MMS Virtual Forum
Hunger and Housing: Lessons from COVID-19
September 23, 2020

On September 23, 2020, the Massachusetts Medical Society (MMS) hosted a 60-minute Virtual Forum on the physical and mental health effects of food and housing insecurity with a focus on how systemic economic and racial inequities exacerbate the impact of the pandemic on already disadvantaged individuals and communities. The program included a discussion of recommended actions and policy solutions to help physicians address these two critical determinants of health. The slides, resources and recording from the program are posted.

Program Faculty:

**Moderator:** Kathryn Brodowski, MD, MPH, Preventive Medicine physician, Chair of the MMS Committee on Nutrition and Physical Activity

**Speaker:** Megan Sandel, MD, MPH, Associate Director of the GROW Clinic at Boston Medical Center, Principal Investigator with Children’s Health Watch, and Associate Professor of Pediatrics at the Boston University Schools of Medicine and Public Health

**Summary**

**Opening Remarks -Dr. Kathryn Brodowski**

Dr. Brodowski began the program by specifically calling out the disproportionate effect of the pandemic on people of low income and people of color. She emphasized that we cannot achieve change if we do not recognize the pre-existing racial and socioeconomic inequality that has predisposed these populations to greater risk from COVID-19 as well as its economic fallout.

Dr. Brodowski provided some background on terms often used in the hunger relief realm. Food insecurity is defined as the household level economic and social condition of limited or uncertain access to adequate food—basically an individual or family who worries that they'll run out of food or actually has run out of food. Food insecurity is linked with a host of adverse health consequences. She explained the difference between a food bank and a food pantry, as often she hears those terms used interchangeably. The difference between the two is important when it comes to solutions and how to partner with community-based organizations. By having a basic understanding of the hunger relief world and how it functions, individuals and organizations will be better equipped to partner with them. Food banks are large sophisticated organizations that act as the nexus for food distribution. Within Massachusetts we have three large food banks. For example, the Greater Boston Food Bank (GBFB) serves Eastern Massachusetts. It basically does two things. It procures the food, so food is coming into a large warehouse, and then distributes it out throughout the system. It has over 500 member agencies. Those member agencies are the local food pantries in your own communities as well as meal sharing programs and homeless shelters. GBFBP also does direct distribution in some cases, such as to medical centers and free
produce mobile markets to community health centers. GBFB covers over 190 cities and towns in Eastern Massachusetts. The scale of the operations is important. To understand scale, GBFB distributes, in a normal year, 60 million pounds of food which is an enormous scale, and a great force that we can partner with in order to improve food insecurity.

Dr. Brodowski then provided a high-level overview of how this pandemic has disproportionately affected those with means and those without to set the stage for Dr. Sandel's presentation. She referred to her slide on the haves and the have-nots. In the have category during this pandemic, those who have means have been lucky enough to experience grocery home delivery. They've also been much better able to absorb increasing food prices. She invited attendees to think back to a few months ago to the outbreaks of COVID in meat packing plants. As a result, meat prices went up. People and families are better able to absorb that increase if they had means. They also have the ability to travel to multiple grocery stores to get needed items since they can rely on their own transportation. She then turned to housing noting that housing ironically has been a real winner during this pandemic. If you own a house, real estate values in general are going up. For those who have had trouble during the pandemic, maybe they've been unemployed, lost a job, or been furloughed, they might have had difficulty paying their mortgage, but there has been help for that. The CARES Act Mortgage Forbearance Program for government backed mortgages offers a practical and realistic way for folks to catch up on missed payments. They still owe what's due, but in some cases, they're able to tack their mortgage payments on to the end of their mortgage, which may come decades later. That is a real contrast with those who rent.

