SNAP Webinar Transcription

OVERVIEW

Below is the transcription of the webinar, Toward Better Integration of Health and Human Services: Linkages between Food Insecurity, SNAP and Health Care, held on Monday, April 9, 2018.

You can view the webinar, and access related resources, on the IMPAQ International Website: [www.impaqint.com/oasdoh](http://www.impaqint.com/oasdoh).

TRANSCRIPTION

Jennifer Pooler: Hello, and welcome to our webinar on better integration of Health and Human Services. We will be exploring the linkages between food insecurity, SNAP and healthcare. Before we get started, I'd like to go over a few housekeeping items.

First, please note that your lines will be muted during the webinar. We are, however, interested in hearing any questions or comments you have and encourage you to submit your questions using the Q&A box to the right of your screen. You can also download the presentations in the download handout box.

At the end of the presentation we'll have about 15 minutes for Q&A, and we'll do our best to address your questions. If we run out of time, though, we'll post responses to the remaining questions on our website. All registrants will get an email when the Q&A has been posted along with a link to the webinar recording. Finally, if anyone has any technical problems during the webinar, please submit them using the Q&A box or email us at the email address that's posted on your screen, and we'll do our best to address any issues that come up.

Now, let's get started. My name is Jennifer Pooler and I'm a senior research associate at IMPAQ International where I conduct research and evaluation in the area of food assistance and nutrition. I'll be moderating the session today and I am thrilled to be joined by three presenters who are helping to shift our
thinking around hunger, health and healthcare, and how we can leverage those linkages to improve overall health and wellbeing while shrinking healthcare costs.

I’d like to take a minute to introduce our presenters, so we don’t have to interrupt the presentation later. First, Dr. Hillary Seligman is an associate professor at the University of California, San Francisco, where she directs the Food Policy, Health and Hunger Research program at the Center for Vulnerable populations at Zuckerberg San Francisco General Hospital. Dr. Seligman's expertise centers on the health implications of food insecurity in the U.S. and her policy work focuses on federal nutrition programs, food affordability, and access and income related drivers of food choice.

Dr. Mithuna Srinivasan is an economist at IMPAQ International with extensive training in Applied Econometrics and in Experimental and Quasi-Experimental Program Evaluation Techniques. At IMPAQ she designs and implements policy relevant studies on a number of topics including food insecurity, child nutrition, school food services, healthcare and work force development.

Finally, Ms. Ginger Zielinskie is the president and CEO of Benefits Data Trust where she works with states, cities, the private sector and community based organizations to understand the true outcomes achieved when people are able to meet their basic needs. She works to liberate and leverage social services data in order to uncover opportunities to make sure the right people get the right benefits at the right time.

Our speakers today are going to tell a story. It's a story of how food insecurity can have lasting negative effects on the health and wellbeing of individuals at every age. It's also a story of how efforts to address food insecurity can have a real impact, not just on an individual's ability to purchase food, but a simultaneous impact on other behaviors that can lead to better health and ultimately reduced healthcare costs.

And now I would like to turn it over to Dr. Seligman, who can start her presentation. Thank you.
Hillary Seligman: All right. Thanks very much. I am going to concentrate on a couple of issues today. In addition to giving you some background information about food insecurity and some of the health information I think you need to know to understand my own work, and the work of the presenters coming after me, and really try to begin answering two questions.

The first is does food insecurity impact health in the U.S. and, if so what are the economic implications?

The United States Department of Agriculture (USDA) defines food security as access by all people at all times to enough food for an active healthy life. And food insecurity is a household level economic and social condition of limited or uncertain access to adequate food. This is often financial in the U.S. but overlaps with a lot of different barriers to accessing adequate and safe food.

The most recent numbers available suggest that 12.7% of U.S. households are food insecure. That's about one in eight U.S. households, and that 12.7% is divided into households with low food security, about 7.4% of U.S. households. And in these households, people generally have to change the quality of foods that they eat in order to meet a constrained budget for food, but are generally able to maintain their quantity of food, while an additional 4.9% of households that are very low food secure, people must both change the quality and the quantity of food they eat because of inadequate access, generally financial access.

While these numbers have improved a little bit since the resolution of the recession, numbers of households in the U.S. or the percentage of households in the U.S. that are food insecure are still higher than they were before the recession, and so this is not a problem that is being resolved with the current uptick in the economic climate.

