**2019 Online KT Conference:**

**Innovative KT Strategies That Work**

*Panel: Planning for Knowledge Translation and Policy Impact*

Gordon Duff and Kathleen Mullen

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>> DONNA MITRANI: To end the day we have an exciting panel planned, Planning for Knowledge Translation and Policy Impact. Our first panel presentation will be given by Mr. Gordon Duff. Mr. Duff has more than 25 years of experiences in human services and advocacy in a career spanning in New Zealand, Canada, the United Kingdom, and Australia, and across the government, nongovernment and business sectors.

Mr. Duff supported the development of the National Disability Insurance scheme, NDIS in Australia. He is a member of the Federal Ministerial Expert Advisory Group on Sector and Workforce Capacity and led the establishment of the Center for Applied Disability Research. He is a recipient of a Fulbright Professional Scholarship in nonprofit organizations, and spent time in 2019 with facilities across the disability system. This supported the development of innovation policy in the context of Australian disability reform, including the establishment of a disability research and innovation partnership in Australia. His presentation today is Research Informing Policy and Practice: Recent Examples from Australia at the Micro, Meso and Macro Levels.

Following Mr. Duff's presentation we will hear from Dr. Kathleen Mullen, a senior economist at the RAND Corporation and director of the RAND Center for Disability Research. She addresses disabilities, retirement and health with emphasis on the incentive effects of social insurance programs such as the Social Security and Social Security Disability Insurance, SSDI.

Dr. Mullen has pursued research on among other things the effects of SSDI receipt on labor supply, the effects of long waiting times in the subsequent labor force participation, and earnings of rejected SSDI applicants, how changes in eligibility requirements affect SSDI or Social Security claims; and the effect of incentives in other countries on labor supply for workers at older ages and what the findings suggest about potential reforms in the United States. Her presentation today is Disability Policy in the United States: Evidence and Implications.

If you have questions during the presentation I remind you, please ask them in the chat box. We will address them as we can using questions from the chat box I will moderate a Q&A following the conclusion of both of their presentations. With that, Mr. Duff, are you ready to begin?

>> GORDON DUFF: Yes, I am. Good morning, Donna. Or good afternoon, rather. Thanks very much. Hello, everyone. So today what I wanted to do was just talk to three recent examples from the Australian context where there has been an attempt to synthesize evidence for the purposes of supporting better policy and practice. So really what I want to do, they are all recent examples and all occur in the same context. Ones at what I call the macro level which is as Donna mentioned has been our recent attempts and ongoing attempts to completely redesign the service system to move to a national system from eight different jurisdictional systems.

Then the other two examples are at the subset level. One in particular supporting organizations that provide early childhood intervention and another which is for organizations that provide community participation.

The main point I want to draw out really is though they are all fairly solid attempts in their own right to synthesize the best available evidence available in some cases globally in order to advance better policy and practice, they've all sort of come off the rails a little bit. I think that the reason for that really, the main point I want to draw out is the importance of having a knowledge translation infrastructure or scaffolding to help get that knowledge out to practitioners or policymakers or organizations working in the field. So, I just want to provide a little bit of Australian context, not too much. Just to kind of set the scene.

So the way I want to do that really is to talk about for our first example, which is our journey of change to kind of reform the national service system, is just office of offer some insights into where we were a few years ago when the conversation started about reforming that national system. I think the best way to do that obviously is to look at the outcomes that were being achieved for the intended beneficiaries of that system, as people with disabilities, their families and careers.

You can see on the slide there probably that unfortunately our story in Australia has been about what is not working well compared to other countries that share a kind of sociopolitical history. So in terms of comparing to OECD countries such as Canada, the U.S. or the U.K., it is a simple fact that compared to other Australians, people with disabilities are more likely to live in poverty, have poorer health, have fewer educational qualifications, be out of work, be more likely to be subject to violence and abuse, live in insecure and unsuitable housing and experience inequality and access to public transport and other services. I think what happened in Australia nearly a decade ago was that this really contradict contradicted the nation's sense of self as offering a fair go for all citizens.

Our story of change, as many stories of change, started with political leadership and the national conversation about the Australian disability services system was started in earnest probably about 2007, 2008. So you know, we are talking about something that kind of happened, it started about a decade ago. This is what some people said about their services back then, that they can't get the support they need, there is not enough money available, not enough information and not enough choice.

And so the formal assessment of it really was that the disability service system was under funded, unfair, fragmented, inefficient, gives people with disabilities little choice and no certainty of access to appropriate supports. And that it was essentially unsustainable on multiple grounds.

