Live captioning by Ai-Media ARIA JAVIDAN: We are about 50 seconds out, so I am about to open the webinar room. Just a reminder that what I do, they will be able to see everything that you are doing. Any last-minute questions? OK. (Presenter Questions) ARIA JAVIDAN: Opening up the webinar now. SPEAKER: Recording in progress. ARIA JAVIDAN: Hello everyone, my name is Aria Javidan, I'm Director 40 (indiscernible). Welcome to the latest presentation our webinar series. Today's session is on Priority Setting in Digital Health and is hosted by the Pacific basin telehealth Centre. These webinars are to provide timely demonstrations to support and guide the development of you telehealth programs. Just to provide a little bit of background on the Consortium, located around the country there are 12 resource centres, and one national. One focused on telehealth policy and the other on (indiscernible). Just a few housekeeping tips before we get started. Your audio has been muted for today's webinar. Please use the Q&A function to ask questions. Questions will be answered at the end of the presentation. Please only use the chart for communication it is with technology or communication access it is. Please refrain from using the chance to ask questions or make comments. Please also note the close captioning is available and that is available at the bottom of your screen. The webinar is being recorded in your be able to access today's and our webinars on our website, at telehealthresourcenter.org. CHRISTINA HIGA: Hello, my name is Christina Higa. It is my pleasure to introduce our meeting today, totally different stop she is a (indiscernible) and policy advisor who most recently served at the senior fellow at the Centre for global development, a nonprofit think tank in Washington DC. She is also a professor at the University of (Speaks Indigenous Language). She and her bachelors of science from MIT, and her Masters of science in doctorate degree in global health and population from Harvard University she has made many contributions to the field of global health, and more recently in Digital Health, is over 4000 citations in academic literature. In her talk today she will present her work with the Centre for global development and (indiscernible) health organization on setting priorities for Digital Health. Thank you for joining us today doctor. I will turn it over to you. VICTORIA FAN: Thank you and thank you for the invitation. It is great to meet you are a child to think about the work that we have been doing, and I have been in collaboration with my colleagues, but mostly the -- World Bank. I am just about to share my screen here, if I can get it to work. I hope you can theoretically. OK. The so I should just carry out that I am a health economist by trading. I am not a technologist or healthcare provider like you own, who really do the heavy lifting of delivering patient care. But as a health economist one of the lenses that I take and that our field takes ask questions about efficiency, and also effectiveness, and lovingly call cost-effectiveness. So this digital science of economics is often asking whether a fixed budget, or a budget

constraint, there is always limited resources. "How can I maximize the impact, or the health impact, with that budget can say that I have?" And so this notion of priority setting can be applied to any field, whether it is your own life, how you prioritize your time of prioritizing limited resource, but in today's case we are going to be talking about how to put others in the digital Space. This is what I am doing with colleagues (indiscernible), head of the Digital Health, (unknown name), as well as an expression. The author presented this at the June 20 in Brazil. So what is the problem of priority setting? As we all know, countries have so many carriages and so many possibilities. We have got different tools, different it conventions, but in order to make a decision we have to know what are all the possible choices I could make? And then I need to proceed to weigh the different options that I have, and then make the best decision. I should also say that I am framing this from a country perspective, but it could be the perspective of a hospital, or anybody who has a budget basically. If we are to translate this into the language of healthy knowledge, we would say that with the need to identify our interventions. What are all the possible choices that I can do? Of course in practice this may not be a realistic choice, because hospitals are only providing a set of interventions already and so switching the set of interventions may only be at the margin. Maybe adding one or two you interventions as opposed to changing the portfolio. The higher in any case you want to know what are your choices that you are examining? And within those choices, you may have different ways of prioritizing, these are all different interactive and digital health. How do we categorize and prioritize them? It finally does economic analysis of how do we think through what are the returns on investment if I choose one intervention or a portfolio of intervention and what is the potential impact, practice or for my country? Depending on what I invested? So you guys are all, I am preaching to the choir, I do not need to tell you my we need to invest in digital now. But just to repeat, I think some of the points I think especially during the pandemic, we, the public, so more than ever the value of health data. And proficiencies and deficiencies whether it