people and they need help in terms of understanding what implementation is and how you design a good evaluation, so Nick Bowersox at the VA Ann Arbor has graciously led this. That’s him jumping out of the airplane to go meet with the Center for Compassion and Innovation and talk to them about how to actually do some evaluations. It’s also matchmaking, so don’t worry, Nick. You’re not going to be jumping out of airplanes and doing all the work. Basically, this is just a way in which we can broker relationships.

So, what’s next on the horizon? I think this is important. This is a book that that David gave me to read. It was really interesting and it was called *The Digital Doctor*. MacAfee [?] is actually a professor at MIT in this world informatics and I think this is a very prescient quote: “The role of the expert is going to shift. It won’t be the guy or gal who has all the answers, but the guy or gal who can convince other people to go along with the program.” This is where I think the missing link has been for many years until QUERI has come into the fray. It’s really that intermediary, that broker, that implementations scientist to make the data and the informatics and the clinical work actually make sense to the frontline providers and to making sure that improves patient care.

I’ll move on and I want to talk about three trends on the horizon and what QUERI is probably going to be needing to work on even more. We’re needing to address house fires. We are having projects that are even shorter-term from our standpoint as research or as one-to-two-year projects. What are you going to do about opioid use now? What are you going to do it about it now? We established CEIR for that, but we need more help in addressing things now such as focusing on top priorities, suicide prevention among others and then really I think understanding our value, the implementation return on investment.

So, we’ve established centers and national network of implementations programs focused on implementation strategies, understanding and creating that value metric of what it means to provide expertise in implementation strategies and implementation science.

There’s a hunger for it, but we use different words to describe the same thing and I think that’s important that we’re starting to ask – they meaning central office and partners – are starting to ask; what do I to sustain this program beyond just the single-site diffusion of excellence? What do I do if I want to scale this up to a number of centers? That’s where we come in many respects.

I want to end and really talk about why we’re here. I always like to try to bring in the historical fact about our Veterans and this is from D-Day at the time the Army Rangers were really one of the first boats on the beach at the time, climbing up the cliffs and really made a lot of sacrifices that day on June 6. I think it’s important to remember why we’re doing this type of work. We wouldn’t be here without them and also it’s just that really sometimes you do have to take a lot of risks to make things happen and to succeed.

I’ll just end and say very briefly that I just want to thank Melissa Brigance in particular as our QUERI program manager and really holding the fort down as I’ve done both jobs and I also want to thank Azia [?] and the QUERI teams around the country for your innovation and support in just moving things forward and your enthusiasm as well. Thank you.

Unidentified Male: We have a couple of minutes for questions if people want to come to the mike.

Mike Davies: I don’t know – this is Mike Davies from Access – I don’t know that I have a question, but I have just a note of thanks for the partnership that we’ve been able to forge with the researchers in QUERI and a number of other partnered research activities over time. I can’t tell you how valuable it’s been just to be able to turn to somebody for help when you’re in central office or when you’re in the heat of the battle of trying to solve some problems.

There are certainly some red letter days where I remember picking up the phone and talking to some of the researchers who really helped understand the problem better and bring some light to the issue. So, it’s been great. Thanks.

Unidentified Male: Thanks, Mike and thanks for coming over.

Alan: I don’t know – this is actually just really more of a quick question to you, Amy – I’m really excited by your creativity in thinking about supporting Nick Bowersox and this idea of a CEIR or somebody to respond very rapidly to a very immediate operational and hopefully starting all your research-oriented questions. It strikes me that this actually has the potential to even further push our idea of a very old concept, the research pipeline, in sort of breaking down the elements of that pipeline a little more. You’ve created an institutional element that’s going to really address things in a timeframe that we’ve never been able to really address before.

I wonder, and maybe you have some thoughts, about whether as we track the success of that endeavor whether there’s going to be a need to actually have a hand-off stage from the work that Nick and this entity do on further to try to transition those research responses into longer-term strategic changes to the organization and the same old sustainability conversation that we have on those kinds of things. I wonder if you have any thoughts about that.

Amy Kilbourne: That’s a great question. Thanks, Allen. I think we’re still building the plane while flying it. I’ll say a couple of ideas we’ve thought about. One is that I see CEIR as a broker of relationships where in many respects we get the program offices linked do CEIR and then CEIR in turn links them to the appropriate implementation experts in the field. It’s evolving where our national network of implementation centers programs, our 15 centers, in many respects our partner evaluation centers are becoming experts in what I consider the how-to of implementation science, the implementation strategies called the improvement strategies.

Whether it be lean facilitation, replicating effective programs, or whatever the strategy is, it’s a mouthful when we talk about it as academics but I think in the real world there is a hunger and a need for actually how do you scale up and spread? I think that we are taking a lot of lessons from the CDC that develop the replicating effect of programs, dissemination of evidence, into practice where they created and operationalize these implementation strategies to scale up and spread.

So, I think the handoff is going to evolve, but it will be increasingly where it’s something that I think Steve Asch had mentioned yesterday – or someone had mentioned yesterday – about the need to have expertise in multiple areas even though in academia you’re always an expert in one area. It’s the idea that implementation scientists are really double-majoring and you’re really going to be called to be an expert in that strategy that you essentially know really well how to do.

