



## HOMELESSNESS AND URBAN SUSTAINABILITY

### Implications of Changes to the US Health System on a Vulnerable Population

November 12, 2014

Science and Technology for Sustainability Program

Roundtable on the Promotion of Health Equity and the Elimination of Health Disparities

**H**omelessness has been found to cause and exacerbate serious health conditions, including cardiovascular disease, diabetes, and HIV/AIDS. In addition, the prevalence of mental illness and substance use along with co-occurring chronic health conditions is significantly higher in individuals experiencing homelessness, which has implications for the delivery and cost of services for this population. Individuals who are homeless are more likely to rely on emergency care due to a lack of health coverage and pose a significant cost to the health care system. Changes to the health care system under the Affordable Care Act (ACA), particularly expansion of Medicaid to uninsured, low-income adults, could significantly benefit this population; however, homeless individuals face challenges to enrollment in Medicaid and access to services, due to lack of documentation and stable housing, and literacy barriers, among others. Many may be disconnected from social networks or other systems or distrustful of these systems. Similarly, the homeless population is diverse, including individuals of all ages, family status, ethnicities, veteran and military status, and so on. Each population has varying health care needs; it is not clear how an expansion of Medicaid will disproportionately affect different populations.

To address these complex issues, the National Research Council's Science and

Technology for Sustainability (STS) Program, in collaboration with the National Alliance to End Homelessness, the National Health Care for the Homeless Council, and the Institute of Medicine's (IOM) Roundtable on the Promotion of Health Equity and the Elimination of Health Disparities, convened a session on November 12, 2014, to explore issues related to the impact of the changing US health care system under ACA on the homeless population in urban areas. The workshop was organized around three panels addressing the following questions:

- What are the necessary and appropriate services needed to impact various homeless populations (families with children, people existing in jails, chronically homeless, etc.)?
- How will the assistance needed by people experiencing homelessness be financed?
- What are the special considerations for various types of providers (permanent housing providers, hospitals, etc.)?

Participants included senior policy makers, health care professionals, philanthropic organizations, private-sector entities, academicians, among others. Other agencies and organizations not in attendance but important to an ongoing discussion of health and homelessness include managed care organizations and the Centers for Medicare & Medicaid Services.

## INTRODUCTORY REMARKS

**Nan Roman**, National Alliance to End Homelessness and **John Lozier**, National Health Care for the Homeless Council, Planning Committee Co-Chairs, introduced the workshop topic and discussed their organizations' efforts to address homelessness.

Mr. Lozier discussed the 1988 groundbreaking IOM report<sup>1</sup> on health care and homelessness to set the stage for the day's discussion. The report's three main conclusions have been the foundation for work in the field for more than two decades, "(1) Some health problems can cause a person to become homeless; (2) other health problems result from homelessness; and (3) many health problems require treatment that is made more complicated or impossible by the fact that the patient is homeless" (pp. 139-140).

Mr. Lozier reminded the audience of the World Health Organization's definition of health, "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."<sup>2</sup> This broadened definition of health is particularly meaningful in discussion of health care for homeless individuals, as addressing this complex problem goes beyond meeting the basic medical needs of this particularly vulnerable population.

## KEYNOTE REMARKS

**Richard Frank**, Office of the Assistant Secretary for Planning and Evaluation (ASPE), U.S. Department of Health and Human Services, discussed ASPE's work on issues related to mental health policy, Medicaid and chronic homelessness.

<sup>1</sup> Institute of Medicine. 1988. Homelessness, Health, and Human Needs. Washington, DC: The National Academies Press.

<sup>2</sup> World Health Organization. WHO definition of Health. 2003. Online. Available at <http://www.who.int/about/definition/en/print.html>. Accessed January 21, 2015.