What one person beautifully described if we can go to the next slide, Donna, as a confusopoly, which I think is a beautiful word. If we can go to the next slide, the other important context is where we were in terms of the evidence base for Australian disabilities research. This is also not a pretty picture. The characteristics of our local evidence base here were essentially that it was fragmented. That there was no critical mass of research topics on areas that were important in the reform agenda. That what was being done was very hard to access because typically it was locked up behind pay walls and academic journals. There were no kind of clear houses or those sorts of things to help people access the best available evidence in an open source way.

 What was being done was really not well aligned to the reform agenda. Lots of studies essentially describe the problem. So, these are the findings of an audit of Australian disability research that were done in 2014 and 2017.

So, we had, you know, the voice of consumers saying one thing and then on the evidence side we had a pretty low base from which to start.

So, in terms of the first example, really this is a story -- I don't want to cover too much of the scheme because I've got references that people can follow up later. This is really a story about looking around globally in building an entirely new service system, looking at what other service systems were doing, what other jurisdictions were doing, and trying to rebuild something from the ground up based on the best available evidence about how do you actually deliver a disability service system which is efficient, effective, person-centered, takes a life course view, is nationally equitable for all citizens.

In Australia these for us are a typical or commonly considered sort of high order social policy goals. So that was the task really that myself and a number of other people have been involved in designing the new scheme were tasked with.

So, virtually all of the main design features of our national disability insurance scheme have actually exited in other countries, all within Australia at the state-based systems. In some cases for many years and in some cases with things like self direction and direct payments for over 30 years.

Really, the job was to kind of look at the evidence and build something from the ground up.

Firstly, at the level of principles, the NDIS is about implementing Australia's national disability strategy, which is in turn the way that Australia meets its obligations under the UN Convention on the Rights of Persons with Disabilities. Which if you know that, you know itself is grounded in the voices and lived experience of people with disabilities, their families and careers. That's about the best evidence that you can get.

Some of the other principles about person-centered design and people with disabilities being in control and having choice over their service provider, they kind of naturally follow from features like portable individualized budgets.

Another key feature from a human rights perspective is the legal life-long title to what is called reasonable and necessary supports. This is possibly unique to Australia. I'll talk a little bit about that later, but that was a feature that was kind of, that we didn't see in any other jurisdiction that has been incorporated into the design of the scheme.

One of the other more distinguishing features of the system here is taking now a social insurance approach to funding disability services and supports. Essentially this means that there's an incentive to provide evidence-based services and supports as soon as practically possible in order to change that trajectory of lifetime outcomes associated with a disability, as compared to the previous system which was really about sort of spending more and more money on fewer and fewer people.

Once in the system, ensuring people that have reliable access to kind of hand-holding supports to manage crises, to deal with inevitable variations, to deal with service providers, to get advice on services is dealt with by a system of local area coordination. That has been a feature in one of our jurisdictions for about 25 years. That's probably an area where there is the best evidence that having that hand-holding support correlates most strongly to eventually kind of people's outcomes.

And people might be interested to know that another feature, it is not really a feature but important context, I think certainly within other OECD countries, we are doubling the spending on disability services in Australia in order to sort of drive economic growth. We are doubling the workforce for the disability services. We think that will add nearly 1 percent to Australia's GDP.

Taken together, we think that the arrangements here reflect the best available evidence that we could find for the most part. I'll talk about implementation later in terms of where that is going.

So, what we are trying to do is sort of design a service system based on these principles around flexibility, portability, choice and control, personalization, continuity, offer people continuity, investment in capability.

I think what this is saying to Australians, going back to that notion of having a service system that better reflects the nation's sense of self or fairness is that you have a right to services that meets your needs; you can use it with any willing provider; you can manage as little or as much of the administration as you like with a range of budget control options. Essentially you matter to society and the economy. You are worth the investment. And you can plan to lead a normal life as any other citizen.

While most of the features that I've sort of described have a pretty good evidence base, have been tried in other jurisdictions and proven to be effective in terms of those high order social development goals I listed before, some of them do. Something as simple as individualized funding, I think in some areas it's more ideological or a matter of faith than based on very good long-term evidence for that. We are by no means the first to apply that notion of individualized budgets, but there is -- I read a great review from Helen Dickinson in 2017, I have the reference at the end of the presentation which concluded that the literature is not really clear on whether these issues with the implementation of the marketization and personalization of services is strongly attributed to people's outcomes and the extent to which the outcomes achieved are attributable to those features or something else. That is for those interested more in that area, that's definitely worth a read. Despite that we are proceeding with that as a key design feature. I think it also depends on what you actually consider to be evidence because that review that I just mentioned is obviously just talking about the peer reviewed sort of first tier academic journals. Certainly if you have a broader view about what evidence is and you look at some of the gray literature in the policy pilots, for example, in the U.K. by organizations like In Control, or even further if you sort of look at the stories of people using direct payments and individualized budgets to arrange their own services, then those kind of stories go a lot further back. There is a really solid evidence base. But I think there's a debate to be had about what people should consider to be evidence.