Dr. Brodowski then discussed the have-nots. She began by stating that we know that food insecurity rates are on the rise because, for example, GBFB is now on track to distribute 100 million pounds of food. That's a 67% increase in their normal operations. We also see that low-income grocery and delivery workers are now considered essential frontline workers which has increased their exposure risk. There's also worsening conditions for those already living in food deserts. Small grocery stores and corner stores have been suffering inventory shortages especially fresh foods, and many have-nots are unable to travel to different locations since car access or other transportation is difficult for those without means. On the housing front, renters have received some relief in the form of prevention of evictions from the CDC Moratorium. However, in contrast to the CARES Act for Mortgages, the CDC Moratorium doesn't really provide any practical or realistic payment relief program. Renters still owe what's due, and the fear now is that people and families are going to accumulate many months of back-due rent that will come due at once without any kind of practical repayment program. She also highlighted the importance of crowded housing during this pandemic. Crowded housing refers to more than one occupant per room, and we have been seeing high rates of COVID-19 in crowded housing situations even more so than population density. We've seen this for example within Chelsea, Revere, and Lawrence. Likewise, we've witnessed COVID-19 outbreaks within homeless shelters, again due to the crowding situation. She ended her remarks by stating during this pandemic there has been really a clear divide between the haves and have-nots, and that the gap is only getting wider.

Presentation - Dr. Megan Sandel
Dr. Sandel discussed addressing structural economic inequities for well-being including how housing and hunger act synergistically to provide toxic stress, how food insecurity impacts health, how housing impacts health and what we can do to make a difference on the individual level, the system level and the policy level.

Dr. Sandel began her presentation with stating the importance of social determinants of health and how they drive outcomes. It is important that we not just talk about them in negative terms the way we normally do. When we think about it, many of us have great social factors that drive our health outcomes. I like to say my children have great social determinants of health. They have two parents that are physicians, we live in a neighborhood that is near a park. We're in a great school district, we own our house. It is really important for us to understand the ways in which social factors can be positive and synergistically positive and also that for certain families they're negative and they're synergistically negative.

Housing and hunger are not unifactorial. We often think about food interventions and that's really important, but oftentimes families are making these toxic trade-offs between whether or not they're going to have enough money for food or enough money for rent. For those that have read the book Evicted by Matt Desmond, he has a beautiful and very difficult phrase in there, which is that rent eats first. In many ways housing and hunger are the twin demons that often are making people sicker.

As we start to think about it, I like to describe it as toxic stress. The reason for that is that as we think about it, stress is in all of our lives, and COVID-19 has made all of our lives potentially more stressful. In short spurts, stress is actually positive. You have a brief elevation in stress hormones. If it's longer, it can be potentially tolerable. Toxic stress is when there is prolonged activation of the stress responses in the absence of protective relationships that allow you to relax. For example, home can be where the stress is if you're worried about whether you're going to be able to stay there. Home is where the stress is if you're not sure where your next meal is going to come from tomorrow. Often it is getting back to what is the basics of public health, Maslow's hierarchy of need. What we realize more and more is those physiologic needs food, water, warmth, rest, and those safety needs, having a secure place. Food and housing instability really impact and create toxic stress in our lives and make it harder to build off of that foundation to senses of belonging, and esteem, and self-actualization.

There are many ways hunger matters to health. There is decades of research in this area. Food insecurity has been linked to overall health, depression, poor oral health, chronic diseases, other things. To give you a sense, the odds of worse oral health is three times higher if you're food insecure. The odds of your diabetes being worse if you're severely food insecure is two times higher. Your odds of iron deficient anemia is almost three times higher. Your odds of depression is three times higher.

We know that families that are food insecure oftentimes are going to choose between food and medicine. We know, for instance that food insecure diabetics have harder adherence and control of their blood sugar monitoring, especially with the higher cost of insulin lately. The other piece is unnecessary health care utilization. There's good research that diabetic food insecure patients
are two times more likely to have a sudden blood drop that results in going to the emergency room, particularly at the end of the month when oftentimes food subsidy programs runs out. There is a relatively older study that really emphasizes the fact that when you think about who is visiting that food bank, you're seeing a higher level of chronic disease, you're seeing a third of the households reporting somebody with diabetes, and over half of the households reporting somebody with higher blood pressure -that could be physiologic blood pressure, elevations, and pathologic ones.