ASPE released two publications in 2014 on using Medicaid funding for people experiencing chronic homelessness, particularly permanent supportive housing services. Dr. Frank stated that the ACA interdigitates with four persistent policy challenges for homelessness, including (1) the fragmentation of financing and delivery of various services such as housing, human services, mental health, and health services, which makes coordination of care and support much more costly; (2) the rigidities within the Medicaid financing stream, including who can receive services and what services can be covered; (3) the political economy of public budgets, where we are foregoing opportunities to improve the efficiency of how we allocate resources; and (4) eligibility issues for coverage for services consistent with evidence-based programs, such as permanent supportive housing. The ACA makes three contributions that help address these policy challenges, including coverage expansion, particularly through Medicaid; changes in the range and structure of services, including those that relate to permanent supportive housing; and flexible financing in new institutions that allows for new ways to think about making investments and creative ways of financing.

Dr. Frank stated that permanent supportive housing to address homelessness will require an influx of new services, particularly in behavioral health, as nearly 80 percent of people who experience chronic homelessness have a severe mental disorder, a substance use disorder, or both. Permanent supportive housing has worked particularly well for individuals who are both homeless and have a severe mental illness. He added that permanent supportive housing has also been found to lead to significant and sustained reductions in chronic homelessness, long-term housing stability for about 80 percent of the people placed in housing, reductions in criminal justice costs, and improvements in public safety, as well as reductions in victimization of homeless individuals.

The ACA affords new tools to address the problem of homelessness and the infusions of money through the Act will be unprecedented. Twenty-eight states, including the District of Columbia, have expanded their Medicaid programs, and ASPE is continuing to work with states on this process. New models of care coordination have been developed, including health homes and patient-centered medical homes. These new models put care and accountability at the provider level. One important aspect of Medicaid expansion is continuing to promote the services that are already available while encouraging states to modify their Medicaid plans to include additional optional benefits and services for particularly vulnerable populations.

### NECESSARY AND APPROPRIATE SERVICES FOR ADDRESSING HOMELESSNESS

The first panel focused on identifying the necessary and appropriate services needed to impact various homeless populations (for example, families with children, people existing in jails, chronically homeless, etc.).

**Jim O'Connell**, president, Boston Health Care for the Homeless Program, described the main purpose of his program, which has been in existence since 1984, to establish a health services care delivery model to provide continuity of care for clients, through multidisciplinary outreach teams. The program also has the capacity to meet the needs of homeless individuals for home-type respite care. Operating as a free-standing federally qualified health center (FQHC), the program is funded primarily through Medicare and Medicaid, as well as through state grants.

In 1985, the program faced two major public health challenges that changed how it worked to deliver health services to this vulnerable population: HIV/AIDS and tuberculosis. The AIDS epidemic changed the way services were delivered by requiring collaboration and coordination across fields that were not previously in communication, such as oncology and infectious disease.

Secondly, that same year, tuberculosis was rampant in several cities around the country. There was an outbreak of 100 cases of active pulmonary tuberculosis in one of the shelters in Boston in 1985, which highlighted that homelessness was a broader public health issue. These epidemics required providers to actively identify individuals needing care by going out into the community; as Dr. O'Connell noted, "if we waited for those people to come to us, we would have lost them." Massachusetts also changed its Medicaid reimbursement, covering services that were delivered in the community rather than limiting the services to those provided in a licensed medical clinic.

Dr. O'Connell stated that individuals experiencing homelessness tend to be the highest users of emergency rooms in Boston and pose a significant cost to the health care system. This was evidenced during a 2004 census of the homeless population in Boston, where about 4,000 people experiencing homelessness were counted and 22 percent of those were identified as being treated in hospitals or detox facilities. He also added that from 60 to 90 percent of the highest users of emergency room services are people living on the streets. To help address this issue, the Massachusetts Medicaid program began partnering with hospitals to develop a database for tracking the number of homeless individuals being treated.

Dr. O'Connell stated that respite care is a critical supportive housing service for homeless people. Currently, he manages a 104-bed program, which includes a licensed medical clinic with an attached lodging house. The program provides a variety of services, ranging from frostbite treatment to end-of-life care. In addition, the Boston program now does most of its primary care visits with teams of providers directly in the community, visiting clients where they are living, whether on the streets or in supportive housing.