 So, ours is certainly a work in progress. We are still in kind of evolution and incorporating new evidence as we go. And learning from trying to bring together design features from around the world to design what we consider to be and we hope will be a kind of world class disability service system.

Ultimately what we want to do is get this line of sight between the resources to the people benefiting from those services, looking at the services and supports they put in place and then the outcomes achieved.

Obviously, that will take some time. We are kind of really on the cut cusp of going to a national scheme last year. 2020, the last of the eight staged jurisdictions comes into the national system. We are very much in the middle of this journey.

I mentioned earlier that this definition of reasonable and necessary supports -- just before I get into the next two examples I think it is worth just mentioning this. This is literally the definition in the legislation which as you can see the whole notion of value for money or effective services or evidence-based practice or contemporary best practice is really written into the DNA of the scheme and into the legislation. And I think that that's really important. It is sort of, for me it highlights the importance of having in place a kind of infrastructure or architecture for mobilization because what this means now is really you've got to have a way of getting out at translating the evidence to people who are now making, we hope, informed choices about the services and supports that they want in their life.

But we don't have that infrastructure in Australia at the moment. When we look at for example the scale of what goes on in the U.S., that looks like world class practice to us. So, saying it doesn't necessarily make it so. In theory the whole idea of funding evidence-based services and supports is written into, very much in the DNA of the scheme.

I'll turn now to the second example, which is in the early childhood intervention space. So obviously this exists in the same context. So, there was the same pressure for change, if you like, around the system. There was a lot of national inconsistency, lots of different models, lots of different policy frameworks and program guidelines that have been developed at different jurisdictional levels and anticipating the national consistency of the NDIS.

There was a process essentially to engage the early childhood intervention sector about their practice to enable practitioners to critically self reflect upon their practice in light of international best practice, and then challenge organizations to think about how they would improve practice leadership around their area of early childhood intervention.

So, in our context, what we mean by that I guess is sort of allied health professionals such as speech pathologists, occupational therapists, family support workers, all of those people who were working through a range of different models reflecting the state-based arrangements.

The deliverables themselves were an eLearning course with modules that takes about six weeks to complete, which then you get a certificate of completion. It's about six hours of professional learning.

So, the way that that was done was in a sense there were push and pull factors. The pull factor was from a new government agency, the national disability insurance agency which is in our context like a single national payer who kind of wanted this done and funded.

Then the push factor was from the peak industry sector, early childhood intervention Australia, which was supposed to get that knowledge out and facilitate the translation. I'll talk later how even though this work was, as I said before, that all of this work was kind of done in quite a solid way, but then the problem was that organization was actually recently defunded. So what was meant to be a good practice story, it shows if you don't have that knowledge infrastructure or architecture in place as a kind of permanent feature of the system, then these best intentions to pull together the evidence about what works and engage practitioners in that and engage people with disabilities in that story, then those best attempts can be frustrated in a very short space of time with the defunding of organizations that facilitate that knowledge translation.

The third example I want to mention is in the area of community participation. So again the existing, happening in the same context, the same pressure for change, a range of different kind of policy frameworks around community participation, a range of very kind of structured programmatic approaches. We did an international literature review to really try to understand what it is, what it isn't, what it could be, what it should be. We found that there was really a poor conceptualization of what community participation is. A range of different kind of lexicons used about community participation, not really a lot of good published literature that clearly articulates a theory of change. Particularly in terms of: What's it for? In relation to other service types like employment, or accommodation or just achieving social and community participation in its own right.

I'll include all of the references for this work and for the previous examples I've got at the end. So, there's a literature review. There are organizational case studies which we found particularly effective in terms of bringing that evidence together and putting it in a form for the end user of this research, which in this case the target audience is really people who lead the transformation of community participation within organizations and we found the organizational case studies extremely valuable because unlike a lot of material information products synthesis, synthesis information products we can borrow from other jurisdictions, we thought it would be really important to develop those in particular in the Australian context, particularly in light of things like the reinvestment rates that apply under the NDIS so that you could build costed service models that people can immediately pick up and then understand that they can achieve what is considered to be best practice in the operating environment in which they are in.

So, this piece of work is actually still ongoing. So there are webinars and podcasts and those guides and organizational case studies and what we are now trying to do is move it to a national conversation much like I mentioned previously in the early childhood intervention.