One of the things that we need to understand about food insecurity is its overlap with hunger. Hunger is a physical sensation that happens with lack of access to food and, while food insecurity encompasses hunger sometimes, for the purposes of this discussion it's really important to understand that what is a problem with food insecurity and chronic disease is often not the hunger itself,
but the coping strategies households must use in order to avoid the physical sensation of hunger. And here I've listed a couple of those coping strategies that you might imagine could make maintaining your health more challenging.

Shifting dietary intake towards low cost foods, which are generally low in fruits and vegetables and whole grains and high in saturated fats and sugars. Eating highly filling foods that you know will keep you hungry through the next meal. Concentrating variety on foods that feel very filling to you, avoiding food waste, binging when food is available in anticipation of an upcoming food shortage. And you can imagine when these coping strategies are maintained for years or decades, that these might increase your risk of obesity and diabetes and other chronic disease; and once you're chronically ill, result in a poor ability to manage those illnesses. You can also imagine cases in which these might predispose you to acute disease, and we'll hear a little bit more about that later.

Here's one framework in which we can understand the relationships between food insecurity and health. And, if you start at the top here, if you're in a food insecure household you have to engage these coping strategies, which I talked about on the last slide. Those coping strategies might increase your risk for poor physical and mental health and once you have poor health, might increase your health care expenditures and decrease your ability to maintain steady employment. Those obviously force increased spending tradeoffs and a reduction in your household income, and that puts further pressure on your food budget, meaning that you're at higher risk of food insecurity. And it's important to note here that this is a circle, so it is both true that food insecurity increases your risk of poor physical and mental health and also, in the United States at least, the poor physical and mental health increases your risk of food insecurity.

One of the things that is important to understand in the context of my work is that in the U.S. episodes of food inadequacy, and a food insecure household are generally cyclic and episodic. Meaning that periods of food adequacy are punctuated by brief, discreet episodes of food inadequacy that happen on average, according to USDA numbers, about seven times per year. That variation may be monthly when benefits or income runs out before the end of
the month. It may be seasonal, in the summertime when kids lose access to school meals or in the wintertime when heating bills are high, or it may be random because of a big medical expenditure, or the car breaks down or something. And we see these episodes of food inadequacy very clearly when we track dietary intake across a month, particularly among mothers. So you can imagine that, depending on where you are in the cycle in a time of food shortage or food adequacy, that your compensatory strategies may change. And, in particular, during food shortage you make skip your meals and reduce caloric intake whereas during episodes of food adequacy you may be more likely to avoid food waste, systematically over-consume or shift to more energy dense foods.

We can take advantage of this in studying chronic disease if we use diabetes as a model. And this is why my work is focused very often on diabetes, because those coping strategies that happen during food shortage times are very likely to predispose you to low blood sugar if you have diabetes, whereas those coping strategies during times of food adequacy are likely to predispose you to high blood sugar.

Here's a study that we conducted a number of years ago now looking at admissions for low blood sugar across the entire state of California for about a nine year period. And what you see in the green line is the day of the month for all hospital admissions to California for low blood sugar. And remember we anticipated that low blood sugar admissions would be more common at the end of the month because that's when households are most likely to run out of money for food and therefore people would have to engage a number of coping strategies in order to avoid developing low blood sugar. The rate of admission across the entire population in green is stable across the month, but what you see in the red line, and the low income households is that every day of the month your risk of low blood sugar is higher, but it goes up as the month goes on. So in the last week of the month your increase in low blood sugar admissions is about 27% compared to at the beginning of the month.

So I'm not going to review other data about food insecurity impacts health. I just really wanted to give you the background information about low blood sugar, so
we can build on that. But I do want to mention that in the context of diabetes there are a number of other complications of diabetes care that are associated with food insecurity and there are also a number of other diseases including obesity, high blood pressure and heart failure that are also associated with food insecurity, and I'm going to leave those discussions for another time and turn to understanding some of the economic implications.