**Mitch Katz**, director of the Los Angeles County Department of Health Services, stated that Los Angeles has a goal to create 15,000 units of supportive housing to address the problem of homelessness, in partnership with the Conrad N. Hilton Foundation. He noted that changes to Medicaid under the ACA created many opportunities for funding housing services by expanding the number of eligible individuals and covering additional needed services.

Dr. Katz stated that in his experience the best treatment for someone who is chronically homeless with a mental illness and/or substance use issues is housing; “housing is the treatment of choice... Housing has a much better track record than substance abuse disorder treatment,” he added.

In order to finance additional housing units, Dr. Katz added, his program must identify the most expensive people to the health care system. By identifying the highest users and then placing them into housing and thus reducing county health care costs, the saved dollars can be used to create additional housing. The best place to find the people at the highest cost are in the hospitals—in the emergency department or in the psychiatric facilities. After identifying these people, it is important to develop a treatment plan and services that will enable them to succeed in housing.

Dr. Katz also described a new housing complex, the Star Apartments, which was built with funds from the Skid Row Housing Trust, where 100 people who were once living in an emergency department waiting room are now being housed (see Figure 1). Through this supportive housing program, Dr. Katz noted, he has learned the importance of case management as a key service. It is work that requires a tremendous amount of creativity and patience and persistence.

Similarly, through the Star Apartments program, Dr. Katz learned that housing someone in a building that is above simple subsistence means that they do better. Some of the ways that they improve might not be immediately obvious, but when people are housed in nicer buildings, they will reunite with their families in a

way they would not have done if they lived on the streets or in less desirable (or less safe) housing. People provided with quality housing feel they have something to lose, and this is a powerful incentive for sobriety and for maintaining appropriate behavior.

Dr. Katz noted that other key services include subsidized employment and community relations. It is not sufficient to give people a place to live and nothing to do all day; employment or other activities become critical. Also, there is a need to create a community in these housing programs that can help in supporting positive outcomes.

**Declan Wynne**, director of Building Changes, discussed the State of Washington Families Fund, a state-wide program established in 2004 to fund supportive services to be paired with housing for high-needs homeless families. The program initially funded transitional housing programs but after several years found that there were a number of families that were not being served by these programs. To address this unmet need, Building Changes, along with other providers and stakeholders from around the state gathered to develop an expanded housing model. The program, which now has more than 25 funding partners, including the Bill and Melinda Gates Foundation, has provided grants to more than 45 programs across the state and provides housing for both moderate- and high-needs families. For high needs families, the goal is to increase access to services and housing and family stability.

Preliminary outcomes from an evaluation of the Washington Families Fund program indicate that families who stay in housing for at least one year show improvement in the following: residential stability, employment, income, family reunification, substance abuse, current trauma, health care access, and dental needs. In addition, access to behavioral health outpatient services is increased for high-needs families compared with comparable families in both public housing and emergency shelters. Families who stay longer in the high-needs families program appear to have more success than those who exit before 12 months.



**FIGURE 1** Star Apartments, Los Angeles, CA, built with funds from the Skid Row Housing Trust.  
SOURCE: Irfan Khan. Copyright © 2014. Los Angeles Times. Reprinted with Permission.

### FINANCING NECESSARY AND APPROPRIATE SERVICES TO ADDRESS HOMELESSNESS

The second panel discussed mechanisms for financing the assistance needed by people experiencing homelessness.

**Carol Wilkins**, consultant, stated that the services that are most effective for homeless populations are multidisciplinary, and include primary care, behavioral health, and housing supports, among others. These types of services require frequent face-to-face contact, visiting people where they live, whether it is on the streets or in their housing unit. The challenge is how to pay for these types of expensive services.

Ms. Wilkins described research in the field of HIV and AIDS, where positive outcomes have been linked to supportive housing. When people are placed in housing, Ms. Wilkins

added, they are more likely to take their medications and less likely to transmit HIV to others. She added that if researchers were to assess data related to other health conditions, it is likely they would observe similar outcomes.