As you'll see, we really don't have that infrastructure in place to facilitate that conversation. So another example, I think we've pulled together the best available evidence but within a kind of model of change then about how you get that information out, we don't have those kind of features in the service system that, for example, exist in the U.S. in terms of organizations like this KT center.

Let me pull the examples together then using a model of change.

Just as a way of kind of making sense of these three examples and the extent to which they've worked or didn't work.

I sort of just propose this model of change which I've used before, which essentially sort of says when, for successful change to happen you need four key enablers. You need pressure for change. You need a clear shared vision. You need that capacity for change and you need actionable first steps. If one of those is missing, for example if you have a clear shared vision and capacity for change and actionable first steps but you don't have any pressure for change, then that effectively becomes a low priority.

And in our case, I think in all three examples I've described at the macro, meso and micro level. We had fantastic pressure for change, we had enormous pressure from using the voices from people with disability families in change. We’ve had extremely good bi-partisan political leadership. We've had tremendous support from the sector or from the sub-sectors and from the practitioners in those sectors and even more generally from the general public. It was a campaign for the NDIS, the Every Australian Counts Campaign, and which is still ongoing. Politicians here describe it as the most effective public campaign that they’ve ever been on the receiving end of. Which is why we sort of describe the NDIS as the biggest reform since Medicare.

So, they all had great pressure for change. They all had a clear, shared vision, but really what we missed is the capacity for change and those actionable first steps.

So, I've talked about, in terms of that pressure for change, the peak industry body being defunded. There was very, very poor market stewardship from the NDIA and really a lack of clarity of roles and responsibilities. When I can compare the Australian arrangements to U.S. arrangements, the thing that stands out for me in these three examples from Australia is really the importance of what I see in the U.S. The kind of knowledge translation architecture and infrastructure that is funded by organizations like NIDILRR, like this knowledge translation centers, like having funding mechanisms that actually require that knowledge translation. When we directly compare Australia and the U.S. we look at the U.S. with envy in terms of that best practice.

So I'll start to wrap up. There are a range of resources and information in the slide pack for those that are interested in more information on the NDIS or how it works and for the two examples I've used I've provided references to the resources and the other information that we’ve done. And there is also my contact details in that slide. But my main message, really just in wrapping up, is don’t take for granted what you’ve got in terms of the center for knowledge translation for disability and rehab research because when we look at that it looks like the missing ingredient for us, which if we had, then the stories and examples that I've given today would have been far more successful. It’s not all bad new, I'll just end on the last point really is that the reason why I came over to the States to do a Fullbright was to spend time with NIDILRR and some of its grantees. We are now in the process of setting up a national disability research partnership which will be a NIDILRR type entity which will coordinate research and undertake capacity building activities and that is being led by the Malcolm disability initiative and there are my contact details if anybody would like to contact me about anything I talked about today. Thanks very much.

>> DONNA MITRANI: Thank you, Gordon for a fantastic presentation. At this appointment I would like to welcome Dr. Kathleen Mullen. Dr. Mullen, are you ready to begin?

>> KATHLEEN MULLEN: Yes. Hi, everyone. My name is Kathleen Mullen, senior economist at RAND, as Donna mentioned. I'm going to be talking -- I'm a policy researcher. I am going to be talking about disability policy research in the U.S. and trying to think about building an evidence base that will help inform us about what are some potential reforms that we can do when we are thinking about reforming the disability insurance system.

All right. I'm not sure how much people know about how Social Security Disability Insurance and actually Old Age and Survivors Insurance, that Social Security is financed in the U.S., but in a nutshell it is financed through a combination of incoming payroll tax contributions and money from the trust fund. There's actually two trust funds. According to the Social Security Board of Trustees in the most recent report, the combined assets of the Old Age and Survivors Insurance and disability insurance trust fund are projected to be depleted about 16 years from now with 80 percent of benefits payable at that time.

We basically have about 16 years, give or take, to think about basically what are some ways that we can be reforming the broader system. We don't always have to be thinking of SSDI. We could be thinking about policies such as ADA and I'll talk about that as well. They feed together.

A sample of potential reforms that have been proposed out there, you know. We could introduce temporary disability benefits. Right now our system is for permanent disabilities only and you'll see how that kind of comes in a little bit. We can think about mandating private disability insurance system or experience rating employer contributions to try to incentivize employers to contribute, or focus on their employees.

We can think about changes in the disability insurance screening system, including potentially integrating it with vocational rehabilitation. Then finally we can be thinking about changes to the way the system is set up right now, changes in the benefit structure, how much you get. Changes in potentially the five-month waiting period for Social Security disability benefits or the two year waiting period for Medicare.