I like to point out a review done by Lauren Taylor in Health Affairs in 2018 that talks about how things like quality, and safety, and stability, affordability and neighborhoods are all related. I'm not going to spend a lot of time on quality tonight, but I do want to emphasize that for many of us honestly being in your home 24 hours a day is something your home is not designed for. It's not necessarily designed for the heating costs, the cooling costs, the ventilation. There can be issues with mold, there can be issues with pests and other things. As we're thinking about these issues, it is important that we don't forget about the quality of the home itself. However, where I'm going to focus during this presentation is on stability affordability and on neighborhood, because one of the things that we know particularly with COVID is that certain neighborhoods and certain communities were hit harder and that oftentimes their housing may be part of the reason why we saw those differences.

Housing stability is like an iceberg. The reason is that we spend a lot of time on homelessness and we should. There is decades of research around how homelessness impacts health. Sometimes we don't spend enough time thinking about the part of the iceberg that's below the surface, namely families that are housing unstable, families that are moving frequently, which we would define as how many places have you lived in the past year and whether or not you're falling behind on rent. The root cause of a lot of these housing issues is unaffordable housing.

Dr. Sandel shared a research study that was published from Children's Health Watch in February of 2018. For those that are unfamiliar, Children's Health Watch is a research policy network. It's based at Boston Medical Center, but we actually collect data in five cities in Boston, Baltimore, Philadelphia, Little Rock, and Minneapolis. We focus on families with young children, kids zero to four because that's when you're growing the brain that you need for the rest of your life. What we're really focused on is what are the ways in which common hardships, food insecurity, housing instability, energy insecurity, health care cost trade-offs are associated with the health and development of children and their caregivers, because what's bad for kids is also bad for adults and vice versa. Over a five to six-year period we interviewed over 22,000 families that were renters and that were on public insurance. These were low income renter families. We found shocking common housing instability. We focused on three forms. We looked at behind on rent, we looked at multiple moves, we looked at did you have a history of homelessness in the child's young life. A third of the families we interviewed endorsed one of those forms of housing instability. Each of these three forms of housing instability were associated with adverse health including being in very poor health, being developmentally delayed or a parent reporting depression symptoms.
Another issue published on is overcrowding which is defined typically as having more than 1 and 1/2 persons per bedroom in your house. We typically have not seen overcrowding associated with adverse health. However, with COVID-19, overcrowding is a risk factor potentially where people aren't able to quarantine or weren't able to isolate themselves and therefore COVID-19 spread through housing much more frequently. I mentioned how common housing instability was. What also was striking is that these were very distinct forms of housing instability. There was little overlap between the three groups, and so if you were positive for one form of housing instability you were only positive for one form 86% of the time. Therefore, it is really important for us to think of these as distinct groups of families that we needed to serve.

The last thing that was really striking looking at the bar graphs is you'll see the red is the stable housing. Then you'll see the adjusted odds ratios of being associated with very poor health in the children or the parent having very poor health, or the parent reporting depression symptoms. The purple bar is behind on rent, the green bar is people reporting multiple moves, and the blue bar is homelessness. What was so striking is we knew homelessness was bad on people's health, but check out that purple bar, behind on rent was just as toxic as being homeless in terms of the adjusted odds ratios. This is pre-COVID data, and now we are looking at the national reporting on how many millions of households are currently falling behind on rent. You can see there's a fourfold increased risk of food insecurity, a four-fold increased risk of health care cost trade-offs. This was actually featured in *Time* this week. I was interviewed about the toxic stress associated with housing insecurity. Yes, you may have an eviction moratorium, but you're still falling behind on rent, you're still making those toxic trade-offs, and this is going to potentially affect a generation of kids.

