A CASE TO

END U.S. HUNGER USING COLLABORATION TO IMPROVE POPULATION HEALTH

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Over the last 50 years, every U.S. president has worked, in some fashion, to address healthcare spending while improving the fundamental healthcare conditions for those in need. As healthcare leaders we often think in terms of three- to five-year plans. But if we think about the next 50 years, it brings into question 'what' and 'how' the investments we're making now in our communities — whether new facilities, programs or initiatives — will impact the public by 2064.

As healthcare professionals we should think of our impact on communities as generational investments; and one critical aspect of this is redefining health care's role in the health and well-being of those we serve. As we think about that, we must focus not only on how to deliver clinical excellence and efficiency, but how we can act as catalysts, innovators and leaders in how we impact health care; indeed how we put the 'public' back in health and health care, recognizing and giving due focus to the roots of our industry. We must be on parallel tracks to continue to advance clinical care while ensuring basic needs are met; because both are inevitably, and inextricably, intertwined.

The United States has both a high level of health spending per capita and a relatively high rate of real growth in spending. The share of GDP devoted to healthcare spending has grown steadily from 5% in 1965 — the year both Medicaid and Medicare were established — to 9% in 1980; crossing into double digits to nearly 13% in 1993; and is now close to 18%. Some projections put it pushing 20% by 2023. That's not just unsustainable. As healthcare professionals, it's unacceptable. Clearly, a new approach is needed and the solution to getting this runaway train back on the right track could be as simple as looking at basic needs, or the social determinants of health.

Hunger is a basic need. Hunger is a health issue.

With more than 17.5 million U.S. households facing hunger⁽¹⁾ — or one in every seven households nationwide — healthcare systems and leaders must recognize that lacking nutritious food to eat is a dire public health concern. Food insecurity and its results, including true hunger, is a health issue causing distress in communities nationwide by taking an incalculable toll on unborn babies, youngsters, parents, middle-aged people, and the elderly. Malnutrition also causes financial burdens for healthcare systems, governments, insurance carriers, and taxpayers, especially

as more people become insured under healthcare reform. Yet hunger can be better identified and eradicated with the engagement of the healthcare industry. Throughout ProMedica's service region of northwest Ohio and southeast Michigan, we have made a commitment to elevate the awareness of food insecurity and all of its effects and implications to health — physical, mental, and social — and call on colleagues throughout the industry to take up this public health issue in their communities. By working with government entities, nonprofit agencies, businesses, faith communities, schools and other community groups on anti-hunger efforts, the healthcare industry can make the fight against hunger a 'winnable battle' through aligned efforts that more effectively end hunger and improve health. Addressing hunger as a health issue is an initiative that should infiltrate healthcare systems nationwide for the sake of the country's most vulnerable residents.

At ProMedica, a mission-based, nonprofit, locally owned healthcare system, hunger has been chief among many social determinants of health being addressed in recent years as part of our collaborative *Come to the Table* advocacy initiative. Driven by a mission to improve the health and well-being of the communities we serve, we began to look at hunger after becoming increasingly aware of its link to the nation's obesity epidemic. While continuing to address all of obesity's causes, we formed partnerships on local, state and national levels and examined additional health-related links to hunger. As a result, we are funding various anti-hunger programs in the community and heading up our own efforts, often in collaboration with other groups.

These partnerships have resulted in better availability of and access to nutritious food among residents of our region — not to mention more awareness nationwide of hunger as a health issue and about maintaining data on the problem. In many cases, these partnerships and programs also have ended up addressing and improving other social determinants of health, including education. In every case, we are working to prevent malnutrition and related health problems. ProMedica's goal with our *Come to the Table* initiative is to help end the devastating and potentially debilitating problem that occurs when people don't have a reliable, consistent source of a very basic human need: nutritious food. By addressing hunger as a health issue, we're making a lasting impact to improve population health while identifying other social determinants of health.