When you are thinking about the work, the research that I'm going to be talking about, I want you to think in the back of your head about how that research fits into the evidence base that tells us how some reforms like this might affect disability insurance rates or employment rates among people with disabilities.

How do we want to think about this huge evidence base that we have on disability policy research in the U.S.? Of course, this is not even thinking about, I'm not even going to be talking about evidence from other countries. Although that information is also particularly interesting. Although it can potentially be difficult to think about how it might affect things in the U.S. given just sort of different institutional features. An obvious example is the lack of universal health insurance in the U.S. and how that would obviously interact with people with disabilities who obviously have health problems.

So, one organizing feature is to try to think about push factors and pull factors. I'm going to talk about four examples from each of these columns. Under push factors, just thinking about things that might push you out of work, right? Lack of economic opportunities. Lack of employer accommodation for people's disabilities. Discrimination that people might face in the labor market and also interactions potentially with the application process itself, just having to spend months and sometimes years waiting for a decision can lead people to have problems returning to the labor force in the event of an unsuccessful outcome. Even to try to reintegrate into the labor force if there is a successful outcome.

The flip side of that, pull factors are things that things that might pull you into disabilities insurance, right? Things like the benefit level or the replacement rate in terms of earnings, the availability of health insurance.

The ease of the application process itself, you know, the application process can present barriers in and of itself. You know, social norms or networks. How do people find out about how to navigate the disability insurance process and whether or not it seems like something that would be right for them.

Oh, okay. So first I'm going to talk about push factors.

All right. So real quick before I kind of dig into -- I'm going to skim over a lot of these. There's a huge amount of literature on some of these topics. But the last five slides of the presentation give you all the references so that you can look all of these things up.

In thinking about lack of economic opportunities, the cyclical pattern in disability insurance claiming has long been recognized. I'm starting with studies going back to the '80s and there's just this robust level of research showing that that's still the case today. Then the next slide will show you just a sort of illustrative example of this. Here is a scatter plot of the SSDI application rate as, it is the number of applications per 1,000 exposed workers. So exposed here means they are eligible for SSDI but they haven't claimed. They are potentially into this pool. The X axis shows the unemployment rate.

Here I am showing you age adjusted rates. So it's holding the age distribution constant for men. We are looking between 1995 and 2018. So you can see that over this long period when unemployment rate goes up, disability insurance applications go up. And similarly, in more recent years as the unemployment rate has gone down, applications have also gone down.

This is pretty much a nice line that shows that that relationship between applications and unemployment rate hasn't really changed very much over this time period.

So, the other thing to be thinking about in terms of economic opportunities here is just the fact that the disabilities insurance system in the U.S. is pretty much an absorbing state. This is a little bit of an old reference. I couldn't find a more recent one. Less than 4 percent of disability insurance beneficiaries exit the program to return to work. So by far the most common ways of exiting the program are transitioning into old age, full retirement benefits or retirement benefits when you reach the full retirement age or death, if it's before that age. And David Autor and Mark Duggan have a nice 2003 paper in the quarterly Journal of Economy Metrics. This is someone medically eligible for SSDI but he or she works until they lose their job. This actually feeds into some potential, some other potential push factors here. Lack of employer accommodation. This is important. The Americans with Disabilities Act requires employers to provide reasonable accommodations, any change to a work environment or the way things are done that allows an individual with a disability to apply to jobs or access benefits available to other people.

If you think about things that might affect employer accommodation, what is the unmet need for employer accommodation? There are previous studies that looked at this issue and they provide a wide range of estimates. A big part of this depends on how the at risk population is defined. Here I give an example of some of the work I have done with coauthors that find that 23 percent of working age adults could be considered accommodation sensitive in that they have a disability that could, if they were to receive some sort of accommodation at their workplace would enable them to work longer or maintain their working hours. And then among these, about half or maybe a little bit more than half of these individuals lack an employer accommodation. They could benefit from it but they aren't receiving it.

All right. Another side of this is thinking about employers discrimination. The ADA also prohibits discrimination in the hiring of those with disabilities. If you think about the economic theory of this, the theoretical effects of legislation like this are actually ambiguous. That is because employers could react by reducing hiring among those more likely to develop a disability. So, they don't have to, you know, potentially deal with those costs if somebody were to develop a disability later. Then they wouldn't be able to let them go.

So, the empirical findings of the effects of anti-discrimination legislation for people with disabilities are actually mixed. Again, sensitive to the definition of who has a disability. So here just are some examples of some literature looking at this from an empirical standpoint. I would say the jury is a little bit out on whether or not the ADA has led to increased employment on net of people with disabilities.