This data is 2011 estimates from managed care plans of how much it costs for a low blood sugar admission. This is how much it costs, not how much it's charged but actually how much it costs for a low blood sugar admission. And you can see on the left that one of those low blood sugars that goes up by 27% at the end of the month costs the managed care plan more than $17,000 per year, whereas the monthly food cost for a family of four on the thrifty food plan, the lowest cost food plan recognized by the USDA, is only $657 a month, so a huge discrepancy here. And as a policy maker, what you want to know is if we put money towards those food costs, can we save money on the other end, in outpatient visits, emergency room visits or inpatient admissions for low blood sugar. And in order to do that we have to understand the resources that food insecure households use, these are the buckets that I use to understand how households cope with food insecurity.

I'm going to concentrate today on federal nutrition programs, and particularly SNAP, the Supplemental Nutrition Assistance Program, which serves one in seven Americans in the U.S., is the largest federal nutrition program and is very effective at reducing food insecurity but 54% of households are still food insecure.

So if you look back to this 27% increase at the end of the month in low blood sugar events, what you might be wondering as a policy maker is, can SNAP make a difference in that 27% increase at the end of the month. In order to understand that, we took advantage of a natural experiment, which was the American Recovery and Reinvestment Act, which temporarily, quite dramatically increased SNAP benefits for a time-limited period from May 2009 to October 2013. So we looked at that end of the month increase in hypoglycemia pre-May 2009, post-October 2013 and then during the period of
the American Recovery and Reinvestment Act. What we found is that end of the month increase in low blood sugar was visible before AARA, after AARA, but not during that time period, suggesting that the increase in SNAP benefits had an impact on reducing rates of low blood sugar events associated with food insecurity. If we added up all of the events that we thought were averted because of the American Recovery and Reinvestment Act, we estimate that $54 million were averted in emergency department and inpatient hospitalization costs only for that population of commercially insured adults between the ages of 19 and 64, for whom we did this study.

That might make you wonder how much does SNAP decrease healthcare expenditures overall in food insecure populations. To do that, first what we had to do was understand whether food insecure populations had higher annual healthcare expenditures than food secure populations. What this slide looks at is asking people whether they're food secure or insecure and then following them over the next two years and looking at what their annual healthcare expenditures are, and you can see in food insecure populations, after adjusting for other measures of socioeconomic status, food insecure people have about $1900 per year in additional healthcare expenditures. That means if we multiply that $1800 per year by all the number of food insecure people in the United States, we estimate about $77.5 billion in additional healthcare expenditures annually that are associated with food insecurity.

If we then look at what we would expect the annual healthcare expenditures to be among people who are and are not on SNAP, what we find is that people on SNAP have healthcare expenditures that are about $1400 less than would be expected for a typical food insecure family. And that suggests to us that just enrollment in SNAP is having an impact on healthcare expenditures overall. And, if you would like the raw numbers, here are the actual healthcare expenditures estimated for similar people who are participating in SNAP and not participating in SNAP, even though they are otherwise eligible, not signed up for SNAP.

So why talk about cost? The hunger safety net is clearly designed to feed people, not to save healthcare costs, but there are strong incentives for health systems to reduce costs. And cost is a common currency that can align sectors
that otherwise might have difficulty or frequently do have difficulty coming together to solve a complex problem. Sectors like public health, healthcare and the social safety net. So documenting these excess health costs, may support the programs that have an enormous impact on health.

I hope I've shown you some evidence that the economic implications of food insecurity are enormous, but we have effective strategies for response. And I'm going to turn it over now to Mithuna, who is going to elaborate on these topics with her own work.

Mithuna Srinvasan: Thank you, Hillary, and hello everyone and welcome to our webinar today.

Hillary just walked us through the conceptual framework underlying the potential role of SNAP in improving health outcomes and reducing the cost of care. And she in particular discussed the impacts of food insecurity for diabetic patients.

I want to spend the next few minutes describing one potential channel through which the effects of SNAP can be seen, via medication adherence. I'll be describing some research that Jen Pooler and I are currently working on using secondary survey data on a population of diabetic older adults in the U.S.

I'm going to start with briefly discussing the motivation behind this paper. Diabetes is one of the most common chronic conditions experienced by older adults in the U.S., and according to recent estimates released by the CDC, about 21% of seniors age 65 or above were diagnosed with diabetes.

Diabetes is also one of the costliest chronic conditions to manage because it relies heavily on prescription medications which can be prohibitively expensive for low income older adults. And when faced with high healthcare costs, these low income older adults may be forced to choose between basic needs like food and medication.