Food is Medicine

Hunger is a problem healthcare providers see every day among patients of all ages in emergency rooms, clinics, offices, and hospital beds. Babies born to malnourished mothers may be underweight, have developmental delays and continue to have health problems throughout life. Children experiencing food insecurity, meaning they live in households that at times are unable to acquire adequate food, are more likely to have behavioral health issues such as anxiety and depression. These children may also be at higher risk for developing chronic health conditions, including anemia and asthma.⁽²⁾

Among the elderly, another particularly vulnerable group, malnutrition increases disability and decreases resistance to infection. Both not only harm quality of life, but they extend hospital stays. People who are food insecure often have irregular eating patterns, which can lead to being overweight and obese. Additionally, people facing food insecurity typically consume food with less nutrients, so they have dietary shortfalls linked to the development of hypertension, diabetes and other chronic diseases.⁽⁵⁾

"For critically and chronically ill people, food is medicine," opens a Harvard Law School Center for Health Law & Policy Innovation paper presenting the case for nutritional counseling and medically-tailored, home-delivered meals. "With adequate amounts of nutritious food, people who are sick have a better response to medication, maintain and gain strength, and have improved chances of recovery. Ultimately, access to healthy food leads to improved health outcomes and lower healthcare costs." (4)

With the Affordable Care Act (ACA) changing the way the healthcare industry does business, hospital administrators and physicians must look beyond our four walls more than ever before in modern medicine. Preventing illness, improving population health and eliminating health disparities are critical for the shift both for clinical and social reasons. In many ways, the healthcare industry, while accelerating as necessary in technology to deliver state-of-the-art care that helps ensure safe and affordable care, must concurrently return to its charitable roots of more than a century ago, when hospitals were community pillars concerned with basic public health needs and overall health and welfare. The industry needs a unified system of common goals that builds from the fundamentals of health and wellness that value one's overall health.

Basic needs are just that, basic. For example, it's highly unlikely a 55-year-old man who is hungry and homeless would be worried about getting tests to detect prostate cancer, heart disease or other health conditions. Or a mother of three who is struggling to clothe and feed her children will not be as concerned about preventive screenings and often delay basic health and wellness needs. They, and more than 49 million other people nationwide⁽¹⁾ who do not know where their next nutritious meal will come from, need to have their basic needs met first.

Hunger Solutions

Some collaborative solutions to hunger, malnutrition and food insecurity that we identified were relatively easy and inexpensive to launch. ProMedica employees, for example, repackage unserved food that otherwise would be thrown out at the local casino and hospital cafeterias for homeless shelters and other feeding sites. Other examples include adding healthy groceries to our flagship hospital's nearby flower shop in a neighborhood without access to healthy food, and screening patients for hunger so we can send them home with emergency supplies and connections for more assistance.

Higher up the difficulty and cost scale, a \$1.5 million donation from a dedicated philanthropist is helping create a center in a disadvantaged Toledo neighborhood to combat hunger and poverty overall. The ProMedica Ebeid Institute for Population Health not only will have a food market with healthy groceries not currently available or affordable to neighborhood residents, but it will feature a kitchen with classroom space, employment and training opportunities, and room for other community programs.

Clearly, philanthropists and community partners — such as Hollywood Casino Toledo and Seagate Foodbank of Northwest Ohio, which distributes the food ProMedica reclaims — are key to our anti-hunger programs. ProMedica is committed to numerous anti-hunger programs and partnerships as part of its *Come to the Table* initiative to address hunger as a health issue. Through our efforts, we have seen firsthand how important it is for families and other residents to have access to healthy food.