There's also just thinking about -- so another way of kind of looking at this is to think about an audit study. There was a recent audit study where the researchers basically prepared fictitious resumes and randomized who had a disability or not so they could hold everything else confidential. They did find that fictional applicants with disabilities received 23 percent fewer expressions of employer interest. There were mixed findings relating to the effects of ADA thresholds on state laws. This is an area of research or an area where I think more research could add a lot.

So finally thinking about the push factors here. There's also this interesting interaction in the U.S. between human capital loss and the application process itself. This comes from the fact that applying for SSDI entails reducing one's earnings below the threshold for activity. The threshold was $1,220 a month. If you earned more than that, you are considered not disabled right off the bat and not eligible for SSDI benefits. So even though initial processing times for SSDI benefits are on the order of a few months, many applicants are initially denied and appeal their decision. A lot of them get on through the appeals process at later stages. In some cases, they end up waiting as long as two years or more for a decision. During that time, they are unable to work or they are basically showing that they don't have a disability. So, during this time their human capital or productivity could be depreciating making harder for objective applicants to find jobs after the process is off.

We studied whether there is a scarring effect of the application process itself. We find that longer application processing times result in reductions in post decision employment of SSDI applicants. Both in the short run and the long run. This is something that could be an area where changing the process itself could potentially benefit people.

A lot of that that I just talked about is thinking about the labor market, right? You are thinking about someone who has a choice between working or applying for SSDI, but there is the flip side of things. What factors make SSDI an attractive alternative? Something that would pull you into that system.

All right. So, one obvious thing here is the optimal level or benefit level itself. So economic literature, theoretical literature shows that the optimal level of disability insurance benefits or benefits in a social insurance system generally like unemployment insurance balances the tradeoff between insurance and incentives or moral hazard and sort of economic parlance.

And basically, what that means is that on the one hand people with disabilities that affect their earning power, they legitimately are experiencing this bad shock. You want to be able to ensure them against this and apply them earnings replacement. On the other hand by providing this money to people you are disincentivizing work and you may be disincentivizing work among people who work on the margins. So the benefit level itself will kind of trade off these two things. So some recent work by Bruce Meyer and I should know the first name of Mok but I do not. Applies this to the disability framework. They find for parameterizations of their model the current level of disability benefits is actually lower than would be optimal.

So, similarly there is also recent work by Deshpande, Grosz and Su, who modify this model and try to incorporate consumption risk and bankruptcy. They want to consider the optimal timing of benefits.

So, they actually find that DI programs can avert more financial distress if benefits were awarded earlier. This body of research together suggests that maybe disability insurance with benefits in the U.S. are lower than might be optimal and could be awarded sooner. So rethinking that waiting period could be something that policymakers could do.

All right. Health insurance. So health insurance is a little bit difficult in the U.S. I already mentioned when you think about incorporating findings from other countries, sometimes it can be difficult to think about how those effects of various policies in other countries, what that would mean for the U.S. because other countries tend to have universal health insurance which the U.S. does not. We do have the Affordable Care Act which recently intended to reduce -- actually did reduce the uninsured rate from 20 percent in 2010 to 12 percent in 18, I think maybe there is recent evidence that shows that has been increasing again in the last year.

So increased healthcare access should improve health but often it doesn't. There's research from outside of the disability insurance literature that shows that sometimes increasing health insurance or access toe health insurance doesn't necessarily improve health but it improves other factors like your sense of wellbeing because you don't have to worry about losing all of your money because of a bad health event. It is not just about health. Even with the ACA, the best way to get affordable health insurance in the U.S. is either through an employer or through show-stopper disability insurance if you have a disabilities.

This just shows a little bit of a schematic that kind of illustrates how health insurance in the U.S. can be complicated especially for someone with a disability. So on the, all the way to the left we have somebody who is employed with employer sponsored health insurance. Say this person experiences a disability that makes it difficult for them to work. They can either maintain their hours above the employer sponsored health insurance eligibility threshold and keep their employer sponsored health insurance or if it's sort of too main full for them they can reduce the hours below the SHI threshold and apply for Social Security Disability Insurance or Supplemental Security Income they can receive Medicare or Medicaid through the program itself.

And then there's all these other kind of options in the background too. Whether they received their health insurance through their spouse, whether they can use COBRA to kind of maintain health insurance through that two-year waiting period.

Then the private market is actually bolstered by the ACA potentially you could buy health insurance on the exchange. I guess actually I don't have Medicaid expansions that sort of happened as a result of the ACA as well in some states. So there is a lot going on here and thinking about how health insurance might interact with Social Security Disability Insurance.