State policy decisions have an enormous role to play in determining how Medicaid benefits are designed and implemented, stated Ms. Wilkins. Most Medicaid benefits that pay for services in supportive housing are optional Medicaid services. States have to make decisions about whether or not to adopt those benefits and how to structure them in a way that works for the Medicaid beneficiaries and the providers who serve them.

Ms. Wilkins added that there has been a major increase in the role of Medicaid Managed Care. In most states, the people who are newly eligible for Medicaid are being

enrolled in managed care plans. Some state Medicaid Managed Care plans are evaluating ways to pay for supportive housing services. For example, in Massachusetts, the managed care plan for behavioral health includes diversionary services or services that reduce avoidable hospitalizations by providing community support services linked to housing assistance.

Ms. Wilkins added that there are some exciting models that integrate primary care and behavioral health services to address homelessness, typically partnerships that bring an FQHC and a mental health provider together so that they can each tap the funding mechanisms that are available to them. Medicaid does not cover all services that might be beneficial to individuals experiencing homelessness or formerly homeless individuals. Funding from federal, state, county, local sources, grants, and contracts that are more flexible are used to supplement some services.

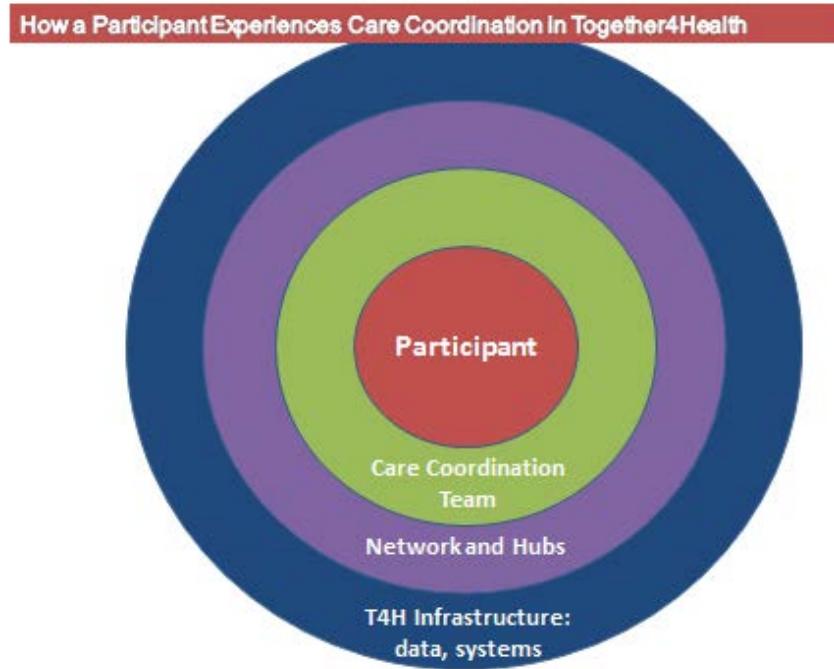
Ms. Wilkins summarized the changes needed to finance necessary services for this vulnerable population. First, payment mechanisms and rules are needed that create incentives and encourage the creation of integrated care teams that include primary care, mental health, and substance use providers. Also states may craft Medicaid coverage for services that address substance use problems that motivate people to make changes to reduce risks. There is a need for financing mechanisms that can pay for those services when they are delivered outside of the normal treatment systems and settings. Payments to the health plans and the providers also need to be adjusted to reflect risk and the complexity of the needs of this group of consumers that take into consideration social determinants of health. Finally, services are needed that support housing stability, as that is an essential part of health care and care coordination.

**Karen Batia**, vice president of Heartland Alliance and executive director, Heartland Health Outreach, Chicago, IL, provided her perspective on what actions need to be taken to finance the

services needed by homeless populations. These include developing a risk stratification methodology for different homeless populations; capitation based on true and comprehensive costs to care for each population; and developing base incentive payments (shared savings, risk-based arrangements) on progressive outcome goals appropriate for vulnerable populations with the ultimate goal to achieve the same outcomes as a commercial-based population.