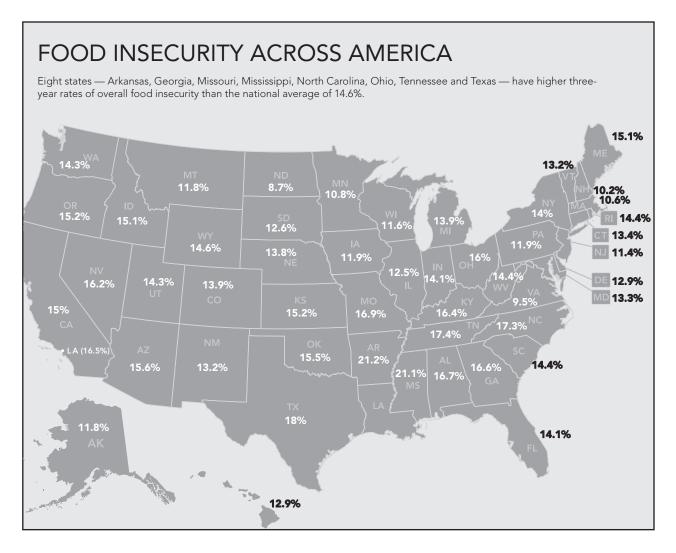
A Common Problem

One college-educated, single Toledo mother working two jobs yet still relying on food assistance shared details of her routine struggle to put healthy food on the table with this heartbreaking insight into caring for her 5-year-old son: "Before his eyes open, he'll ask: 'Can I have breakfast?' Food is his world."

Sadly, in ProMedica's home base of Lucas County, Ohio, many children live in food insecure households: 13% of 5^{th} and 6^{th} graders and 11% of 7^{th} to 12^{th} graders admit they go to bed hungry at least one night a week. (5) And 1% of Lucas County youth in both categories go to bed hungry every night of the week. (5)

In Lucas County's largest school district, Toledo Public Schools, nearly 80% of students qualify for free or reduced-price meals. In some Toledo schools, 98% of students qualify for the U.S. Department of Agriculture's (USDA) school meal program.

Lucas County is not the only place where hunger and food insecurity abound. Nationwide, 19.5% of households with children are considered to be food insecure and unable to acquire adequate nutrition, a problem that is even more prevalent among single women with children at 34.4%.⁽¹⁾



Among all households nationwide, three-year food insecurity rates range from 21.1% in Arkansas to 8.7% in North Dakota, with Ohio at 16% and Michigan at 13.9%.(1) Ohio and Arkansas are among eight states where the prevalence of food insecurity is higher than the overall national average of 14.6%, along with Georgia, Missouri, Mississippi, North Carolina, Tennessee and Texas. (1)

Learning that food insecurity and hunger are so common in America is indeed shocking. The latest recession and its lingering effects have worsened the situation for many families, and income disparities continue to persist. Addressing hunger as a health issue is paramount for both the healthcare industry and the nation as a whole. And the effort makes good business sense, too, as the healthcare industry undergoes changes related to reform.

Affordable Care Act

The ACA is changing the way health care is being delivered and reimbursed, and U.S. hospitals will increasingly be paid based on outcomes instead of volumes of care. As a result, healthcare organizations are considering innovative ways to both improve care and decrease costs. ProMedica operations are working on various initiatives aimed at better coordinating care, including participating in the Medicare Shared Savings Program as an Accountable Care Organization and transitioning to a single electronic health record platform throughout the system. More and more

innovations related to the ACA will be implemented in the industry, and ways to address hunger, food insecurity and malnutrition can, and should, be among them.

For instance, the ACA mandates that the Centers for Medicare & Medicaid Services reduce payments to hospitals with high rates of readmissions within 30 days of patients being discharged. One international study showed patients who have been malnourished are nearly twice as likely to be readmitted within 15 days of discharge than those who are not, as well as have longer hospital stays and have a much higher risk of death. (6) It stands to reason, then, that improving nutrition among residents will both help boost population health and a hospital's bottom line.

Consider how often patients are discharged from the hospital with prescription medication and instructions to take it with food. Far too many Americans, however, can't afford one or the other, much less both. More than 11% of chronically ill adults reported experiencing both food insecurity and cost-related medication underuse, highlighting how difficult it is to successfully manage chronic disease.⁽⁷⁾ Those with more chronic conditions and who have dependent children are more likely to buy food instead of their medications, jeopardizing their own health. (7) All together, about a third of chronically ill adults are not able to afford food, medications or both.⁽⁷⁾

Making sure people are able to recover — and able to get both the medicine they need and food often directed to go with it — is the right thing for healthcare systems to do both from a mission perspective and financially. To truly make an impact on and improve population health, the healthcare industry and its leaders must focus on social determinants of health. Hunger, specifically, is a social determinant that is straight forward. With a coordinated approach, hunger could be the first of many social determinants to be eliminated in decades to come.