was a local county or city County or State or even countries themselves facing challenges in reporting the basic data, and yet, although we have seen that really massive investment in health and particularly if the United States, with so much money is spent on health, you could argue that the data systems for health may be somewhat lacking in terms of our infrastructure. Certainly at the global level, despite massive investments in infectious diseases. We have not seen significant advances in our data systems. This is just one example of the consequences, when we do not see these advancements. There is this phenomenon, in global health, that we call fragmentation. I think this is likely happening domestically in the US as well. Just as an example, in one African countries there was a story, for a colleague of mine working in this country, that there were

17 fragmented Digital Health systems, a variety of platforms that were all the pictures and not connected to each other. And all funded by different foreign channels. And so the argument was this result of more than 70 fragmented Digital Health systems was really a more wasteful and duplicative. So what I want to share with you today are two areas for us to think about in terms of priority setting. I want to drop from the case and the body of work, the disease control priorities project, which uses this priority setting view of the world to make an investment case for investing in what is called a highly cost-effective, a package of highly cost-effective interventions. And then I will talk a little bit about some of the resource tracking platforms that have been used to try to track the investments in different health areas. First on prioritization. So, my work on Digital Health, and of course a lot of it was during the pandemic when I was working 24/7 and running a call centre the suicide prevention, and isolation quarantine, one of the research study cited after the pandemic was looking at the cost-effectiveness or the sort of economic benefits of investing in surveillance. Surveillance systems for pandemic preparedness, and part of that review we found this report also produced by the World Bank which attempted to identify existing interventions, digital interventions for surveillance. And the studies which found whether they were effective or not. Positive meaning there was a significant effect. Interestingly, many of the available technologies and surveillance interventions all had, not surprisingly, a Digital Health aspect to it. The context facing, digital automatic context facing, so on and so forth. So this allowed us to make the case that we really need a Best Buy's list for investing in surveillance. Policymakers need to think through how they are going to invest in surveillance and leading a top 10 list of things that they should think about, to invest in at the ramp up the surveillance systems. This approach of prioritization, as I mentioned here about the disease control priorities project. And did a quick crash course here in health economics, there is something called the cost-effectiveness ratio. The CER. And what this means is you are looking at a metric which refers to the dollars per year of life sick. Dollars per year of life saved. So things that are cheaper per year of life saved is a better deal. It is a testify. So if you are going to go shopping so to speak for interventions, your policymaker, you have your basket and you are trying to decide what is the basket of interventions you want to invest in, you might want to invest in things which are more cost-effective, which also meets things which have a lower cost-effectiveness ratio. Basically it is sort of a cheaper, the smaller the cost-effectiveness ratio, the more cost-effective it is. That is the basic terminology. I also just wants to reflect other additional resources that might be of interest to you. There is something called the global health health Consortium, this is an initiative which was trying to understand just the cost aspect. The dullest size of many of these programs on TPA and HIV. Which is a big

focus of international foreign aid. And then there is the part about the effect of that. Does it save lives? Does it prolong life? And prevent mortality and morbidity? There is an initiative of the international initiative the impact of valuation. They have a huge amount of information and studies that have waited, personally, what they call impact of regulations, with the intervention saves lives. I think in the fields of medicine, this is kind of parts, well accepted sort of research. We have clinical trials and tell us what is effective in the case of our drugs. And in the case of this field of global health develop, we are not dealing with drugs or we are not dealing with health. We are often dealing with programs. Also it all something broader than just a -- pill. And so with this analysis, the ability to assess the effectiveness of programs is flown in popularity. And some background on this way of thinking in the world, this project actually began in 1993, the World Bank released this report, the world development report, an annual report the release annually every year. And at the time I put a picture here of Clarence Thomas, he was at the time the chief economist of the World Bank. And he left this report and it was the first time the World Bank produced a report on help. Prior to that, the world of turbid reports work primarily on poverty alleviation, and accelerating economic for. And so this was