Dr. Batia added that it is important to encourage states to develop supportive-housing friendly Medicaid plans that include habilitative interventions and create mechanisms that help match the right level of housing supports to the populations that need that level of support. Encouraging states to blend or braid Medicaid funding with grant funds will be important and can address the social determinants of health. Managed care organizations (MCOs) contracts could include plans to encourage incorporating housing supports, assure differing care coordination models matched to population needs, and include standards of care for homeless populations.

Dr. Batia described the Together4Health program, which is a collaboration of providers that created and implemented a care coordination model—an integrated delivery system with risk-based payment, based on health outcomes (see Figure 2). The program includes participation from hospitals, primary care providers, and behavioral health providers (34 owner organizations now include more than 100 contracted provider organizations). The goal of the program is to ensure that participants experience the highest quality care, to improve the health of vulnerable populations (particularly high utilizers of Medicaid), and to reduce the per capita cost of health care and health disparities. There have been opportunities to continue to revise and improve the model, according to input from research partners who evaluate and report on network services and outcomes and disseminate the findings.



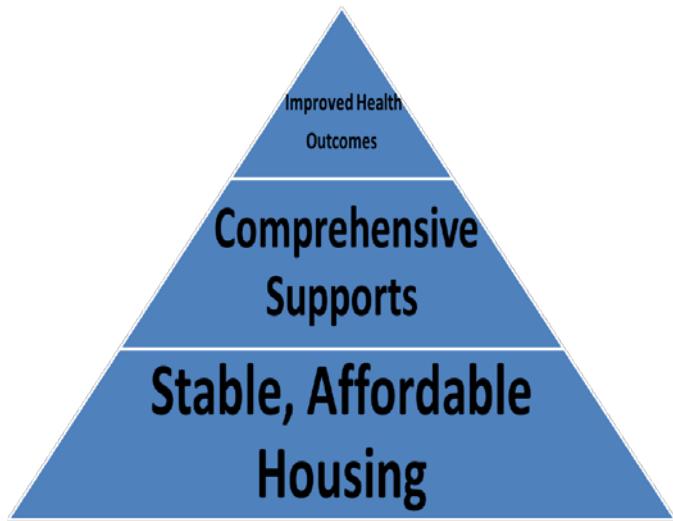
**FIGURE 2** Together4Health Model.

SOURCE: Batia, K. 2014. Homelessness and Urban Sustainability: How will the assistance needed by homeless people be financed? Presentation at the November 12, 2014 National Research Council Workshop, Homelessness and Urban Sustainability: Implications of Changes to the US Health System on a Vulnerable Population.

Dr. Batia noted that data on health care claims typically determine risk stratification. For this vulnerable population, it is possible to have two people with the same diagnoses and demographics, but with vastly different claims data. That can be attributed to service utilization. Dr. Batia added that her program is developing the Insignia Patient Activation Measurement Tool. This tool will be blended with claims data and will provide a self-reported measure that can help the participant identify where they are in terms of their ability to manage their own health care, thus using this information to stratify risk for their target populations.

**Michael Nardone**, managing principal, Health Management Associates, Philadelphia, PA, began his presentation by reiterating a point made by several previous presenters, that there is a substantial body of evidence documenting the effect of supportive

housing on improved health outcomes in homeless populations (e.g., improved health status, better mental health, lower substance abuse rates, higher survival rates for residents of supportive housing) (see Figure 3). There is also evidence of a reduction in utilization rates and cost (e.g., lower emergency department and inpatient hospital admissions, lower detox and psychiatric admissions) among formerly homeless individuals in supportive housing. Dr. Nardone stated that this bolsters the argument that stable, affordable housing is a foundation for better health outcomes and lower health costs. Despite the research and recognition of housing as a key social determinant, the two systems, health and housing, remain "siloed." Despite evidence to support the link between housing and health, there are several barriers that continue to make it difficult to bridge the gap between housing and services.



**FIGURE 3** The relationship between housing and health outcomes in homeless populations.

SOURCE: Nardone, M. 2014. Presentation at the November 12, 2014 National Research Council Workshop, Homelessness and Urban Sustainability: Implications of Changes to the US Health System on a Vulnerable Population.