I want to talk a little bit about location. This is a map of the city of Boston. What we did here is we utilized a mapping system of opportunity. An opportunity index was developed by the Kirwan Institute at Ohio State. It considers 17 different factors and then creates a grading system between high opportunity neighborhoods, very high opportunity neighborhoods down to very low opportunity neighborhoods. In this map you can see the lighter areas with the very light yellow that's Roxbury, Dorchester, Mattapan in terms of the neighborhoods in Boston. Diversitydatakids.org allows you to map everywhere in the state and the country being.

One of my dear colleagues at Boston Medical Center, Dr. Renee Boynton-Jarrett, who founded the Vital Village Network, pulled out of our electronic health record the blood pressure readings of three-year-old’s. We ended up doing the mapping as circles of prevalence of elevated blood pressures above the 95th percentile. What you see here is that the larger the circles are actually in the lower opportunity neighborhoods. Think about that toxic stress. You are starting to see how something that is social plays out into something that is biologic. What’s interesting is that it happens not just in the elders or in the adults, it happens in kids. We published this in Academic Pediatrics in 2016 arguing that we can't just do individual level interventions to address child poverty, we have to do neighborhood level interventions if we're going to be truly effective.

Place has taught us more about the inequities across the lifespan than COVID did. What you'll see here are three different Boston neighborhood maps on how economic inequities played out in terms of an infectious disease. There's the light blue map to the left-hand side looking at the
percentage of people in a household that are paying more than 30% of their take home income on rent. The next one, the gray areas where you're seeing the unemployment rate, and again, you're seeing those central core city neighborhoods Roxbury, Dorchester, Mattapan having a disparate amount, and now we’re seeing the infectious disease prevalence rate of COVID infections.

What we’re starting to understand is that people are making these trade-offs. If it’s hard to afford your housing, you’re living overcrowded, you’re living in less stable housing, then you are potentially going to have to get a job to work. You may have to choose a job that places you more at risk. We see this vicious cycle playing out. It becomes really important to understand that we have to target things appropriately. We have to think about them more effectively. One of the things you have to do is not just think about a patient in front of us but think about what neighborhood are they going to and how is that going to play a role. As Kathryn mentioned homeless shelters have much higher rates of COVID infection. The Pine Street Inn in their congregate shelter settings have a 30% COVID infection rate, but they also run permanent supportive housing, affordable housing units. In those units they had less than a 1% infection rate. Similarly, Chelsea had an 8% localized infection rate whereas their affordable housing units had less than a 1% infection rate. I’ve sometimes said that a home acts like a vaccine. It keeps you healthy now and in the future. The data has shown that it can be a vaccine against COVID infection.

Dr Sandel then switched gears to talk about how we start to address these problems. It is really important that we not just think about the individual level and the screening, but we start thinking about systems and ultimately about policies. Boston Medical Center has been instituting a universal screening system called Thrive. We basically try to do it with every patient that comes into our outpatient setting. We hand them a piece of paper, load it into our electronic record and then if the family or the individual requests resources, we actually connect them directly to resources. It’s a single page of 10 questions that are addressing eight different domains. We’re looking at housing using the accountable health community’s tool. We’re looking at food insecurity using the hunger vital sign that Children’s Health Watch helped develop and is the best validated tool for food insecurity. We also ask about difficulty affording medicine, difficulty with transportation, difficulty affording your utilities, challenges caregiving for an elder or for a child and we ask if you would you like help with employment or education. We have built this system such that it will actually do ICD-10 coding so that we can actually do it. I want to give a huge shout out to Stephanie Lucy and Dr. Pablo Buitron de la Vega that really spearheaded that effort. We now have this in six different languages and have built a resource list.

There are great resources out there, Help Steps, 211, The Aunt Bertha Social Resource Network, and others. You can go to massthrive.org, put in your zip code and resources will come up. One thing I am often asked is what do you do with the responses beyond just giving someone a resource list? I want to really emphasize that a resource list is a good intervention. Research shows that just giving people information alone is a powerful intervention.