a paradigm shift I think, that development should and could be about investing in hell. And here is a picture of the Jamison who was the lead sort of GVSU. This concept about how do I come up with a list of my 100 votes, effective intervention. The story goes that he asked, "If I was in Minister of health and I had only a fixed budget what are the 100 -- what cost-effective things I would spend in my country?" A person called Bill Gates read support and was so inspired by this, only a technology that could be inspired by cost-effectiveness, as he was getting his new foundation established, he chose to prioritize vaccines as one of those interventions because facts came out as one of the top, as being the most highly cost-effective. As a result Bill Gates invested in the second edition but cannot in 2006, as well as the third edition but came out around 2018 or so. And as you can see each successive version wasn't the and longer and as we think right now the fourth edition being led by the University of Bergen by a professor there named (unknown name). So, these critical priority projects really emphasized interventions, things we saw earlier like bed nets or spring household to prevent against malaria at TV vaccines. Chemotherapy. The very specific interventions election also mentioned that everything here, like for example the area bed nets which is $10, but just $10 you can buy a better net which saves one year of life. It is very effective but also, ORT, oral rehydration therapy, a mixture of sugar and salt, that people drink when they have diarrhea, that costs about $1000 per year of life saved because most people who get diarrhea are not going to be buying and you need a couple of cases. All of these interventions are considered highly cost-effective. $1000 per year of life saved is a

really good idea. I think in the United States we spent to $1 million per year of life saved. So, I shouldest emphasize that the disease control priority project emphasizes this notion of intervention. Something that you can sort of almost take its place and say "This one piece, this truck, this intervention, save lives. The report but of course any intervention requires a platform or a system in which the interventions are delivered, whether it is primary care, or a hospital. And so there is this constant discussion within the project of sort of the intervention and that human resources, the digital infrastructure, the financing, all of the systems part that helps to deliver that particular intervention. I should just mentioned that this approach has been applied not only to health, but in other areas. More recently it has been applied in education. So this was a paper published in 2020, that attempted to do something similar where they ranked 150 interventions in education, and they ranked the interventions by the new metric of learning adjusted years of schooling. They came up with a set of interventions in education which are the most effective, it's sort of getting the most amount of learning for each year of school that you get. This is also being applied at least in very to the field of climate change. Thinking for which intervention is the most effective given some abatement costs. So this is euros or dollars per ton of carbon to ambitions, and a variety of interventions that might be available. The this was done is a go and I think just a more theoretical and not necessarily the evidence. But more than a back of the envelope perfect, as a businessman or a policymaker, might think of orders of magnitude about how they should be investing in that climate change at a patient admission. That is the basic approach to prioritization. How do we apply this Digital Health I have learned in the past few months that WHO has an interesting classification of digital intervention services and applications. I think this slide will be shared with everybody afterwards. You can be from this list to get to the left, this is a snapshot from WHO's list, they have a Digital Health interventions for people, providers, data services, health management, the report personnel acceptable. It goes into very minute detail. Each of these is a different intervention so to speak. I think this is a fairly recent innovation that came out of the WHO. There is another list that came out by the international initiative impact evaluation to (indiscernible), and they have also come up with their own classification of Digital Health interventions as well. As for thinking through how to evaluate these interventions, for this sort of cost-benefits or cost-effectiveness, there are these two studies that I am aware of, the ACT works toolkit as well as the World Bank have started to think through this framework for the economic evaluation of these different types of interventions. It is a very new space. Without have a fear of missing out, we really cannot stop talking about chatGPT and AI. We all know that it's very rapid advancements that are happening in artificial intelligence. But it is really not so obvious to hospital or healthcare