And so, you can teach others how to implement something because five years ago we were at a point where many program offices were saying; well, if we just build an app they’ll come or we’ll send out this directive and everybody will do it. We know that’s not the case and they know that, too. Essentially it’s a matter of saying; well, what do we do and I think that unanswered question is where CEIR comes in to broker that knowledge translation to say that this is how you implement.

Nina Sperber: Hi. My name is Nina Sperber. I’m from the Durham VA and I was wondering if you have any thoughts about how to facilitate publication of what you’re calling rigorous evaluations in high-profile policy journals. It’s been pointed out, but we’re working within the VA system but there is relevance to publishing outside of the VA.

Amy Kilbourne: That’s a good question, Nina. I would say that my philosophy is there’s a journal for every paper out there. You just have to try hard enough and be creative enough to find out what that journal is. I think in many respects journals such as *JGIM*, many of the people in the audience here are deputy editors of JGIM medical care. With psychiatric services we can help with helping the spin of the paper, but I think more and more if some of these journals are also offering opportunities for brief reports and policy briefs and things like that, that that could also be an opportunity to publish as well.

It’s a matter of finding the right journal and sort of targeting it to your audience. That’s a good question.

Nina Sperber: Thank you. I know we have very limited time, but I was also thinking about health affairs for example that has sort of a more eclectic kind of audience.

Amy Kilbourne: Absolutely that’s true. Go ahead, Laura.

Laura Peterson: Hi. I’m Laura Peterson from Houston. I just want to commend you for being so nimble about really changing the focus and being much more responsive to the administration. You’ve done a great job of that. The concern that I have is thinking about where do we add value?

So, there’s this push for foundational services, but I think that is extending to research. What is the research that only we can do? I would like some help thinking through how the new Cerner system will be something that will not prevent us from doing the research that only we can do, that will only be an asset. I know we won’t have access to all the legacy data, which is one of things that make us a unique research service.

I haven’t heard a lot about what the thoughts are and I would appreciate it about that.

Unidentified Male: So, I don’t know if Steve Finn is still here, but Steve is on the work group as is Jonathan Nebaco. They’re just writing the contract now for Cerner, so I think you’ve highlighted an issue, but that issue hasn’t been resolved yet, so the intention is to figure out solutions to make sure we can join legacy data with new Cerner data whether something like OMOP is the solution to it or whether other solutions in Cerner will do it, so I think it’s a real risk but I think people are aware of it.

I think all of you know the problems we’ve had in terms of innovating in IT under the current structure, so I do agree with people like Steve that there’s an upside to this. The transition is I’m sure going to be rocky. The big question is cost because you don’t get anything for free from commercial vendors. The big issue whether congress will fund it to the level that it needs to be funded. I think all the obstacles are solvable.

Amy Kilbourne: I think that’s a great point. I would add, too that if we get Cerner the hope is that we would have more real-time data that’s more recent to answer questions now as opposed to trying to go through multiple DUA’s and merging multiple data sets only to have a publication that has data based, even two-year-old data, a lot of people say that’s even too old for these times. So, I think we’re cautiously optimistic but I think there are opportunities especially for implementation. Tim?

Tim: Mine has to do with how we can go about trying to make our work more innovative. This is from the perspective of both writing grants and sitting on the study section. I have the feeling we’re sort of forcing all of our work into one mold whether it fits or not because we think that’s the canonical form it has to take. I think it boils down to thinking about what is the intent of the research. I mean I guess you as the sponsors have to decide how much of your work that you’ve sponsored you want to be implementation and very applied and how much do you want to be basic science and how much do you want to be “shoot the moon” research and whether those are the right categories to cover the waterfront.

It might be worth sort of having people designate which of those buckets or the buckets you choose you’re submitting a proposal in because the forum might be very different based on those three different goals. If you think you’re doing foundational basic science research there’s one format and you’re shooting the moon then there’s another one and the expectations as a reviewer are that what I’m going to bring to it are going to be very different.

I often can’t tell from the proposal what the person thinks it is because generally they all have three objectives. The first one is sort of a formative scoping out of the waterfront. The second one is kind of a slam-dunk, I can do the big data thing and the third one is my implementation goal. First of all, they all feel the same if they fit that mold and second of all I’m sure that’s the right format for each of those buckets.

Amy Kilbourne: Yeah. I think that’s going to be a challenge. I read a quote somewhere that every year about 18 to 20 percent of what we know becomes obsolete. I think the point of that quote is that the proposals we read now are based on structures that we’ve had in the 20th century. I think the whole world is just moving faster in general and the whole world is really looking for results more quickly. We also need to do it in a way that utilizes data that can also be done accurately. What do you think?

Unidentified Male: Just to be clear, I didn’t intend that all of our research is going to be viewed under our new, innovative lens and so I think you’re right. We have multiple functions in our research. I think the way that you framed it is right in terms of foundational and more applied and innovative. So, I think we’re going to need to figure a track to get things that look different than we do now, not meaning that we’re going to throw away everything that we do now. It’s not a 180 degree turn; it’s more like a 60 degree turn.