Sometimes you do want to do more as there is an emergent need. In this case, we built systems co-located within our hospital setting. Many of you may know through the great partnership with
GBFB we were able to put a food pantry on site at Boston Medical Center. We have grown that over the last 18 years, and we actually now get 12 to 15,000 pounds of food twice a week delivered to the hospital to serve 8,000 families every single month. These are things that you could start yourself. GBFB is starting mobile markets, and so there are ways in which you can bring in food to co-locate on site. We also have been bringing on site Metro Housing Boston and the Medical Legal Partnership to be able to address some of the housing issues, provide rent resources and other things that are needed. We’ve done higher collaborations, partnering with Boston Housing Authority, local community development corporations, and health plans to start to think about who are the medically complex individuals and families where being homeless or housing unstable is causing them to come to our hospital and be hospitalized or visiting our emergency department. We call this model housing prescriptions. We were able to first pilot it through a grant through the Boston Foundation called Health Starts at Home and have published some of the preliminary data from this on our medically complex families Housing Prescription Program and Health Affairs in April.

The last piece is the policy world. I'm going give a shout out to two campaigns. One is a national campaign which is called Opportunity Starts at Home. For those that want more information, opportunityhome.org is where you can find it. It is a cross sector campaign to try and get more housing resources, particularly for renters. The Opportunity Starts at Home campaign had a sign on letter in August trying to get the Senate to include $100 billion of rent assistance in the Heroes Act that the House had passed. Many local health systems signed on to that letter including Mass General-B Brigham, Beth Israel Lahey, Boston Medical Center, Cambridge Health Alliance, the Health Care Anchor Network Hospitals, UMass Bay State, the C3 Collaborative. These are ways in which we can act to try and get more federal resources, because while the CDC Eviction Moratorium is great, I do think it's important that the federal government help people get caught up with rent. It’s really important thing that hospitals are weighing in with their voice to get those resources.

Here in Massachusetts, GBFB has been convening a Hunger to Health Collaborative. The next meeting is coming up in a couple of weeks. There's a night meeting on October 5th and then a half day conference on October 6th. You can sign up for free through the link there for Eventbrite to learn more. Food is Medicine in Massachusetts is another collaborative.

When we think about this, what we hear a lot of times in our patients and the stories that they tell us is really the individual health story. They're having hardships and we're seeing the downstream effects. What I'm asking all of you is to not just think about those individual downstream effects. Of course, we have to do something. We have to act, we have to get people the resources that they need, but I'm asking you to work upstream to go towards the systems and the policy changes that we need to do in order to address those inequities.

Equity is part of every story. It’s not just about equality, it's about equity. What we understand is that when you have three different height people, a tall person, a medium height person, a shorter person and you treat them all equally by giving them one box to stand on. Only the tall person gets to that apple of opportunity pictures in the tree. It's when you treat people equitably, you give them what they need to be successful. When you give the tall person one box, the medium
height person two boxes, the short person three boxes, that's when you make sure each person has a fair shot.

There are two tensions in equity. One is that to get that same fair shot, you have to treat them unequally, you have to give some people more. You have to acknowledge that people didn't get to be different heights by accident. Structural racism and oppression have really systematically made it so people start at different places, which is not to say that they will stay fixed in that way, but we need to equitably give them the shot so that they can get to that same equity in the future.

Responses to participants’ questions

I'm familiar with the use of community or lay health workers to help tuberculosis patients keep on track with treatment. Have any programs been developed to use community workers to help teach preparing healthy and expects of meals to using foods available from food banks and food pantries?

Dr. Brodowski: Before COVID-19 I would have been thinking this could be done in local community centers or even in the neighborhood home, more challenging to contemplate now.

Dr. Sandel: I do think that to an extent being able to have culturally appropriate foods and recipes is really critically important. One of the things that is heartbreaking is that food availability is not universal. In the clinic, what we will hear from our patients is that they have to go to four stores to use their WIC checks to get the yogurt, and the eggs, and the milk. They're exposing themselves every time they go to a grocery store. I do think education and understanding nutrition is critical. I hope that what we do is address the structural issues of people being food insecure and hungry and the fact that there is not universal availability of healthy foods in every place where people live.