leaders how to best to effectively use AI. Every day, every month, that are constantly new articles that are coming out, that are talking about how the to think will how we are going to be interesting in this. This just came out in March, who makes the argument that we do not even have good benchmarks for AI applications. A global health. And that we need to stop thinking through some benchmark methods, as we start examining all of these new AI applications. The conflict also came out in March there is no clear standards, no accounting of the fixed, no way to measure the performance, the benefits of the effectiveness of all these applications in clinical settings. (indiscernible) last month, so we are really in this very sort of growing space that is asking these questions about property setting and value for money. Of investing in AI. OK. There is actually a lot of just, just to zoom out quite a bit, Digital Health arguably fit within a broader set of investments in the health sector. And in the health sector, at least from this global international perspective, we often talk about things as health benefit packages. Health benefit packages. In the US we might think of this as what does my insurance cover? Does it all of the benefits that I need? What is Medicare or Medicaid cover? And recall that the health benefits package. So how we design the health benefits package, it of course have to incorporate not just the intervention, not just the hundreds of thousands of interventions that will be possibly covered by our insurance plan for example, but the process and the governance and the capacity for how you design these benefit packages. So this report, (unknown name), written by one of my colleagues and mentors Amanda Pressman, is a really excellent reference for those interested in thinking through these broader questions of how do we decide what is covered and what is not. Even today we are constantly seeing the use of "Should we be covering this newest drug, should recover this new Alzheimer's drug? Should we cover this new drug? What are the consequences?" (indiscernible) there are hundreds of thousands of digital health interventions, diseases, technologies, populations, and generally they aim to improve health for the patient had sufficiently outcome for the patient. You could argue that some of these are final and it is hard to assess them, and the measured, the indicators of costs, or benefits, they kind of… It is a motley crew. Every intervention might have its own set of cost measures of measures. This is a slight for my colleague Alex Fisher, he was arguing that many of the Digital Health interventions have secondary benefits that will not be easily captured in the formal evaluations. Whether they are benefits to the health system of benefits to users, or sentence in time, or maybe improvements in quality. Improvements in data itself, very hard to measure the value of improved data and potentially other cross sectoral benefits. So this notion of Digital Health having many dimensions of benefit makes it not so easily adapted to our very narrow measure of cost-effectiveness that were using before, which was "How many more years of

life, how many lights can I save, with my intervention? The quote That is probably the crux of the issue of why it has not been done already. It is a really tough problem. And so I think there is a need for a entire agenda to think through these metrics about how we can define what is the value of Digital Health interventions. And then from there, make systematic comparisons across multiple interventions. I can compare intervention aid to intervention, but they have so many different dimensions of benefits, how do we make an apples to apples comparison. So I imagine in health economics we are… The most common metrics that we use is something called the disease… The disability adjusted life you are the quality adjusted life year. This is a standard measure get the most cost-effective analysis but like I said, if this is not fit for purpose, for measuring the benefit of a Digital Health intervention, we need a better metric. What should that metric be? I do not know. This is an area where we are raising the question but we did not know what the metric is. Maybe somebody has already done it and it just point me to the study because that would be great if you need to, but if you metric ourselves. Summary: Proposed some new metrics here. He is providing something called a digital DALY measured along a set of predefined criteria or benefits. He also has (a system health adjusted labour here, estimating evidence of some enhanced efficiencies. And then there is another option everything we do not like cost-effectiveness at all, that our measure of effect is to network, we often 50 years and just sort of benefit which could be all-encompassing of all kinds of benefits but the challenge with this is it have to be monetized. And that is also very intelligent. So if you are feeling like I have uploaded the answer, that is correct. I have just raised the question and would love to hear from you about what you think the right metrics can or should be, or how we could go about thinking for this metric should be. OK. So, I want to shift gears now to think about ways of tracking and coordination. The reason being that often times when we are in the Digital Health space, or any fearful we are trying to make the case for investment, we wanted to hear it devalued that we get in this intervention. By the way, this is what we are currently spending. I think the second question is about resource tracking. How much of the company spending on Digital Health? It seems like a simple question but it turns out to be quite challenging to figure out. And again, from an international perspective, how to retract the resources that we are spending, invisible systems around the world in many different countries? We have something called the national health accounts which tracks all health spending in the country. There is also things for public expenditure reviews, which is government contracts to figure out where the government is spending that money? And many of you are coming from hospital or healthcare providers, looking at your accounts and being "Paid, what are we spending it on and how much of that is spent?" So this has become a major theme, in the case of

