

UC Davis Health's Chief of Population Health and Accountable Care Reshma Gupta, MD, MSHPM, brought things to a point—and a sharp one at that—when she said, “Food is health, right? Food is life.”

For the last 35 minutes at AMGA's 2023 Annual Conference, Gupta—alongside her colleagues Georgia McGlynn, RN, MSN-CNL, CPHQ, manager of the office of population health and accountable care, and Vanessa McElroy, MSN, PHN, ACM-RN, IQCI, director of care transitions and population health care management, UC Davis Health—had been offering

Innovations in social needs data, engaging communities, and prescribing meals

physicians, clinicians, and care professionals in attendance insights and lessons learned regarding their organization's efforts to overhaul its approach to treating patient food insecurity. Together, they explained how, in doing so, the group established a new kind of engagement and trust with its surrounding community and institutions.

While there are varying degrees of food insecurity—from the uncertainty of obtaining food to compromising food quality and variety, reduced food intake, forced skipping of meals, or not having anything to eat for days at a time—UC Davis presenters made it clear that when care teams

Good Enough to Eat



Featuring Reshma Gupta, MD, MSHPM; Georgia McGlynn, RN, MSN-CNL, CPHQ; and Vanessa McElroy, MSN, PHN, ACM-RN, IQCI

do not proactively pay attention or enact a directed strategy for patients' dietary needs, significant downstream effects can result. Not only can food insecurity mask underlying health conditions and cause misdiagnoses, but it can also affect medication adherence and lead to chronic conditions, negative pregnancy outcomes, long-term deficits in children's development, increased emergency department visits and hospitalizations, and an increased risk of negative mental health impacts. All of this creates avoidable healthcare utilization and increased costs. In a recently published study, researchers have found that the average annualized healthcare expenditure is over \$1,800 greater for those who are food insecure relative to those who are not.¹

The UC Davis Health presenters acknowledged that addressing food insecurity within a patient population comes with a number of challenges. Attendees of the breakout session were asked to huddle together and contribute to a list of the common barriers that often emerge when faced with the prospect of beginning or reforming their approach to food insecurity. Words and phrases such as "not knowing where to start," "silos," "funding," "training staff," and "relationship with community" were all circulated within the room. Looking to provide actionable solutions to these kinds of challenges, Gupta, McGlynn, and McElroy proceeded to lay out a six-step framework that they introduced at UC Davis Health to confront food insecurity around the health system's care footprint.

STEP 1 Scalability

The first thing UC Davis Health needed to accomplish was to build a scalable infrastructure, requiring the establishment of internal and external partnerships. "Internally, we were siloed," explained Gupta. "Having worked in many, many health systems of varied types, I have rarely seen the leaders of population health and equity in the same room as your executive chef in charge of food and nutrition services. The commitment of working together to really think about what we can do around community engagement, inclusiveness, and the diversity of palates in our diets within a medical context really brings an opportunity to build something much larger." Externally, it is about reaching out to organizations that the health network may very well have an existing relationship with, such as drive-thru distribution centers, walk-up locations, food assistance programs in emergency situations, and commodity supplemental food programs. "We don't need to build it from scratch," said Gupta, "and knowing that historical context that others know is very important to build off of."

Approaching these community-based organizations creates an inherent win-win scenario for both



parties. Gupta said that, while many of these institutions benefit from the influx of referrals, the health system benefits by giving patients services that are not internally available and is alleviated of capacity concerns. It is important, Gupta noted, that these contracts were not selected at random, but picked and prioritized through a rubric, assessing where UC Davis Health patients were food insecure, and whether the partners delivered food, produced hot or cold food, and could accommodate specialized diets for allergy restrictions or ethnic adherence.

It is also important to understand that, as a health system establishes the infrastructure needed to for these endeavors, building relationships within the community must take place in tandem. "You can't build your

structures with the health system and then expect that the community will immediately respond to it. We really have to start this as step one and learn in parallel the history of your institution with your community. It is very likely that your institution has worked with the community, and it may not have gone well before. There are certain relationships or certain people such as community leaders or experts to go through and get to know and have those conversations with as you're mapping out your approach. Start small. Focus on trust and communication, and understand what is really feasible for community organizations, what infrastructure they have, what flux and staff retention issues they're having, and define your workflows to incorporate those concerns into what you do."



STEP 2 Data Collection

The second step of UC Davis Health’s framework is collecting data. According to Georgia McGlynn, when the health system started reforming its approach to food security, the percentage of related data it had on its patient population was 2.9%. To improve this deficit, UC Davis Health did what many medical groups and systems across the country would do: it sent out surveys. In addition to this rather quick and practical method, UC Davis Health also employed the assistance of external food insecurity data, such as vendor purchased data and community health information exchanges. Such external patient data not only come from hundreds of public and proprietary sources that are specific to socioeconomic, lifestyle, community, and other relevant data, but also allow a health system the ability to gather a more holistic picture of patients who face social influencers of health that may inhibit treatment or care.