Dr. Brodowski: You bring up a really important point of culturally appropriate foods as well. There’s wonderful research out of UMass Amherst that we are more likely to have uptake if we’re talking about cooking with foods that people know because everybody knows the foods that they love. Another great resource if you’re interested in cooking nutrition. There’s a large nonprofit called Cooking Matters that works within our state and elsewhere. Their classes are offered to low income families kids included which is wonderful as it gets moms and kids cooking together. These can be hosted at medical centers or also in the community. They even have provisions for many of our families who are low income, suffering from food insecurity, and /or co-morbid issues with housing and material hardships. Unfortunately, people may not have a refrigerator or oven to cook with. If you have a patient in that situation, they do have a great drop down menu for no cook recipes, and you can also offer that resource to your patients who may be in motels and do not have access to cooking equipment.

We see homeless patients every night in our emergency room. We have them see our great social workers in the morning, but is there other things we could be doing to serve those families best? How to get more involved?
Dr. Sandel: I do think that in many ways there just is not enough affordable housing. That is a reality and that is part of the reason why I think it's really important for us to act on the policy level to try and create more resources. That being said, I do think that one of the things that we need to try to start to do is do more screening earlier in the process. I would give a shout out to some of my colleagues at Boston Children's Dr. Catherine Kopplin and Dr. Amanda Stewart. I wrote a pediatrics commentary this past month about the fact that we're worried about the tidal wave of potential evictions and how many people will be coming through the emergency department. Massachusetts is what's called a right to shelter state. If you're a family and you show that you are homeless, they have to find a place for you to go. What is difficult is that the office right now is closed so you have to virtually apply, and oftentimes it's only open from 9:00 to 5:00 Monday through Friday. So, sometimes families as a last resort will sleep in an emergency department. What we need to start to do is not only to screen people earlier to try and prevent them from becoming homeless. For example, work with getting RAFT, which is Resident Assistance for Transitional families. Up to $10,000 is available for families to be able to avert homelessness. We also need to be able to actively start to get new resources available. What will be interesting during this current time is that there's a lot of spaces such as hotels and dormitories that are potentially going to be underutilized. I think we need to be creative in starting to think about where families can stay that may not be a traditional apartment until we can get more funding.

What policies should we be advocating in additional to these local efforts that can help people stay in their homes?

Dr. Sandel: We have in Massachusetts a Massachusetts Rental Voucher Program. It's functionally our state version of Section 8 Voucher. That program is going to need to be expanded not just for helping people get out of homeless shelters and into apartments, but actually to help people stay in their apartments. There was a really great webinar this morning that the Boston Foundation put together. Keith Fairey who runs Wayfinders in the Western part of the state said it used to be that affordable housing was a crisis and now we are in an emergency so we need to start to apply emergency things not just RAFT, but potentially in place pandemic vouchers or things like that to help people who have that gap in income and may not be able to stay in their homes themselves. Because the reality is that we can avert evictions, but we need to help the small landlords be able to pay their mortgages too. This is a ripple effect that we need to be able to do on both sides.'

On that same issue with finding creative solutions to the housing problem. We're going to go off the cliff after the CDC Moratorium on evictions ends, is there any luck in having meaningful conversations with perhaps real estate brokers or builders, thinking really outside the box who should be at the table, what stakeholders, how can we get involved?

Dr. Sandel: I think this is exactly right. What I would say is that in many ways, this idea of hospitals being in partnerships with real estate developers and others has not been the case over the last couple of decades, but you're starting to see it more and more. We at Boston Medical Center used our Determination of Need obligation, which is a Massachusetts specific. When we build a new tower a certain percentage of the cost of the building need to go into a community
health initiative. We said to the Department of Public Health, that we think the most determined need in the community is affordable housing, will you let us spend this on partnerships? I want to be clear, BMC is not building its own housing, we're not becoming a landlord, but we're building partnerships with Boston Housing Authority, Cambridge Housing Authority, local community development corporations and trying to start to think about financing tools to build more affordable housing. What's exciting is we used a million of the 6 million obligation to find something called the Innovative Stable Housing initiative. Boston Children's and Brigham and Women's actually matched our dollars. We have now pulled them together into a collaborative process where we're trying to think about ways to do neighborhood revitalization and job pipelines to help people afford their housing. I think this concept of being an anchor institution and doing place-based investing, place-based procurement, place-based hiring as ways to help people with economic mobility. I think we as doctors need to demand that our institutions are part of those networks and are doing that type of work.