international health and global health, HIV was a big big area. And so there was a lot of resources spent on tracking resources for HIV specifically. And in the case of Digital Health, I think there is no global number that I can tell you that hey, this is what we are spending globally on Digital Health. Even in the United States. I cannot give you that matter. And it just goes to show that if we as… In the article ourselves in Digital Health community, if you want to make that investment case, we still need these two comported of making that value for money ultimate as well as being able to say here is how much we are currently spending and here is how much more we need. There is another specific tool, again, invite foreign aid feels attracted on the project but it doesn't actually track Digital Health. Despite the importance and plumbing demand by country, remarkably there is a mismatch between the talk that we have a tracking expenditure and not really sort of need. OK. So I just want to summarize my recommendations, that I made to the G 20 that we really need to categorize these interventions so we can proceed to the prioritization step. All of this is part of making the case and thousand this package of intervention. We clearly need new metrics entitled to estimate or demonstrate the value and benefits of these interventions in Digital Health. We also need to improve our resource tracking for making this investment is. And that is likely to be existing tools that we can already track expenditures that maybe could be adapted, before tracking Digital Health. But that really requires leadership and stewardship. And, well, this last point about coordination platform, it is more in the case of international dullness, this is more for the foreign aid perspective, in the USA as a result of separate alright have that many different healthcare paintings, whether it is Medicare or Medicaid, in the case of global health we are talking about the controversy the funding for many different countries, and that lead to fragmentation of implementation and really difficult, and it's a really difficult to coordinate and channels investments. You could maybe make the case that coordination and fragmentation is also possibly an issue but the US as well. So, I just wanted to stop here. And I welcome your comments and questions. And thank you for your attention. CHRISTINA HIGA: Thank you so much doctor. I thought I needed one more cup of coffee, to stay on you, but I feel smarter, somehow! That was a lot of information and I really appreciate the way that you presented. Not all of us have an economics background, so this is so important. When you think about Digital Health, and the investment that made without of study, I mean the fact that you said "We cannot say right now as a country how much is being invested in this area," that is a statement to say that we really need to look at what are these metrics and how do we develop that? For those of us that work in telehealth, that is the same question. We have a very difficult time looking at, you know, when we look at cost and benefit, because it is a cost to the system? Is it income to the system, to the individual? To the

patient? To the provider in terms of time, money, travel time? Health outcomes, benefits, so it is very complicated, including when you say "Benefits on health outcomes." If we have a telehealth intervention or a quality disease management that is over a long period of time before you can also see the outcomes to say that that is a benefit. So I think you just gave us a slightly different angle of how to look at this measurement. And then also how to prioritize where do we need to invest in? What makes sense? Ours, there are two questions in the chapter. But I just wanted to say that for the NCTRC we work with a couple of different countries and I would want this to be recommended to groups including the ministers and directors of health, because they have a lot of funding and donors so they could track Digital Health from donor countries and then their own investments. But I do like the way that you took the country level of prioritizing it helps to put it into the perspective of individual, you know, health centres. Even in our own lives, what we do to invest, when to reinvest, where are the benefits, it makes a lot of sense to look at it this way and we often do not. I will turn to the Q&A. There are two points, one was speaking about the CER, the cost-effectiveness ratios for devices such as watches and health monitors. And then I will just give you two, and then you can answer in whatever order. The second question, I am not sure if you can see the Q&A, it is the pharmacy benefit, pharmacy benefit managers must be doing such analyses on an ongoing basis. Do you know the methodologies that they use? Are there any studies where they have shared data? Do you think the approach may be saving someone! Does it run it counter to the best interest of patients? Please comment. I am just going to at the last one and then you can answer in whatever honour is suitable for you. The last question that came in is how do we compare