These economic tradeoffs can manifest as cost related medication nonadherence or CRN, including behaviors like skipping or stopping medications or taking smaller doses of medication to save money.
In addition to its primary goal of alleviating food insecurity, SNAP has the potential to exert a spill over income effect by helping older adults better adhere to their treatment regimens and this conceivably can happen through the reduction in out of pocket expenditures for food.

The research question that we seek to answer in this paper, is to what extent is SNAP participation associated with a lower likelihood of medication nonadherence among older adults, age 65 and above, who've been diagnosed to have diabetes?

We used secondary survey data from the National Health Interview Survey to answer this research question for the period 2013 to 2016. The NHIS is a nationally representative, cross-sectional survey of the civilian, non-institutionalized population in the U.S. It's really a great data set that's not very highly utilized. So I encourage you to check the link that's on the slide that gives you more information about the data and how you can download it.

The NHIS was especially well suited for our study because it has information about two key variables of interest, which is SNAP and CRN, as well as on an array of other characteristics that are important to control for in these types of analyses. Now we include some sample restrictions to derive our final analytic sample, which included older adults age 65 or above, who were diagnosed by healthcare professionals to have diabetes or borderline diabetes, who were eligible for SNAP benefits in the prior year, who were prescribed medication in the prior year and therefore for whom medication nonadherence is relevant, who incurred at least some out of pocket medical costs in the past year, and so for whom the question of trade off arises.

Finally, older adults who lived alone or in households with other older adults. This last restriction was really imposed to simplify our calculation of SNAP eligibility, which was a critical component of this study. USDA has special SNAP rules that are set aside for the elderly or the disabled.

Let me walk you briefly through the analysis variables that we used, beginning with our outcome variable, which is a binary indicator for engagement and CRN in the past year. This variable was constructed using three underlying survey
questions that asked individuals about whether they delayed refiling prescriptions to save money, whether they skipped medication doses to save money, or whether they took less medication to save money. And as long as an individual responded affirmatively to any of these questions, he or she was flagged as engaging in CRN.

Our main explanatory variable of interest is our treatment variable which is a binary indicator for self-reported SNAP participation in the past year, regardless of the duration of participation. In other words, as long as an individual responded participating in SNAP for at least one month in the past year, they made it into the treatment group.

We controlled for a host of other characteristics that are known to affect both SNAP and CRN such as demographic characteristics which are the usual suspects of age, sex, race, ethnicity and so on, socioeconomic characteristics including indicators for being employed, food security status of the household as well as the continuous variable for household income, and health and healthcare characteristics including indicator variables for one's self-reported health status, presence of any functional limitations, existence of prescription drug coverage and an indicator for high, out of pocket medical costs.

Everyone in our sample had at least some form of health insurance, and so the variation across people in health insurance was really based on whether or not that health insurance included prescription drug coverage.

How do we estimate the effects of SNAP on CRN? For this we used a two stage doubly robust propensity score matching technique. Propensity score matching is a widely used quasi experimental method that essentially entails matching individuals across treatment and comparison groups so that we eventually end up with a sample of people who have similar propensities for treatment, which in this case is SNAP.

In our first stage, we undertook this matching using a Logit participation model and radius matching with replacement. And once we were able to successfully match individuals across the treatment and comparison group, in the second stage within this matched sample we then used a Probit impact model to
estimate the effects of SNAP on CRN. The weights were chosen in such a way that they allowed us to estimate the population average treatment effect which is usually the policy parameter of interest. So our treatment group comprised of SNAP participants, as I mentioned earlier, based on self-reported SNAP participation, and our matched comparison group comprised income eligible nonparticipants.

The main research question asked whether SNAP is associated with a lower likelihood of CRN, and that is what we found from our modeling of this relationship. So, in particular, we found that the average or typical diabetic older adult participating in SNAP is about 5% percentage points less likely to not adhere to their treatment regimen as compared to their nonparticipating counterparts.

What is particularly noteworthy about this result is that the SNAP effect we identified is over and above controlling for other important predictions of CRN. For instance, diabetic older adults least likely to engage in medication nonadherence have prescription drug coverage unsurprisingly. They’re also older adults who live in fully food secure households and they’re older adults who incurred under $500 in out of pocket medical costs in the prior year. So clearly healthcare coverage characteristics are key protective factors against medication nonadherence.