**While it's great to offer food from a health location. Many of our hospitals are in difficult to access locations, have paid parking, and traffic issues in our sites. Especially in a pandemic, why do you say a hospital as an ideal place to provide food as opposed to vouchers?**

**Dr. Sandel:** It's a great question. I would say I certainly would never say it's one or the other. One of the things that's been great about our ability to do food and security screening is if someone's means positive and you say, "Do you have a food tonight?" And they say no, you can refer them to the basement of Boston Medical Center, and they can walk out with a box of food. However, just because of exactly what you're saying, a hospital, especially during a pandemic, is not a great place to bring a healthy person to get their food, we actually have started doing a delivery service through our food pantry. We've also been partnering with things like Fresh Truck and others to do mobile locations. To the extent possible being able to partner with big markets like Stop and Shop to be able to do food vouchers is also critical. So, you do on site food, then you do delivery, then you do some type of vouchers. You need to think about this holistically. The other thing to think about is the there's more and more of a need for medically tailored meals. Community Servings and others have been really important. Sometimes you can get Medicaid or Medicare to actually be able to pay for some of those food prescriptions.

**Dr. Brodowski:** I couldn't agree more. It’s basically not a one size fits all as you said. Every hospital or medical center is unique. Some places like BMC might have the space and can afford to have a food pantry, but others that's just not going to work. Real estate is prime in our country and even within hospitals, having that space to put aside for a food pantry in a lot of places is not feasible. You have to do what works for you. I will say also just to tag in on my experience. GBFB recognized that barrier. They said, "We want to partner with medical centers, let's see what organically works for you in your situation." In some cases, we could do a physical food pantry like the Preventive Food Pantry at BMC. In other cases, we can assess the site and do a completely free produce mobile market in a parking lot set up. Now that might not be for all because as you say parking lots can be in demand. But in some cases, facilities do have large completely free parking lots, and we also specifically try to target medical centers that might serve the highest needs. Community Health Centers (CHC) are a great place to have such
operations. We found with screening at CHC’s that usually the majority of patients are screening positive for food insecurity, which is just absolutely shocking like in the 50s and 60s percent for screening positive for food insecurity, and you know they have other issues like housing and things like that. Dr. Sandel mentioned Aunt Bertha technology. One of the other major issues with hunger is that not everybody needs a mobile market or a food pantry. I find a lot of times medical centers will call up and ask let’s put a mobile market or new thing in sight, but they may not realize that there's a local food pantry a block away. There’s also a need to also have a conversation about being aware of what community based organizations exist and how to connect your patients and neighbors to really strengthen the whole neighborhood and have referrals out to the local food pantries or other forms of assistance.

**How does stigma affect those with food and housing insecurity and a patients’ willingness to discuss it with their doctor and be truthful on the screening questions?**