Food for Patients

In early 2014, at ProMedica, we began screening hospital patients for hunger and food insecurity using \$65,000 raised by employees in our annual giving campaign. Patients are asked about their food security as part of the admission process, using a two-question screen that has been validated by Children's HealthWatch, a nonpartisan network of pediatricians, public health researchers and children's health and policy experts committed to improving children's health in America. Our hospital patients who are identified as food insecure are referred to a social worker or care navigator for additional assessment.

At discharge, patients who need assistance are given an emergency, one-day food supply and connected to community resources for further assistance. In many cases, people simply do not know they qualify for assistance, or how they can access it. With the move to a common electronic health record platform, ProMedica hospitals are working to keep track of hunger-related statistics, providing a better look at the problem and how it affects community health.

We believe that this two-question screen is a tool that can easily be implemented by all hospitals and physicians offices and should, in fact, be a requirement within the Community Health Needs Assessment, to help highlight and identify the need for increased focus on social determinants and further linking basic needs to clinical care; how addressing the former supports the latter. Such a screen should be factored into a hospital's total performance score calculation in order to receive their full value-based percentage for Medicare payments, further engaging hospitals and the government to work collectively to address issues that improve health, well-being and communities as a whole.

ProMedica Physicians, our system's physician group that uses patient-centered medical homes as a care model, has launched a pilot program to see how hunger affects patients and their health conditions. Hunger-related data will be tracked for up to three months at select physician offices, the place where most people get the bulk of their health care. And to help patients who need high-quality, nutritious food for their health, ProMedica is developing plans to open prescription food pharmacies, starting in the ProMedica Center for Health Services in early 2015. The urban Toledo center houses a wide range of outpatient primary, specialty and preventive care services, including those for women and children.

Government's Role

While ProMedica and other healthcare providers are making strides with our anti-hunger efforts; government needs to play a key a role, too, by continuing to help cover costs for nutritious food and otherwise recognizing efforts to address hunger and food insecurity.

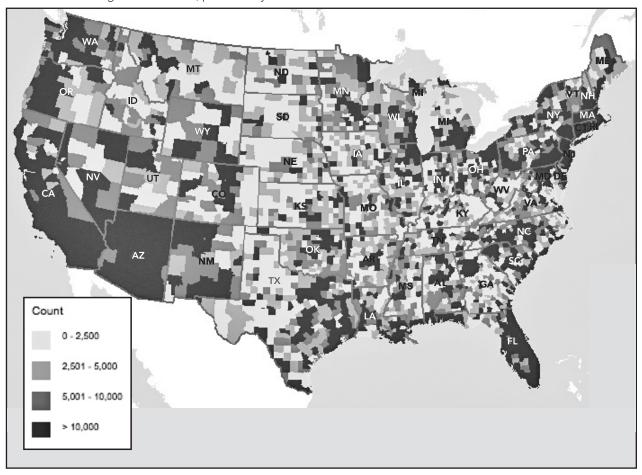
There are several government-funded programs in place that associate nutrition with medical treatment. Nationally, the Ryan White HIV/AIDS Program defines "medical nutrition therapy" as a core medical service for which those in need can get assistance. In Ohio, the PASSPORT Medicaid waiver program helps eligible older residents get long-term services they need to stay in their homes, including home-delivered meals, some of which are prepared specifically for those with diabetes and other health conditions. One study even showed that for every \$1 invested in Meals on Wheels Association of America programs, there could be a savings of \$50 on Medicaid expenses.⁽⁹⁾

Other statistics illustrate how nutritious food saves money. A Philadelphia area program serving chronically ill patients demonstrated that receiving public health nutrition services, including healthy meals and nutrition education, lowered healthcare costs among participants by 28% on average after six months. (10) Participants also had 31% lower monthly healthcare costs on average than a similar group of chronically ill patients not receiving services. (10)

By opening prescription food pharmacies, ProMedica expects to help chronically ill patients unable to afford groceries needed to manage their conditions. We believe these pharmacies would be more readily adopted by hospitals if the government would partner with hospitals and consider ways to reimburse for, or supply, healthy food items prescribed to those in need.