low-tech investments such as for training people, with so-called Digital Health? VICTORIA FAN: Thank you for these questions, I really appreciate your perspective of my jumbled thoughts. The question from Dan Smith as well as the other question about comparison of low-tech investments, I think that is a very important question. I think my whole message is we need to know what the CERs of these different interventions. If we were to go and pull up the WHO list of interventions, you've been the experts in digital would maybe be a study to do to say pay, for my own intuition, here the set of interventions that I think give you the best value for money. And of course value for money may not be your only criteria cost, and it probably shouldn't be, just as you design a benefits package, cost-effectiveness, it is not and should not be the only criteria that you use. But you may not have some intuition just from your years of working in this field of a new hospital or maybe an older hospital. Maybe depending on whether particular healthcare facility is, maybe the country or state, depending on what agency you are talking with, even when they are, here the set of interventions that they should be think about. And, you know, instead of

having some highly paid consultant to give this advice, you know, it would be nice if it was a so-called unbiased research study that we could actually just have that many or that `. So that only list that I showed for global health, and I can pull up that list again, let's see… This year, at an example, I would love if we have this for Digital Health. If I only had a fixed budget, how should I be thinking through all the hundreds of things that WHO has listed? I am sure that constantly policymakers are like "We have this new app, let's use it! We have had this other option, let's is that!" How does the privatization happen? There is also a discussion about low-tech investments, and if it a point well taken it if you have bought a 50 budget, you could be investing it in Digital Health and we are just talking about allocating it within the Digital Health bucket. But it is potentially not just for Digital Health, it could be outside of Digital Health. Could you be interested in other interventions? (indiscernible) make this comparison across everything, we did compare health to (indiscernible), some sort of the budget that we are looking at and that the decision space that we are looking at really depends on who we are as the policymakers and the decision-makers. So there is another question here from Lori McKenna about which policymaking bodies have these questions and perspectives being brought into. I think this is a great question to ask, and to be fair comment sometime this perspective seems almost to the event. But I think in practice it is being done. Certainly from the ministry in the US, we do not have ministries we have departments, but the Department of treasury, or in the case of the Pacific Islands you might have a ministry of finance. Which is making decisions about hate, here is how much the budget for health ministry is going to be. And then similarly, the Minister for health by then proceed to make decisions about I am going to take that budget, certain items I had to continue based on the previous year. But then is there a new incremental budget that I can work with, the item make that decision? That kind of tube approaches. Imagine you have this project, and kind of change the entire budget, afforded is often not realistic because you have already paid for certain things that you are already doing certain things in the previous year, as opposed to adding incremental intervention given in you additional markets like a minister of finance get to the Minister of health a 5% increase. What can you do about 5%? And I think in the case of a healthcare provider, you are often presented with an annual budget, and you know how much you can spend based on previous years services, but you might have a little with room that you can work with to potentially expand or do something new. I think often times we are looking at incremental picture. So that is another question here about pharmacy benefit managers, and sort of they are own analyses and decision-making. I think quite well taken, depending on who you are, are you a CEO of your own company, or aren't you the Secretary of health, you have a different land to which you are

making those decisions. But I think certainly, it this way of thinking of the world, for better or worse, I was just saying that this way of thinking about the world use of economic evaluation I think is quite covalent actually, if you are the CEO of a company, and you have just raised $1 million for your company, you want to spend your money in a way that will give you the highest return on that investment. And in a sense that is a economic way of thinking. It is kind of a return of investment way of thinking. Absolutely, we live in a capitalist society where companies are private-sector during this as we speak. And so, so for us, and often in the public sector, where we may or may not have such an obvious sort of… We certainly have budget constraints that we may not be making profits. I think that is a different sense of how you measure this value. The principal economic view of the world is that the market of things. But if you do not take care of property will go out of business. Now in the case of many public endeavours, you might not have, if your public intervention is not profitable that