All right. So the theoretical effects of health insurance expansions are ambiguous. Just because of this complexity. So on the one hand if you are not eligible for supplemental security income and have employer sponsored healths in you may want to stick it out with your current employer unless you can find some bridge health insurance through that gap. On the other hand if you are unemployed or don't have access to employer sponsored health insurance, applying for disability insurance could be a way to get health insurance. The theoretical effects of health insurance expansions not even thinking about the ACA are ambiguous. Most studies find null or mixed effects which is not surprising.

The challenge in this literature is separating out what are the theoretical effects of those channels. Are the people we think should be increasing their disability insurance claiming doing so? And the ones we think should be decreasing, are they doing so? That's something that is hard to get at without a really strong research design and the right kind of data. I think there is potentially some areas there for work as well.

In terms of the application process, the application process itself involves several costs. Mostly it is foregone time. The time it takes to potentially travel to a field office to get help with your application or walk in wait time. Once you are there it may take a long time for somebody to get to you. If these costs deter applications from people with lower severity disabilities it could actually increase the targeting efficiency of the program, right? That is the ability of the program to serve those most in need.

On the one hand, higher application costs could really mean that the people who stick it out through the application process are the ones who are the most likely to benefit from the program. On the other hand, these are real costs that are incurred by people and so that's something you might want to minimize.

There has been some recent work by Deshpande and coauthor that found that field office closings led to large and persistent decreases in the number of disability recipients and these are concentrated in people with moderately severe conditions.

Evidence points to the increased congestion at the neighboring field offices as the main channel. What that means is that people who suddenly didn't have a near by field office went to the next closest field office and then you basically had a lot of people all going to the field offices at once. This increased the time that it took to get to a decision for these people. And then finally there is work by Andrew Foote, Michael Grosz and Stephanie Rennane that showed that the switch to higher speed Internet post 2009 when SSDI applications became available online increased more in counties with better Internet access.

So definitely there is some research showing that the sort of path that people need to take to get through the application process matters.

Finally, just the decision to apply for DI benefits may depend on social norms, what people -- how people think about receiving SSDI benefits versus potentially working. So this could take many forms. This could be differences in values about how important it is to work. This could matter based on feelings about the government. And these could be amplified or kind of reduced based on one's social network.

Then in addition to that, social networks also make it easier for people to learn about the program and how to put together a successful application, get all of their medical files together so it doesn't take as long as it could, things like that.

So, Delia Furtado and Theodoreopoulos had a recent paper using immigrants and finding those residing amidst a large number of co-ethnic groups have higher disability payments uptake. They find that immigrants from countries with stronger work norms are less likely to apply. This is evidence that how people around you react to disability insurance can make a big difference in terms of whether or not people apply or don't apply.

I started off saying here is a list of proposed reforms. I will walk you through some literature that speaks to the different channels take might be affected by these different reforms.

So here I'm just kind of trying to walk you through how the different types of research in the different areas can speak to than understanding how potential changes to the program might affect things.

So, if you're thinking about introducing temporary disability insurance benefits understanding how economic opportunities affect long-term and short-term opportunities for disabilities can be very important. If you're thinking about proposals that mandate private disability insurance or add experience rating to payroll tax contributions for employers, thinking about how much unmet need there is more employer accommodation and how effective employer accommodation is at increasing employment rates is important. Thinking about discrimination is also important. And how anti-discrimination laws could interact with these potential channels.

If you are thinking about changes in disability insurance screening, you want to think about how long that application process takes and whether the application process itself might deter applications and who it may deter applications from.

Then finally if you are thinking about changes in the way that the current benefits system is structured, you want to be thinking about how recent research can inform what that optimal benefit level should be and how the provision of health insurance affects people's decisions on the margin. Potentially how people's social norms and networks could amplify or muffle out some of the effects of these potential systems.

That's all from me. And I guess, I think this might have been a little bit high level. So I apologize for that. Maybe through some of the Q&A that might help. And as promised there's five pages of references following this slide. So I think we'll stop now and say thank you.

>> DONNA MITRANI: Thank you very much, Dr. Mullen. That was very interesting. I know that we only have a few minutes left. I do want to take time for a few questions. At this time, I would like to invite Gordon, Kathleen and our reactors to switch on their webcams.

The first question today I will direct to Rosmin. Gordon mentioned enabling features for change and barriers to implementation. Can you give us an example of barriers and facilitators to change that you've experienced in your field?

>> ROSMIN ESMAIL: Yes, absolutely. So I work in the, with my Ph.D. work I work in the area of health technology reassessment. And that is about not introducing new interventions but reassessing interventions that we currently use in the system and how we can actually use them optimally. That might involve actually decreasing their use. Removing them completely from the system.