Various healthcare efforts to combat hunger in communities nationwide also should be counted as community benefit for tax-exempt hospitals. With more emphasis on ensuring tax-exempt hospitals are responsive to pressing community health needs, certainly efforts to eliminate hunger, food insecurity and other health disparities can and should be among what is considered community benefit.

And as noted in the previous section, a greater emphasis on social determinants within the Community Health Needs Assessment would help identify areas of greatest need in communities and prioritize the work that would help achieve better health outcomes for all. To ensure this can be carried out, we must also recognize the need for adequate staffing of primary care physicians within health systems to drive these efforts forward. This will require additional allocations of primary care slots, with an emphasis in training on the social determinants.



Market and More

Food insecurity and poverty are forever intertwined, and alleviating U.S. hunger will take more than the immediate solution of offering people nutritious food. We believe hungry people also need education, jobs and other assistance to help lift them out of poverty and make solutions sustainable. One ProMedica project under way will meet all of those demands and be a definite benefit to a disadvantaged Toledo community.

Philanthropist Russell Ebeid donated \$1.5 million to establish the ProMedica Ebeid Institute for Population Health, which will offer a full-service market in early 2016 followed by other services. Plans call for the institute to be located in a four-story central city building that the City of Toledo deeded to ProMedica for a nominal amount, with the market on the first floor. Upper floors will house kitchens and education workstations for nutrition classes and rooms for basic health screenings, as well as services offered by our partners such as mental health counseling, dental care and literacy programs.

Toledo has many underserved areas, but we used a scientific approach to select the institute's first location. With consultation from Mari Gallagher Research & Consulting Group of Chicago, ProMedica conducted a block-level study of food access and health outcomes to determine the best location.

The institute will be located within a low-income area identified by the U.S. Department of Agriculture as a food desert, where a significant number of residents are more than a half mile away from the nearest supermarket. It also is within a few blocks from a low-income swath of Toledo where residents are more than a mile away from the nearest supermarket, which is also known as a food desert because there is limited access to fresh produce, low-fat dairy products and other healthy foods at an affordable price.

Food deserts are located across the United States, and throughout northwest Ohio and southeast Michigan, they are areas where we have concentrated many of our efforts. We expect the ProMedica Ebeid Institute for Population Health will serve as a place where people also will be able to access job training and employment so they can learn how to help themselves establish solid skills to improve their economic stability as well as self-confidence. Income disparity continues to plague the United States, and health care has a role in helping to make sure people are equipped to land jobs and earn better wages.

Other ProMedica Efforts

ProMedica has several concrete examples of how we have been able to benefit the community and work on ending hunger in northwest Ohio and southeast Michigan. Besides the ProMedica Ebeid Institute for Population Health, hunger-screening programs among patients and the food prescription program, here are some other ways our *Come* to the *Table* initiative to address hunger as a health issue has made strides. We encourage other healthcare systems to use our examples as models to create programs tailored for their communities and partners.

Community Funding

Developed in 2009, the ProMedica Advocacy Fund annually awards an average of \$300,000 to non-profit community partners that provide basic needs services, including food, clothing and shelter. Funding has been granted to programs that provide weekend food to school children who qualify for free and reduced-priced meals during the week, for example, and programs that need kitchen renovations, equipment or vehicles to provide meals for those in need of all ages.