is expected. Not sustainable is the standard for most healthcare. Still, you need to make that case for whether it is legislators of Congress or someone to invest or increase the budget basically. And to do that, you have to be able to show that value. That is a long-winded way to (indiscernible). Anyone who is making profit, I am sure, is applying this way of thinking. And I think it would be good for us in this field, let's say on the good side of things, to be able to try to make that case as well. I think we are probably the last country on the planet to actually negotiate prices of drugs by the government, but the pharmaceutical company. So that announcement a couple of years ago under the current administration to negotiate tenant Medicare drugs, the price amendment was a huge thing for the US. But actually is a standard for all high income countries already. The places like the UK already negotiate drug prices. Often using this kind of argument of economic evaluation, so, yeah, the US on whole is getting a bad deal. On average, we are paying more for drugs, compared to other countries, because we do not have this government public bargaining with the private sector. I will stop you. CHRISTINA HIGA: Thank you, I apologize my internet connection dropped. So I reconnected and I am just going to ask for some assistance, because the questions but refreshed when I reconnected. So I am seeing to new questions. One regarding the HR and one regarding the Oregon health plan. Whether any other questions prior to that? VICTORIA FAN: I have seen some other questions pop up in the window. There is a question about the problem of spending current money on building future capacity. How would you ever be able to tease out the return on investment? And I think that is a great question on time frames, and it is true that many of the cost-effective studies in the health space often have a short timeframe of one or two years. If you are going to get vaccinated or take a drug the impact can be within a relatively short period of time. This is another reason why doing economic

evaluations of Digital Health are much harder. The infrastructure capital cost can be much higher. The current cost can also be higher. And there is a lot of a barrier to entry to installing a major system. There are a lot of reasons why I think to be economic evaluations in Digital Health and be harder but that doesn't mean you should not give it. An electronic healthcare sector be counted into Digital Health? If so, how? Let me see if I can pop over the length of the WHO, and you can just immediately check the link. But I am quite sure that the WHO classifications of health interventions has EHR. So let me just see if I can… Check. Hopefully I have answered that in the window directly. There was a question from one of the attendees about the Oregon health plan. That is a great example for those of you who are life then in 1992. There was an innovative, actually Oregon is a great state whether innovations in the healthcare system, and in 1990 to 1 1995 there was an interesting exercise that they attempted to rank order interventions based on cost-effectiveness. And, interventions, purely on cost-effectiveness ratio. It was controversial because what ended up happening was things which are cost-effective but do not save lives, like dental cavities, was covered. But things that save lives but can be very expensive, were not covered. I think this is a classic case that is taught now in health economics training, and the bottom line of this is that you should not use cost-effectiveness only in deciding what is covered. Just because something is defective, does not mean that have the budget to afford it, because particularly in telehealth and lunch. They argued the multidimensional aspects which may not be fully captured and are definitely not captured in our natural cost-effectiveness mentioned. So it would be great if someone what this Digital Health community together to really fix but what are the benefits that you experience on a day-to-day basis? And trying to sort of summarize and share that as a sort of manual or lessons, even if it is qualitative, trying to put a quantity to it. We are in this era where quantitative stories are good, but if you put a dollar amount that is better. That is the social norm that we are living in. I do not necessarily agree with it, but often times a dollar number sometimes makes it more convincing. Apparently. So, did I answer… CHRISTINA HIGA: I think those are all the answers there. But I did want to say, yes, for the economic evaluation viewpoint, you are saying we do not only use cost-effectiveness as the only measure of… (Static) ... Because I am always reminded from the other way around, a lot of do not think of economics. Until we get to our administrator of the hospital or something. So we'll this is going to increase access to care and we know that might have better outcomes somehow, but tell me about how this is going to impact our bottom line? So that point that he said, that qualitative stories, those kinds of quality improvement events, they are very important but it is true that we must and if we can put a dollar amount to it, somehow, to figure it out, then I think it does kind of balance out our