With some clinical validation efforts thrown in the mix, UC Davis Health was able to take its 2.9% data set and grow it exponentially to 73%. With this more detailed understanding of its patient population, UC Davis Health was able to learn that food insecure patients were 1.6 times more likely to have an emergency visit or hospitalization in the health system. “We also found that those patients who are 65 and older are 1.7 times more likely to be food insecure. When we look at it by race and ethnicity, we found that a lot of Hispanic, Asian, and Black patients had higher rates of food insecurity as well,” McGlynn shared.

STEP 3 Training Staff

With data in hand, the third step of UC Davis Health’s framework is training staff. This means providing a focus on communication, the use of the data, and knowing its limitations. The organization should develop strategies—including the development of scripts and targeted training—in order to have conversations that can cultivate trust with patients. It is important to begin proactive outreach to those patients who are pre-identified as having high food insecurity, and once connected, find out what is important to them and what potential barriers may be affecting their care. Training should also be implemented across the health system, including inpatient care managers, health navigators, outpatient care managers, social workers, pharmacists, food and nutrition experts, and others. “It’s really training the staff to truly understand trust in the community,” said McElroy, “to be very focused about identifying the patients’ needs and being more holistic with the staff.”



STEP 4 Standardization

To accomplish step four, UC Davis Health undertook the task of standardizing its support platforms, tools, and documentation to assist in its new workflows. This was achieved through the integration of the electronic health record with surrounding community-based organizations. UC Davis Health’s network can now allow care managers to not only search for appropriate resources and send referrals, but also receive responses and updates about a specific patient from those community-based organizations. “We know the status of patient engagement and if they received the services,” said McElroy. “It’s a timely, bidirectional communication with our community-based organizations to create this closed-loop workflow.”





STEP 5 Sustainable Funding

The fifth step centered on one of the more difficult aspects of UC Davis Health's framework: sustaining funding. While grants and donations continue to be a powerful tool in supporting what the organization is attempting to accomplish, the health system took a more active role in political policy reform in order to create a long-term monetary solution, increasing expenditures on resources and engaging beyond its local programs and funding.

Recently attending a White House conference on hunger, health, and nutrition, UC Davis Health's Executive Chef Santana Diaz advocated for the prioritization of nutrition and food security in overall health—including disease prevention and management—and that health-care systems address the nutrition needs of all people. They also advocated for more enhanced nutrition and food security research to improve nutrition metrics, data collection, and analysis to inform nutrition and food security policy, particularly regarding equity, access, and disparities.

Beyond national policymakers, UC Davis Health also works at the state level, becoming part of California Advancing and Innovating Medi-Cal (CalAIM), a multiyear Department of Health Care Services (DHCS) initiative in California to improve the quality of life and health outcomes of the Medi-Cal managed care population through the implementation of broad delivery system, program, and payment reform across the Medi-Cal program. The initiative includes 14 community supports in lieu of services programs, among them Medically Tailored Meals or Medically Supportive Food. The DHCS is committed to ensuring that UC Davis Health has the infrastructure and resources to support these programs, at times providing cost coverage for supplies or indirect costs.




STEP 6 Environmental Framework

Finally, the sixth step of the framework is placing a concerted focus on community, economy, and the environment. "At UC Davis, we are stepping on the shoulders of a community that has been focused on agriculture and nutrition for a while," said Gupta. "While having these resources isn't always the case in a lot of places, it did cause us to think about our relationship as a health center to the environment, the economy, and community building. So we are focused on that, not only creating more community engagement, but also thinking about regional produce and sourcing through Chef Diaz's engagement. Our chef knows a lot of the farmers and where the food is being produced and procured in the region. And that is our community, right? That is the economy and the sustainability of the economy for those folks."

Gupta continued: "I'll tell you a story. During COVID, if you were to look at medical centers and health systems, what happened to food and food sourcing during the pandemic? Most of them were hit very hard with sourcing, as with many other industries. We were one of the only hospitals in the country that actually increased production—by 300%—and it was because of some of the things that we did focusing on really knowing where foods and fruits are coming in a very transparent way and pulling out of the local economy." Gupta shared that, thanks to their ongoing efforts, UC Davis Health, through Chef Diaz, is now one of only a handful of hospitals to be recognized by The Good Food 100 List for sustainable food procurement,² as well as The James Beard Foundation for sustainable seafood.³

Eventually divvying up the room for small group discussions in which attendees could talk about their own specific challenges in improving their organization's approach to food insecurity, the representatives of UC Davis Health continued to stress the importance of partnerships, of outreach to those with more experience and knowledge to offer support, and of getting personal with those on the ground.

At one point during the session's Q&A, Gupta explained: "There's such a wealth of information even just getting on the phone. It's not the big data. It's not the fancy tool. You just get on the phone and you talk to someone to find out what's going on—from patients to hear about their experiences and needs or to other health systems to learn about their approaches." 

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