First, housing is not covered through Medicaid. In addition, there are limitations to the capacity of housing organizations to function as service providers. As a first step, Mr. Nardone added that housing providers and healthcare payers will need to interface and begin to work to understand how each communicates, ultimately fostering more effective collaboration.

Mr. Nardone stated that there is currently an increased focus on a more holistic approach to care for individuals experiencing homelessness. This has been supported through new tools available through the ACA, such as Health Homes and State Innovations Models. Housing organizations are providing service supports on-site as natural partners in efforts by payers to achieve health outcomes. Also, housing organizations are becoming more focused on tracking outcomes and measuring the effect on health related metrics.

There are several potential roles for housing entities in providing services, including locating high-risk members who are residents;

helping residents maintain insurance eligibility; addressing medication compliance; developing peer programs to help residents manage chronic conditions; and implementing health education efforts to improve health literacy and prepare residents for making appointments. Mr. Nardone noted that there is a need to increase technical assistance to help housing organizations and MCOs to address ACA requirements. Similar support would be beneficial for states to help them navigate existing authorities. There is also a need to increase the dissemination of information on best practices and explore enhanced flexibility to test new models.

#### SPECIAL CONSIDERATIONS FOR VARIOUS TYPES OF PROVIDERS

The final panel discussed special considerations for various types of providers (permanent housing providers, hospitals, etc.) in addressing the problem of homelessness.

**Janelle Schrag**, research associate, America's Essential Hospitals, Washington, DC, described the cycle of readmissions that is often observed in homeless patients when they come into the hospital. They typically stay for a longer in-patient stay, but when they are discharged, they often go back to the streets or the shelter, and then back to the hospital if they have another health issue.

Ms. Schrag stated that interventions at the discharge stage can significantly affect health outcomes. The medical respite program has demonstrated that it can provide the necessary supports to break the cycle of homelessness. Rather than sending patients back to the streets, medical respite programs allow patients to recover in a safe environment where they have a medical staff on hand to assist them. Respites can also serve a gateway to other services and allow individuals to arrange for housing and services while they recuperate.

Ms. Schrag discussed two examples of successful respite programs, including the Edward Thomas House in Seattle, Washington. The program operates 34 beds and has a full

medical team, including mental health providers. Eighty-three percent of their patients are discharged with a direct link to primary care and only 6 percent of their patients return to the streets.

The second is the Santa Clara County Medical Respite Program, which operates 20 beds, has onsite clinicians and mental health professionals, and is co-located with a shelter. Thus far the program has seen an estimated \$5 million in hospital savings since 2008, including more than 1,000 hospital days; 99 percent of their patients are placed into stable housing when they leave the respite.

Ms. Schrag summarized that hospitals, in addressing the complex health needs of individuals experiencing homelessness, should seek to partner with local respite programs and other community services. She added that respite programs should be co-located with shelters or primary care sites. Finally, primary care should be tailored to best meet homeless patients' needs.

**Ed Blackburn**, executive director, Central City Concern, Portland, OR, described the program, which serves about 16,000 individuals with mental health and substance use needs. One unique aspect of the program is that 46 percent of the 700 employees self-identify as recovering from addiction. About 25 percent of those people have actually participated in the programs as clients or patients in the past. The program provides integrated care with mental health services for individuals with severe mental illnesses as well as those with substance use issues.

Mr. Blackburn noted that some essential functions of his program, including respite care and supported employment, are not Medicaid billable, adding that there is a need to expand Medicaid's ability to pay for the services required to end homelessness and support health in this high-acuity population. This would include global financing for peer mentors, wellness specialists and case management.

The program also provides several types of housing services, tailored to the needs of the individual. These include scattered site housing

with intensive resident services and access to health services as well as peer-delivered recovery housing. Mr. Blackburn stated that there is a need to better align housing models and funding with the best practices for recovery recognized by the Substance Abuse and Mental Health Services Administration. The US Department of Housing and Urban Development has recognized transitional recovery housing as an effective model for ending homelessness for people with primary addiction disorders, and Central City Concern funds new housing using this model.