Given the importance of these healthcare coverage characteristics that I just showed you, we then wanted to investigate the SNAP effect within subgroups defined by these characteristics. And so the first bar graph that you see now essentially recaps the results from our main model which showed that SNAP participants were about five percentage points less likely to engage in medication nonadherence as compared to nonparticipants. When we looked at this effect within a subgroup of people with prescription drug coverage, we found pretty similar effects. So again the rates of CRN among SNAP participants with prescription drug coverage were lower than the corresponding rates of CRN among eligible nonparticipants who also have prescription drug coverage. In terms of magnitude, the SNAP effect was again about five and a half
percentage points and the difference between CRN rates of participants and nonparticipants was statistically significant.

When we examined the SNAP effect within a group of people without prescription drug coverage, what was interesting is, although the results were in a similar direction, meaning that the CRN rates again were lower among participants than nonparticipants, as you can see, the difference is magnitude is much smaller and this difference is also not statistically significant.

We also looked at this relationship within a group of people with lower out of pocket medical costs, which were under $500 in the past year, and again we found a statistically significant effect of SNAP. But when we looked at the corresponding impact within a group of people with high out of pocket medical costs that were at or above $500, again we found effects in the same direction, but the difference in CRN rates were not statistically significant between participants and nonparticipants. So it seems like the SNAP affect is really being driven by one’s healthcare coverage characteristics, but it’s important to keep in mind that this does not mean that SNAP cannot help those without healthcare coverage or with lower healthcare coverage. It just means that those individuals may need a bigger bump in resources before the effects of SNAP on CRN can be seen.

I’ll conclude by just briefly talking about the policy and public implications. So the result of this paper has illustrated that SNAP can help with the self-management of diseases that require regular care access such as diabetes. And our subgroup results in particular illustrated that policy makers need to consider that the mere provision of health insurance or drug coverage may not be sufficient for improving health and wellbeing, but access to other kinds of social support like nutritious food should also be ensured.

Stakeholders have a vested interest in educating seniors about SNAP and eliminating barriers that may limit their access to the program. And so for example, we can move towards better integration and streamlining of programs like SNAP and Medicaid. Community health professionals can also contribute to this effort of reducing barriers to participation by framing SNAP not just as a
food assistance program but also as a health subsidy, and this may help counter some of the stigma associated with participation. And finally, providers can be reimbursed for screening older adult patients for food insecurity and consequently referring them to public assistance programs.

With that, I'll hand the baton over to Ginger who will discuss other channels through which SNAP can impact health.

Ginger Zielinskie: Thank you, Mithuna, and thank you Hillary. It's an honor to share the microphone with both Mithuna and Hillary. They've just done such awesome work over the years and look forward to seeing what's next from both of them. As Mithuna said, my name is Ginger Zielinskie and I lead an organization, Benefits Data Trust. We are a national not-for-profit and our mission is that we're committed to transforming how people in need access essentially benefits and services that cover the cost of food, shelter, heat and healthcare.

We got our start by really working with state agencies to be smarter about how they use data across health and human services programs to target individuals that are very likely eligible but not receiving particular benefits.

The way in which we engage in our work is first by being really smart about using data on both the health and human services side to target individuals that are likely eligible. We do direct service, so we've helped around 700,000 access $7 billion in benefits covering the cost of healthcare, food and heat. We also engage in policy work to understand policy options that are available to streamline benefits access across health and human services, and we engage in a diverse array of partnerships along both the public and private sector.

As Hillary started to give the frame of around the level of need or why this work matters, as we think about ever rising healthcare costs, we also have to be honest that there are 41 million people who cannot afford to meet their basic needs. Even more striking, 75% of seniors in America are surviving on social security alone. So as we ask hard questions on the healthcare setting around chronic disease management, around prescription assistance, we have to be very honest with ourselves around the economic situations in which people are Medicaid are struggling to survive.
With the explosion of the social determiners of health, this work is even more magnified, a perfect example of just how many participants are with us today. I was talking with Mithuna and Jennifer and two years ago I don't think we would've had more than 500 people on the line today to talk about food insecurity and its relationship to healthcare. We have a huge opportunity, as this little man shows, we're spending more than 80% of our healthcare in the clinical setting, but we know that there is a dramatic misalignment and if we really want to tackle the underlying issues associated with ever-increasing healthcare costs, we have to be smarter about our human services intervention, and really reassess the scale between our investments in health and human services support.