Some of the barriers obviously are where people don't want to let go of things when they are used to using them all the time. And so some of the barriers could be financial barriers. Some of the barriers, and they also could be facilitators as well. Some of the barriers could be policy issues as well as we could also have them as facilitators in terms of regulatory facilitators.

So, I think it is all about having that conversation and really understanding what the barriers and facilitators are. In the previous presentation, I talked about, a little bit about the theoretical domains framework as a mechanism to elucidate what those barriers and facilitators are. I'm interested in hearing from the panel what you think about when we are trying to actually remove things from the system or decrease their use what you think some of the barriers and facilitators are. Thank you.

>> DONNA MITRANI: Thanks. So I don't know, Mary or Meg if you wanted to comment on that? To responsibility to Rosmin's question? Or Gordon for that matter? Or Kathleen.

>> GORDON DUFF: Look, I think that's absolutely right. In the three examples I gave, the biggest impediment is always people's ownership of the current system. There's always kind of vested interests that don't want to change to new models of practice or better models of care and support.

You know, I think this issue about portability as well and context is so important. We undertook a massive exercise to basically look around the world and try to import different elements into a new system. This idea that you can just sort of cherry pick from other places without considering the local context and local practitioners weddedness, their existing organizational knowledge and existing practitioner knowledge, that in our experience has always been a main impediment. You have to paint a picture of a different future. You have to reveal the gap, I guess, between the current practice and some better practice. And then how it will influence better outcomes for the people that they are supporting, I think.

>> DONNA MITRANI: Departmentally. And then Meg, this question is for you. So Dr. Mullen talked quite a bit about disability insurance. So the question is from a rural perspective, being based in Montana, do any of the proposed reforms to disability insurance cited by Dr. Mullen seem more pressing than others?

>> MEG ANN TRACI: Boy, I would say the economic opportunities available in rural, if that's one of the reforms that she was underscoring, really I think resonate in rural America. At the RTC rural we have had examples of successes on how to organize with rural communities to address economic opportunities in a way that relies on opportunities for workers with disabilities, business owners with disabilities and so on.

I'm not sure I really understood some of the reforms that Kathleen was describing. So it's hard for me to respond directly there. But I can share that under the ACA one of the products that came out of the RTC rural with some of my colleagues was showing that access to health insurance through ACA, through Medicaid expansion is being felt even more by rural residents. We are seeing in states where there was expansion more access to health insurance.

So that's a report that just came out. Maybe, Kathleen, you can underscore exactly what some of the reforms are that you, that may be relevant to rural as well from your perspective.

>> KATHLEEN MULLEN: Yeah. I mean, I think it's a good question. So maybe the list of reforms was a little bit -- I tried to be really comprehensive about all the things you could do. My area of expertise is Social Security Disability Insurance, you might have guessed. A lot of it is thinking about how you might have tweaked that program. But a lot of it is thinking about how it might interact with different backgrounds, kind of indicators. So I think directly improving economic opportunities for people with disabilities is a hard policy. It is probably something that is not going to come through reform to the SSDI system itself. Potentially you could think about, there have been proposals to think about integrating potential opportunities for vocational rehabilitation. Also you can think about job training opportunities that can be integrated together into the application process. Instead of going to a disabilities insurance, SSA field office and essentially trying to prove I can't do anything, and any sort of evidence otherwise is a ding against you, you could think about going to an office where somebody would say let's kind of think through your case. What are your skills? What are your health problems? What are the opportunities in your area? Try to think about almost like being a caseworker, right, and getting somebody, helping them try things out for a temporary period. Then if that's unsuccessful or if it is obviously going to be unsuccessful, going to the benefit period.

I don't know if that helps or makes sense.

>> DONNA MITRANI: Thank you.

>> MEG ANN TRACI: It does and in a rural landscape, making sure that there's a variety of agencies and partners who can play that role as you describe it, and just thinking about the individual's opportunity to access that opportunity, to do that kind of employment support. So VR has so much reach in a rural area in making sure that they are supported to develop those other partners to play a role with them in a coordinated way so that rural residents with disabilities can have access to those supports as you describe them.

I would say that the importance of what you said about the field offices closing is really important to pay attention to in the rural, on the rural landscape. And also just the quality of who is in those field offices. And just opportunities to access advocacy organizations like offices of independent living when those offices are closed or somebody who is not willing to work with an individual. All those things play out in sensitive ways in our rural communities. And then for us, just letting people know that our programs like Medicaid for workers, that there are bridges back to employment. You can keep the healths in that works for you. And how to put accommodations back together if you have lost your job and you do want to return to work. RFA so just keying on some of what Dr. Duff said about case studies and how important they are. That's very true in rural America.