Mr. Blackburn concluded that those experiencing homelessness come into contact with multiple federally funded systems, which can become problematic. To address this issue, there is a need to align with and encourage innovation in such systems as Corrections, the Temporary Assistance for Needy Families program, and Education, which can contribute towards housing, employment, treatment, and other supports to help end homelessness.

**John Parvensky**, president and chief executive officer of the Colorado Coalition for the Homeless, stated that the coalition has been in existence for about 29 years, and has taken an integrated approach to providing health care, housing, and supportive services for homeless families and individuals. The program currently supports about 1,600 housing units and manages another 800 housing vouchers to allow individuals and families experiencing homelessness to live in scattered site settings, bringing health care, supportive housing, and services together with a focus on employment for those who are able to work, to get back into the workforce.

Mr. Parvensky noted that the program has always adhered to the model that "housing is healthcare," stating that "if we treat people who come in for primary care...and send them back under the bridge or to the shelter and expect them to get better, [there is] not a high likelihood that that is going to happen...We believe not only should healthcare incorporate housing, but that housing is, itself, healthcare,

particularly when you are dealing with the homeless, a very vulnerable population."

Mr. Parvensky stressed the importance of having a range of models to meet the needs of clients. For example, the Housing First model may not work for clients who are struggling with substance abuse issues; alternative models may be more appropriate.

Mr. Parvensky discussed the Stout Street Clinic, the health care for the homeless program that has now grown and replicated into some satellite services. During the previous year, it served about 12,000 patients, including close to 100,000 visits, integrating primary health care, mental health, substance treatment services, pharmacy, pediatric care, eye care, and dental clinic within a building that was not really designed to meet the demand. Through ACA funding and other resources, the program has been able to renovate a vacant, under-utilized block across the street from the existing clinic into the new Stout Street Health Center. The new center includes 78 units of supportive housing to meet the needs of both homeless families and individuals.

Mr. Parvensky stated that the program has been attempting to measure the effect of its integrated approach to health care and housing by measuring several outcomes, including decreases in patient readmissions, decreases in depression, improvement in health scores, increased screening dually for behavioral health and mental health, and reductions in the number of detox visits, emergency room visits, hospitalizations, and emergency shelter costs.

## THE WAY FORWARD

**Barbara DiPietro**, director of policy, National Health Care for the Homeless Council, Baltimore, MD, introduced the final session by identifying key ideas that were discussed during the workshop. Some ideas specifically related to health care and individuals experiencing homelessness, particularly the impact of changes to the US health care system under the ACA, while others related more generally to

research and policy needs for addressing the broader problem of homelessness.

Some of the issues related to health care needs of the homeless included the following:

- Many participants discussed the link between housing and improved health outcomes in homeless populations. The ACA provides new opportunities to bridge this gap as well as provide other necessary services for people experiencing homelessness.
- Participants discussed the types of services that benefit this vulnerable population, including medical respite services, home-based services, dental health, legal services, supported employment, engagement at crisis points, and flexibility to provide bridge housing services, among others. A number of participants noted that homeless youth and pregnant women have unique needs. The ACA provides opportunities for covering many, but not all, of these necessary services.
- The ACA provides opportunities and challenges for building the capacity of MCOs and other health care providers and engaging them in the complex challenges associated with homelessness. Many participants discussed the need for technical assistance to support housing organizations and MCOs as they work to understand and meet the requirements of the law.
- Others discussed the importance of the integration of primary care and behavioral health for homeless populations, similar to the work done by the Boston Health Care for the Homeless Program.
- The severe shortage of service providers for homeless populations was noted by many participants, particularly those in primary care, behavioral health, and social work. Additional resources and partnerships could encourage these career paths, including training in culturally appropriate services that would allow providers to work effectively with specific populations.

- Participants discussed obstacles to financing the needed services for homeless populations under the ACA, noting that the consequences of these gaps are not well understood. Many also observed that a health care system that meets the complex needs of homeless populations could meet the needs of society more broadly.