As I mentioned, Benefits Data Trust works with state agencies to target individuals that are likely eligible and not receiving particular benefits. A huge focus of ours, we started really focusing on prescription assistance in the low income senior population, realizing that there were dramatic needs as it related to SNAP support or Medicare/Medicaid that were currently unmet. We started to support low income people in accessing SNAP with a deep focus on connecting Medicaid enrollee data with SNAP enrollee data. And if you cross those lists, what you come up with is a group of people that are on SNAP but not on Medicaid. Conversely, you also come up with a group of people that are on Medicaid and not on SNAP. That being said, their income, their means tested really does closely align, so there should not be significant gaps.

Another gap that's really important to note is that nationally only 45% of low income seniors that are eligible for SNAP get it, leaving 55% of older adults that are eligible for SNAP not enrolled. Focus on this work and working to convince policy makers that it was worth the investment to engage in targeted outreach and enrollment, we started the questions, "Well, what are the savings associated with increased access to SNAP?" And I pushed my team. I said, "Well go find the literature from Dr. Seligman that shows us that increased access to SNAP improves healthcare costs." And at that time, again several years ago, probably going back three, four, five years ago, there was a gap in that research, so Benefits Data Trust kind of became accidental researchers.
We started to ask the question, what impact if any does SNAP and heat support have on healthcare utilization costs and outcomes? To answer this question, we used our unique position of already being able to access enrollment data across state agencies and we partnered with the state of Maryland, John's Hopkins University, University of Maryland, Baltimore County, the Hilltop Institute and both the Department of Health and Human Services in the state.

We then crossed full Medicare and Medicaid claims data for the whole population of older dual eligibles living in the state of Maryland. This ended up being about close to 69,000 individuals. We focused on individuals living in the community, again 65 plus. This is who the population was again, just about 69,000 individuals and there were a couple striking pieces of information on this slide. The average annual income for this population was $5800, annual. And, as Mithuna noted, on average they were carrying around at least two chronic conditions, and you'll see that from a race perspective, we did get a smattering of quite a diverse group.

Another couple of striking points to consider. Of the population where the average annual income was just $5800, less than half of them were enrolled in SNAP. So 47% were enrolled in SNAP and the average benefit amount when they were able to access SNAP was $117 a month. Even more striking was that only 21% of them were enrolled in heat assistance or MEAP, also known as LIHEAP, and that average benefit was around $340 per season. So just again to accentuate the practical implementations of the research that we're discussing, there are huge participation gaps for the most eligible population that our policy must address in order to continue to curb ever growing healthcare costs.

For the population of the 69,000 older duals living the community in Maryland, on an annual basis 17% of them were going into the nursing home, at least one nursing home visit, and that average annual cost hovered around $28,000. 28% of that population did find themselves in the hospital at least annually and that average cost was around $25,000.

So what we learned from crossing the SNAP enrollee data, the LIHEAP enrollee data and the Medicare and Medicaid claims data, was that by accessing SNAP
we were able to reduce the odds of nursing home admission by 23% in the next 12 month period in which an individual was enrolled in SNAP. Further, we are able to reduce the likelihood of a hospitalization admission by 14%, and we also saw that when an individual did have to go into the hospital or the nursing home, enrollment in SNAP reduced the length of stay in both settings.

Another finding that is not summarized here also showed that increased SNAP amount by a $10 increment strengthened both of these likelihoods.

After we double checked those numbers since they were striking, we partnered with Northwestern’s health economists to understand in layman's terms what the healthcare savings could be associated with increase access to SNAP. And what we learned is that for every individual and low income senior enrolled in SNAP, we had the ability to save over $2000 in healthcare costs in the next 12 month period in which someone was enrolled. So whether or not we care about from a heart strings perspective or a purse string perspective, increasing access to SNAP for populations across the age spectrum has the ability for us to deliver better outcomes at a better cost.

In regards to the implications associated with this research, we know that over 5.5 million low income seniors are eligible but not enrolled in SNAP. By increasing access for this population by being smart the policy options that we can employ, we have the ability just for the low income senior population to save over $34 billion in healthcare savings. As we think the demographic trends in front of this country and the silver tsunami, as it is called, this is a smart policy investment again to help make sure that older, low income seniors are able to meet their basic needs.