Repackaging Food

In February 2013, two part-time ProMedica employees began working at Hollywood Casino Toledo, where they repackaged salads, meats, side dishes, and other unserved food. Other foodservice providers joined the effort, including ProMedica Toledo Hospital's cafeteria and more than 75,000 pounds of food was collected in the first nine months. That was enough for local partner Seagate Foodbank of Northwest Ohio to distribute food for more than 55,000 meals. ProMedica's food reclamation program expanded in 2014, adding the Toledo Mud Hens' foodservice venue at baseball games and other community partners. Through the first nine months of 2014, approximately 100,000 pounds of food was collected, or enough for 75,000 meals. The community benefit is far reaching, not just for those who receive the meals, but to all who collaborate and share a greater purpose in helping others in need. And it costs just about \$30,000 a year to employ two part-time food packers, both of whom are very committed to helping combat hunger.

Mobile Farmers Markets

To help improve access to fresh fruits and vegetables in a rural Michigan county where two of our hospitals are located, the Veggie Mobile debuted in 2013 to make stops at senior centers and other community locations. The Veggie Mobile sells and distributes fresh produce, including seasonal offerings from area farmers' markets and local producers, as part of a community health program started by ProMedica and a community group of which we are a member. Parts of the county are designated as food deserts, low-income areas without supermarkets offering fresh produce and other healthy food. The van was funded through a U.S. Department of Agriculture grant secured by ProMedica.

Recently, ProMedica was awarded a second U. S. Department of Agriculture grant to assist Seagate Foodbank in expanding its mobile farmer's market in 2015. This mobile market visits senior housing complexes, community centers and other underserved neighborhoods

and provides an opportunity for residents to access fresh fruits and vegetables. The program will expand from 16 to 28 sites and also provide nutrition counseling and education by a registered dietitian during the expanded stops.

Food in Unlikely Places

Our flagship hospital is located in an area of Toledo where local residents must travel at least a half mile for healthy food, so The Flower Market gift shop was an ideal place to add nutritious groceries. Fresh vegetables, low-fat dairy products and other healthy items are for sale in a section of the shop called the Garden Grocer, and recipes including the items are handed out, too. Further, one of our dietitians gives monthly demonstrations and answers questions before a physician leads participants on a walk to a nearby park.

Food Drives

ProMedica holds annual contests among schools in our service area to challenge students to plan and hold seven-day food drives benefitting a hunger-relief agency or other community organization of their choice. The school that collects the most donated food per student wins \$1,000. Twice a year, our employees also hold food drives to benefit food banks and other charities in their communities. Additionally, our employees donate their time to help staff food drives at Toledo Walleye hockey games and other community venues that benefit charities, as well as at various food-related agencies.

ProMedica: Revealing Hunger

This exhibition featuring photos by nine local residents facing hunger made its debut in the Toledo Museum of Art's Community Gallery in 2013 to help raise awareness about hunger. From there, the exhibition traveled to Washington, D.C., for our national hunger summit held in partnership with the Alliance to End Hunger. The exhibition returned to the Buckeye State to be on display at the Ohio Arts Council's Riffe Gallery in Columbus, followed by a tour of our hospitals and other venues through early 2015. We have numerous partners, the Toledo Museum of Art, American Frame, Toledo Portrait, Food for Thought, Hickory Farms, Inc., and another local food-related business, The Andersons, Inc.

National Collaborations

On the national level, we also have several partnerships to help address hunger as a health issue. ProMedica is a member of Stakeholder Health, a coalition of healthcare systems that work with the U.S. Department of Health and Human Services to improve public health through innovative practices and community partnerships. The coalition's aims are to lower healthcare costs, improve access to care, elevate the health status of the communities it serves, and reduce health disparities. Hunger and food insecurity have been the topics ProMedica has focused on in discussions with the group, and we are learning from other's efforts as well

To further develop and deploy anti-hunger efforts among healthcare organizations and their partners, including government officials, we are partnering with the Alliance to End Hunger to hold summits nationwide with an array of experts on hunger and health. A national summit was held on Capitol Hill in February 2014, and a series of regional summits are under way.