Some of the issues related to general policy and research on homelessness included the following:

- The role of social determinants of health, for example, poverty, housing and education, in the discussion of homelessness. Policy changes could encourage looking more broadly at systems (not specific populations), for example, looking at employment issues, total housing stock, Medicaid

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**DISCLAIMER:** This meeting summary has been prepared by **Jennifer Saunders** and **Karen Anderson** as a factual summary of what occurred at the meeting. The committee's role was limited to planning the meeting. The statements made are those of the author or individual meeting participants and do not necessarily represent the views of all meeting participants, the planning committee, IOM, STS, or the National Academies.

The summary was reviewed in draft form by **Rebecca Brune**, Methodist Healthcare Ministries of South Texas, Inc. and **Emily Rosenoff**, U.S. Department of Health and Human Services. The review comments and draft manuscript remain confidential to protect the integrity of the process.

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**PLANNING COMMITTEE:** **John Lozier**, National Health Care for the Homeless Council (co-chair); **Nan Roman**, National Alliance to End Homelessness (co-chair); **Jennifer Ho**, U.S. Department of Housing and Urban Development; and **Mitchell Katz** (IOM), Los Angeles County Department of Health Services.

- reimbursements and other non-Medicaid funding.
- Related to homeless families: education, particularly for homeless children; research on family functioning; and the health needs of homeless youth and young pregnant mothers.
- Research on how to rectify disparities, including where to invest or focus efforts on this issue.
- The role of the criminal justice system in homelessness.
- Coordination and integration among the many ongoing efforts to address the health needs of people experiencing homelessness by non-governmental entities, federal and state agencies, the private sector, and foundations.

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**SPEAKERS AND MODERATORS:** **Peggy Bailey**, Corporation for Supportive Housing; **Karen Batia**, Heartland Health Outreach; **Ed Blackburn**, Central City Concern, Portland, Oregon; **Richard Cho**, U.S. Interagency Council on Homelessness; **Barbara DiPietro**, National Health Care for the Homeless Council; **Richard Frank**, U.S. Department of Health and Human Services; **Michael Nardone**, Health Management Associates; **Jim O'Connell**, Boston Health Care for the Homeless Program; **John Parvensky**, Colorado Coalition for the Homeless; **Janelle Schrag**, America's Essential Hospitals; **Carol Wilkins**, consultant; and **Declan Wynne**, Building Changes.

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**IOM STAFF:** **Rose Marie Martinez**, senior director, Board on Population Health and Public Health Practice (BPH); **Karen Anderson**, senior program officer, BPH.

### **ABOUT SCIENCE AND TECHNOLOGY FOR SUSTAINABILITY (STS) PROGRAM**

The long-term goal of the National Academies' Science and Technology for Sustainability (STS) Program is to contribute to sustainable improvements in human well-being by creating and strengthening the strategic connections between scientific research, technological development, and decision-making. The program examines issues at the intersection of the three sustainability pillars—social, economic, and environmental—and aims to strengthen science for decision-making related to sustainability. The program concentrates on activities that are crosscutting in nature; require expertise from multiple disciplines; are important in both the United States and internationally; and engage multiple sectors, including academia, government, industry, and non-governmental organizations. The program's focus is on sustainability issues that have science and technology at their core.

For more information about STS, visit our web site at <http://sustainability.nationalacademies.org>.

### **ABOUT THE IOM ROUNDTABLE ON THE PROMOTION OF HEALTH EQUITY AND THE ELIMINATION OF HEALTH DISPARITIES**

The Roundtable serves as the conveners of the nation's experts in health disparities and health equity, with the goal of raising awareness and driving change. The Roundtable promotes change by:

- Advancing the visibility and understanding of the inequities in health and health care for racial and ethnic populations.
- Amplifying research, policy, and community-centered programs.
- Catalyzing the emergence of new leaders, partners, and stakeholders.

For more information about the IOM Roundtable on the Promotion of Health Equity and the Elimination of Health Disparities, visit our web site at <http://www.iom.edu/Activities/SelectPops/HealthDisparities.aspx>.

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