Just to give you a sense, since we're fortunate enough to have participants from across the country, here are where some of the SNAP gaps exist. If you're in one of those dark blue states, there are between 300 and 600,000 low income seniors that are eligible, not enrolled. And while this research does hold true for the 65 plus population, I don't want to underestimate the positive impact that SNAP can have on all populations, but just this research did focus, in order to
get the claims data, we were able to focus on both the Medicare and Medicaid, the full claims picture of low income seniors.

So just form a data perspective, from a practical perspective, what data can and should be used, we here at BDP strongly believe that you are on Medicaid, you should be accessing SNAP, that good healthcare is making sure that you can overcome your food insecurity and be able to eat three meals a day. The low income subsidy, which is also a prescription assistance program related to the conversation that Mithuna had, there are 2 million seniors in this country that are eligible, not enrolled, in LIS, but for those that are that is another very strong target population that can and should be used to increase access to SNAP. WIC, LIHEAP, TANF, these are all potential opportunities to really think about cross-program utilization to align on supporting individuals and accessing the right benefits and services that they need in order to improve their economic social and health outcome.

At the provider level, it's our sincere hope at Benefits Data Trust that if we can take care of this in partnership with our state partners and our federal partners, that we shouldn't have the need all the way down to the retail level of providers, but food insecurity screens connected to the right social service support provider a great opportunity also to ensure that individuals are enrolled in all of the benefits that help them meet their basic needs.

Here's just a smattering of, in addition to SNAP, other programs and services that are available, but we won't really jump into that in detail today. Finally, just several practical policy options. There are options available to state. The data is available and we really have more power in our hands than we ever have had before to align health and human services ecosystem. There are policy programs like the elderly simplified application that increases re-certification periods to 36 months. It makes it less challenging to apply and get enrolled in SNAP. There are opportunities like Fast Track that support helping SNAP enrollees access Medicaid support. Obviously, like we mentioned, there is data available to better serve individuals across the spectrum and we certainly believe that increased flexibility for state and for payers and providers in thinking about value based payment reform, is critical to again build an integrated health and
human services network. And I think that is it from the presenters today. Again, thank you so much for this opportunity and your interest.

Jennifer Pooler: Great. Thank you so much Ginger and thanks to Hillary and Mithuna as well for such great presentations. I just have a few housekeeping items while people continue to send in their questions, and I'm going to breeze through them because we have about 11 minutes. As a reminder, everyone can download the PowerPoint presentation in the download handouts box to the right of your screen. If you'd like to submit a question, type into the Q&A box and we'll receive it. If we don't get to your questions, we will post response on our website. If you are interested in seeing some additional resources related to food insecurity in older adults in particular, you can visit our website which is the fourth bullet down on the screen, IMPAQINT.com/OASDOH. We have a number of resources for food security screening, referral and primary care, and we also have links to external web pages including a free online course about food insecurity among older adults that was produced by FRAC and AARP Foundation as well as clinical screening algorithms developed by NOPREN, and a whole bunch of other things.

Finally, if you can all take a minute to complete our survey after the webinar, we'd appreciate that. We have got a few questions coming in, so let's get started.

Ginger Zielinske: Sure. So the SNAP gap information does come from FNS and there has been increased effort around increasing senior SNAP participation. Over the past I guess five years we've seen it grow from I think about 40 to 45%. You can also look to the National Council on Aging. They have a really great map that shows gaps in access for prescription assistance as well as SNAP. And then I forget, Jennifer, I'm sorry, the second part of your question?

Jennifer Pooler: Where did the numbers come from?
Ginger Zielinske: Yeah. So I believe on that slide that they actually came from FNS, which is the part of USDA that administers the SNAP program.

Jennifer Pooler: Great, thank you. So we have another question about...or a couple questions actually about food security screening in clinical settings. So maybe Hillary you could take a shot at those. Are you familiar with any processes or workflows for enrolling patients in SNAP, and would you recommend that this happen at the clinic site or someplace else?

Hillary Seligma: There are initiatives happening all over the country to implement screening programs in clinical settings and then refer to either community based food support or federal nutrition programs. And each of those programs is a little bit different, based on the way that the SNAP program is operationalized in that state and based on the clinical work flow, but let me just give you a couple of examples.