**Dr. Sandel:** It is such a good question because I think that people don't walk in with labels. I've learned that oftentimes it’s only by doing systematic screening that you will uncover issues that you wouldn't have otherwise guessed. There are a lot of different ways you can implement it. We have chosen to implement it where when you walk in and you check in at the front desk, you're handed that piece of paper the same way you would be handed a pediatric form to do a developmental screen or any other type of pre-visit checklist. Basically, you fill it out yourself. Someone is not asking you the information; you're filling it out to hand it to the medical assistant. The medical assistant puts it into the electronic record and then you the physician or advanced practitioner can look at it and can say, OK, this is what's going on and do a little bit of further assessment. First line screening is better. There's is good research from the Social Intervention Research Evaluation Network, SIREN, out of UCSF that suggests that you may actually get more accurate information from that iPad or that written screener than if somebody is physically asking questions of you because of that type of stigma. I do think that more and more people are kind of getting used to answering these questions. I think that if it makes you feel better to somewhat normalize it, you can say, listen, we're asking every patient this because we know this is important for your health, and we want to offer some assistance. It’s also important to manage people's assistance. We're not going to be able to give everyone a home. You may not be able to give someone food right there that day, but you want to be able to build out even something as simple as the resource list so that people are able to be connected. By doing universal screening and showing that a third of the people were housing insecure was motivating to my hospital and got them to start thinking about how we can partner in housing. If you don't have that data, it becomes really hard to have the conversation.

**There are often concerns raised by health care practices at screening and addressing social determinants of health is challenging, and that referrals and support agencies are not available, especially in more rural areas of the state. Do you have suggestions to address these concerns?**

**Dr. Sandel:** It's really a critical issue around not having equal access around social service organizations and community-based agencies. The last thing you want to do is to overrun a local community agency. I do think that before you start some type of screening you want to get to
know your local structure and what are the different ways in which there may be gaps or other ways in which we may be able to be of assistance. I also will say start small. We were able as a health system to do eight, but maybe you start with one. Just do the two-question hunger vital sign, get to know your local food environment, and move forward to start to think more holistically about it. Maybe you want to focus on affording medicine by just asking whether people are having difficulty affording medicine. Believe me, you'll find people that you didn't know were having difficulty and weren't telling you but we're accepting the new prescription over and over again. I do think that that to me the biggest take home is right size it. Find something that feels doable, find something that you feel comfortable with because it's really important for you to have those early wins and to not feel overwhelmed with it. But I will say that understanding the social drivers of health, even if you can't change them becomes really important information because I think otherwise in a vacuum you're creating plans for people that you wouldn't otherwise and can adapt your plan around those challenges. This in turn helps you potentially with policy work because you now have a patient's story that you can tell a policymaker. They need to hear that, that you aren't able to do the things that you want to do to make someone healthier because of a social factor that's outside of your control. I tell the housing prescription and housing vaccine story every single time I talk to a legislature because it makes it more effective.

Can you address the differences in how people in and outside of urban and suburban areas experience hunger and housing issues? What's the difference between these two populations?

Dr. Sandel: I think there are two things. One is because of urban areas being really coveted places, there's a lot of displacement out of urban areas into what I would say are the inner ring suburbs. For instance, many of my patients don't live in Boston anymore, they live in Brockton. Or maybe they've been displaced all the way to New Bedford, and they want to still see me at Boston Medical Center, so they come all the way up from New Bedford to come see me. There are great hospitals and health centers in the New Bedford area, but I do think that it was really important to understand that oftentimes those resources they may have, the different transportation options they may have can mean different abilities to serve. As we think about suburbs, I think there are a lot of inner ring suburbs that are not necessarily what we sometimes think of when we say the word suburb. We think of the Wellesley's and Weston's of the world instead of the Everett's and the Brockton's of the world. It's really important to talk about the differences of the suburbs and the differences of the availability. I think transportation ends up being the biggest one because even if you have an available resource, if you can't get to it, you might as well not have it. In the housing world it becomes interesting. In a lot of rural areas, it's not so much housing affordability as it is housing quality. That can be a huge issue. There, we need to think about the ways in which we can address housing quality. There are creative ways I've seen other parts of the country. Greensboro, North Carolina started a jobs program where someone could learn to be a handyman, and what they ended up doing was fixing up low income houses as a way to try and be able to address quality problems or doing adaptations for people who are low income trying to age in place and needed a ramp. That can be the difference between them being able to stay in their home or not be able to stay in their home. Sometimes
being able to leverage other resources becomes a way to do it. USDA has a rural housing program that you can partner with.