arguments for this thing. So it is really good, I think a lot of times those of us who do not have the economics background, we almost just to know that if it is something that we need to do but it is so hard to figure it out. We leave it on the site. Like if we go to the doctor and they say that we really need better exercise all you need to handle stress. OK, I know, that is so critical, that is something I really really need to do. And then you kind of just leave it. And I kind of feel like that if somebody says that is good, the empty issue is so important, the (indiscernible) and all that. But this does not help our bottom line. Tell me how it is going to help? And then I do not know what to do. So I think that the framework that you provided for us is (indiscernible) it is difficult and it is complex, but you can splice it in different ways. And we have to figure out a good framework. The other thing that helps me is no one figure this out, there is no formula you can present and say this is how it is. So it is an opportunity, I think, that we can work with, health economists, researchers like you, to figure out what is the best way to come up with our own situation, if it is at the national level, or the health sector level, to talk about how to evaluate our investments in Digital Health. And a lot of us know the CMS waivers for telehealth out there, and a lot of the feedback that we are getting is that some of the health systems do understand the benefits of telehealth but they still want to understand the total cost of care. And all the efficiencies and effectiveness of (indiscernible). Before they invest further. Because the reimbursements for these waivers for telehealth and, then the formula for international investment not -- does not end. So I put the country people are trying to analyse how Digital Health and also telehealth was used during the last years, during the public health emergency. And trying to understand that, to figure out the policy direction, that CMS is going to take, with either continuing it on or making modifications. And those policy impacts are not going to be strictly carved. But it will be you know, other health cost effectiveness as well. So this is really very very timely. I think the people on the call, is not is defined health economists. I know we are coming to the end of the here. But do you have any kind of recommendations, like if somebody is out there saying this really opened up my mind and way of thinking, how do you approach something like this? Because I have you to call, I can ask you for advice. How did we start to even think about looking at this? As you know the business people in your facilities, I am sure they are to Harry to do some proponents to evaluate this kind of thing. But it may not be the details we are talking about today. So to enter, I was just wondering if we had any advice on how we move forward, we did put some resources, what are your partners? VICTORIA FAN: That is a great question. So I have to thoughts about it. One is sort of making the case for your organization, you do not need resource to do that. You can give your own back of beyond types of cost-benefit analysis type of thing. And that is what all of these consultancy

companies are doing. They are not pulling their research, the edges putting up with on a napkin to make that case. But having a rigorous research makes your case as an advocate more compelling and so it doesn't make sense for practitioners to partner with researchers who can generate an artist, quote unquote undervalues the rigorous evidence that can be used to help you as a practitioner to make that investment case. Like I said, this failed to what I can tell, it is remarkably undeveloped. There are so many studies on cost-effectiveness of HIV, because there is so much (indiscernible). This has been a major supporter, but the cost-effectiveness of digital interventions to my surprise is just very… There are very few studies out there. I was very shocked to discover this, and it goes to show that there is a need for greater collaboration between the Digital Health community or the telehealth community, whatever this community is called, with health economists or even epidemiologists who tend to focus on only the effectiveness site, health economists will focus on both the effectiveness and the cost analysis side effects. And you know, I am happy to take any questions and (indiscernible) if you want to reach out, but only send the email. I'm always happy to collaborate, to brainstorm, if I have time. And no, I am just super excited to be connected with this community. So thank you for bringing me on today. But I think it would be a really great group project, and a group project of the gift us (indiscernible), but I think this would be a great share agenda potentially for this community to try to raise, what is the value for money of telehealth. And with these policies, potentially going into sunset, what risk? What were the consequences benefit of these programs? And what is going to be lost by not giving that?: Absolutely. Thank you so much. It was very enlightening today and inspiring. I am going to thank you again, and turned it over to Aria person. ARIA JAVIDAN: I am just putting up our closing slides. Just a reminder that our next webinar will be held on Thursday, August 15, and that will be hosted by the (indiscernible). Registration information is available on our events page. Actually we do and you take a few short minutes to complete the survey that will pop up at the conclusion of this letter as the feedback is very valuable to us. Thank you again for the hosts of today's webinar, and to the doctor for her presentation today. Have a great day everyone. Live captioning by Ai-Media