One way in which this is done is to have SNAP eligibility workers embedded in clinical settings. A second way this is done is referral to a social worker or a health leads type community navigator who can walk the participant through an online application form that does the initial steps of SNAP eligibility. And then there are centralized systems, like in Colorado, where there is a centralized phone number that participants get phoned from essential place that will help people walk through the SNAP application over the telephone if they screened positive in the clinical setting. We have a relatively recent article in JAMA Pediatrics, lead author Ellen Barnage, that walks through all of these models and might be a good resource for that.

Jennifer Pooler: Great. And we have a couple of follow up questions. If you could answer those as well, that would be great. One is whether someone has to be certified to enroll someone in SNAP and another question, how providers get reimbursed for screening.

Hillary Seligma: Great questions. In most states if not all, you do have to be a certified SNAP eligibility worker to complete the enrollment process, and so it does take training and some kid of affiliation with the SNAP program, although, in many
places that application can be completed online, so you have to check your state.

The second question is about reimbursement. At this point in time there is an ICD-10 code for food insecurity. It’s Z59.4. This is put into the clinical algorithms that you can download off the NOPREN website or this IMPAQ website. You cannot bill for that screening service, but that Z59.4 code can work towards building social complexity and socially complex patients do, in some situations receive a higher reimbursement rate. So the answer is sometimes this can be used for higher reimbursements, not all the time.

Ginger Zielinske: If I may add, this is Ginger. If I may add, a final CMS rule just came out last week regarding the Medicare Advantage program and the regulation thereof and there is a supplemental health benefit component on page 207 of that rule where we do see that there may be an opportunity to include benefits access, screening and support as a supplemental health benefit, because of the research that Mithuna and Dr. Seligman have been able to do around the healthcare utilizations and savings associated with the basic need support. So we are seeing continued change from CMS in regards to how we categorize human services supports that have supplemental health benefits and I think we need to continue to push from a policy perspective that level of flexibility.

Jennifer Pooler: Great. And I am getting overwhelmed with questions here. And along the same lines that you’re talking, Ginger, do you find that states policy makers or federal policy makers are open to this information and the cost savings logic?

Ginger Zielinske: I would say yes and the proof is in the pudding. But yes they are and we have to continue to engage in research that demonstrates the positive outcomes achieved, so more cross-program research, more rigorous research like the work that the three of us are doing is essential as we continue to push this kind of more comprehensive policy and practice forward.

Jennifer Pooler: Thank you. Mithuna, we had a question about covariates used in your model. Gender and sexual orientation were not displayed. I know that LGBT community has some of its own health risks that seem likely to be aggravated by food
insecurity. Were they controlled for and just not shown or were they not accounted for in the models.

Mithuna Srinvasan: That's a great question. So we did not control for sexual orientation. We controlled for male versus female. I'm not sure if the NHIS has questions for this population on sexual orientation. They might. I just have to go back and check, but that is a great point to consider for future work. Thank you.

Jennifer Pooler: Thank you. Another questions. I think Hillary this probably relates most to your presentation. We see evidence on cost and utilization. What do you find intermediary outcomes that would help explain these outcomes. For example, the impact on A1c and/or BMI is very mixed. Can you speak to that and how it works within the framework.

Hillary Seligma: Yeah. So you are correct that the association between food insecurity and BMI has been quite mixed and it depends on what population you look at. And over time, what seems to be happening is that relationship is disappearing as the entire population becomes more obese. The relationship between food insecurity and other intermediate health outcomes like hemoglobin A1c, which is a measure of blood sugar control, in people with diabetes is far less mixed. We see a very reliable and consistent relationship between poor blood sugar control and food insecurity. We also see a relatively consistent relationship between food insecurity and some but not all measures of blood pressure. What we have to be really careful of in these situations is to understand the extent to which these intermediate health outcomes are driver more by diet and more by cost related medication nonadherence. And so, for example, high blood pressure and high cholesterol are so highly associated with taking your medications that the food insecurity probably gets trumped by that. And intermediate outcomes, like in diabetes, that are so diet sensitive, we see the impact of food insecurity much more greatly.

Jennifer Pooler: Great. Thank you. So we are out of time today. So thanks again to all of our presenters and for anyone still listening, look for a link from us in the next couple of weeks with a link to the recording and the answers to the rest of the questions.
Thank you everybody. Bye.

Hillary Seligman: Thank you.