These summits held in collaboration with the U.S. Department of Agriculture are designed to motivate healthcare organizations to work with community partners on anti-hunger efforts. They also serve to encourage local, state and national government officials to protect food-related policies and programs. Boston Medical Center and Aurora Health Care of Milwaukee are among other hospital providers that have joined the conversation, and regional summits are expected to be held into 2016.

Obesity's Link to Hunger

Like many healthcare organizations, rising obesity rates have been a concern for ProMedica, and it was while examining causes for obesity that the often-related problem of hunger and food insecurity came to our attention. The link between obesity and hunger became clearer as we began working with Share Our Strength, as a No Kid Hungry Ally Partner, and other partners. So did the industry's lack of focus on hunger, which prompted our decision to pay some much-needed attention to food insecurity while continuing to work on obesity.

Oftentimes, part of the problem with obesity is a lack of access to nutritious food at affordable prices, which is another reason why some of our projects involve selling produce and other healthy items in food deserts.

In Lucas County, Ohio, where ProMedica is based, adult obesity rates have increased to $36\%.^{(5)}$ The latest figure is up from 35% in 2011 and 33% in 2007. $^{(5)}$ Obesity is declining among high school students, however, going from 15% in 2011 to 13% in 2013/2014. $^{(5)}$

Only 6% of Lucas County adults ate the government-recommended five or more servings of fruits and vegetables a day. (5) Among barriers to consuming fruits and vegetables are the expense, not having transportation to purchase them and not know how to prepare the produce. (5) And 53% of adults reported that cost is the reason they chose the types of food they eat. (5)

Proper nutrition is needed to help manage obesity and other health problems associated with hunger and food insecurity. Nationwide, more than half of households getting assistance from the Feeding America hunger-relief network have at least one member with high blood pressure. (11) Plus, a third of households have at least one member with diabetes. (11) These figures present opportunities for the healthcare industry to make a real impact on health outboces by addressing conditions that are often the primary causation of disease.

Health Care Must Have a Permanent Seat at the Table

There is plenty of evidence to show hunger harms a community's health and well-being. In addition to being able to address the most pressing clinical and acute care needs we must — as a mission based, not for profit health system, continue to identify ways in which we can prevent ailments caused or exacerbated by hunger, food insecurity and other social determinants of health — and ensure local residents have what they need to live productive lives.

A Call to Action

The healthcare industry *must* make fundamental changes. Currently, the model is defined as a hospital 'four walls' approach when we need a completely new model that reverses the trend of unaffordable and unsustainable health care. We have a fragmented system with no common goals around changing the very fundamentals of health and wellness. We have created a massive industry that responds to challenges by designing new ways to maximize revenue and build gleaming new facilities while failing to address the *basic building blocks* of overall health.

Health care must focus on the most common social determinants—starting with hunger as a health issue. Strategic, purposeful and intentional changes can create an improved model to deliver better public health care.

A New Way Forward

- 1. Add hunger screening and increased focus on social determinants to Community Health Needs Assessment and develop appropriate interventions.
- Require hunger screening in Medicare value based reimbursement and at all Medicare facilities and include it in community benefit reporting.
- 3. Be diligent in adding new physician slots and requiring them to be based predominantly in primary care, with an emphasis on social determinants training.
- 4. Begin a public healthcare demonstration project in which Medicare and Medicaid payments are fixed for designated communities where the providers adopt a public healthcare focus. Further, assign case managers to all patients and actively address the social determinants of health beginning with hunger.
- 5. Develop Medicaid and Medicare incentives for taking personal responsibility, similar to those being developed in the private sector.

It's Time

It's time for healthcare leaders nationwide to focus on addressing hunger as a health issue in their communities, as well as working with policy leaders to ensure it *becomes* and *remains* a priority. Our collective voice is strong and we must use it to lead as we move forward.

For more information about ProMedica's *Come to the Table* initiative and programs — or to join our national effort — please contact ProMedica Chief Advocacy and Government Relations Officer Barbara Petee at CTTT@promedica.org or 419-469-3894.

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