

Opportunity Knocks Again for Population Health: Round Two in State Innovation Models

James A. Hester, John Auerbach, Debbie I. Chang, Sanne Magnan,
and Judith Monroe*

April 16, 2015

**The authors are participants in the activities of the IOM's Roundtable on Population Health Improvement*

The views expressed in this discussion paper are those of the authors and not necessarily of the authors' organizations or the Centers for Disease Control and Prevention/the Agency for Toxic Substances and Disease Registry or of the Institute of Medicine. The paper is intended to help inform and stimulate discussion. It has not been subjected to the review procedures of the Institute of Medicine and is not a report of the Institute of Medicine or of the National Research Council.

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

Advising the nation • Improving health

Copyright 2015 by the National Academy of Sciences. All rights reserved.

Opportunity Knocks Again for Population Health: Round Two in State Innovation Models

James A. Hester; John Auerbach, Centers for Disease Control and Prevention; Debbie I. Chang, Nemours; Sanne Magnan, Institute for Clinical Systems Improvement; and Judith A. Monroe, Centers for Disease Control and Prevention^{1,2}

The first round of awards in the State Innovation Models (SIMs) Initiative by the Center for Medicare and Medicaid Innovation (CMMI) created a wave of excitement and a sense of opportunity knocking. We previously wrote that “we believe that the SIMs developed by states provide a unique opportunity to test new alignments, payments, and incentives that focus our current delivery system on achieving health for all” (Auerbach et al., 2013).

CMMI’s recent announcement of a second round of SIM awards greatly expands the program and makes it an opportune time to revisit the potential for sustainable improvements in population health. We begin with a recap of the two rounds of SIM awards and then present a framework for enhancing the relative maturity of a state’s population health improvement plan. We close with some observations on lessons learned from the Round One sites and a description of challenges and opportunities for SIM to drive population health improvement. Our direct experience with SIM in three of the testing states (Delaware, Minnesota, and Vermont) provides examples that inform the discussion. In a paraphrase of the title of our earlier paper,³ opportunity has knocked, the door appears to be opening, but what lies on the other side is still unclear.

CONTEXT: UPDATE ON THE SIM INITIATIVE

The first round of SIM was awarded in February 2013 with the intent to use the various regulatory and policy levers that state governments control to accelerate the transformation of its health care delivery system. The key question that Round One of SIM tested was whether new payment and service delivery models developed and implemented through a state-sponsored State Health Care Innovation Plan could yield greater improvement in health care, improved health and lower costs through a sustainable model of multipayer and delivery reform. In addition to policy and regulatory authorities, states have a unique capacity for convening diverse public and private stakeholders. Round One was awarded to 25 states with 6 Model Test awards totaling \$250 million, 3 Model Pre-Test awards totaling \$4 million and 16 Model Design awards totaling \$31 million. Using broad stakeholder engagement, the testing states have demonstrated assorted healthcare delivery and payment models, including patient-centered medical homes, accountable care organizations (ACOs), health homes (CMS, 2015a) and bundled payments (CMS, 2015b).

¹ The authors are participants in the activities of the IOM’s Roundtable on Population Health Improvement

² Suggested citation: Hester, J. A., J. Auerbach, D. I. Chang, S. Magnan, and J. A. Monroe. 2015. *Opportunity knocks again for population health: Round two in state innovation models*. Discussion Paper, Institute of Medicine, Washington, DC. <http://nam.edu/wp-content/uploads/2015/06/SIMsRound2>.

³ See Auerbach et al., 2013.

In December 2014, the Centers for Medicare and Medicaid Services (CMS) financed a major expansion to SIM with a second round of funding totaling more than \$622 million in 11 additional Model Test awards to states to implement their State Health Care Innovation Plans. Nearly \$43 million was awarded to 17 states, 3 territories and the District of Columbia for Model Design awards. Lessons from Round One were incorporated into the funding opportunity announcement (FOA) for Round Two including requiring state applicants to “articulate a broad vision for state-wide health care transformation; describe ambitious, realizable programs in identified areas; commit to using the full range of regulatory, payment, and policy authorities available to facilitate transformation; and commit to sustain their model after the design and/or test period concludes” (CMS,2015c). CMMI played a major leadership role in population health by making it a more explicit objective of SIM. In Round Two, the funding opportunity announcement required the Model Test proposals to include as a core element a statewide Plan to Improve Population Health (PIPH) during the project period (CMS, 2014). This requirement was not explicitly included for Round One Model Test states but later they were asked to have a population health plan developed with state health officials. However, the Round One funding opportunity announcement did require the states to explain how their model would improve the population’s health in a number of areas and after funding was awarded, states were instructed to enhance their population health planning. These circumstances resulted in the Round One testing states having a much smaller focus on population health initially and having to play catch up as CMMI clarified its expectations.

The SIM population health improvement plan (PHIP) must aim to advance the health of the entire state and at a minimum focus on the high priority areas of diabetes, tobacco, and obesity. The states must use regulatory and policy levers to advance their models and will be monitored on their efforts to improve population health. Many states already have current State Health Improvement Plans (SHIPs) which are a foundation for the SIM PHIP, however these plans were developed using more limited types of interventions than those available in SIM. SHIPs, which should be based on state health assessment data and include broad-based participation from stakeholders and the community, are a requirement for health department accreditation through the Public Health Accreditation Board, have been included in legislation for some states such as Vermont and Illinois, and are a focus for a Healthy People 2020 objective. The Centers for Disease Control and Prevention’s (CDC’s) National Public Health Improvement Initiative provided funding that considerably advanced state health assessment and SHIP efforts among grantees. SHIPs are public health-oriented efforts that identify, analyze, and address health problems in a state and contain recommendations and plans of action. SHIPs represent an opportunity to align community health needs assessments and leverage efforts of tax-exempt hospitals working to comply with the Internal Revenue Service Community Benefit requirements. The CDC funds should help the SIM states with their population health efforts.

Although states are encouraged to build on SHIPs as they develop their SIM PHIP, SHIPs vary widely from state to state. For example, some states have SHIPs that already exhibit a high degree of integration between public health and health care through the sharing of data and large-scale delivery and payment system reforms. Other states have SHIPs with little or no mention of integrating public health and health care. The CDC is playing a key role as the lead federal agency for population health and as a partner to CMMI in providing technical assistance to the SIM states as they develop their population health plans. The variation in state readiness to address population health and SHIP plan content made technical assistance more difficult and complex in Round One and is expected to do so again in Round Two.

A FRAMEWORK FOR ENHANCING THE MATURITY OF A STATE POPULATION HEALTH IMPROVEMENT APPROACH IN SIM

Every state that was awarded a SIM cooperative agreement has a different health care system, starts from a different stage in the transformation process, and has a different set of policy levers and capabilities it can use to drive transformation in general and improvements in the health of their population in particular. Reviewing the summaries of the state applications, we saw that the Round Two SIM states represent a broad spectrum of maturity in their approach to population health improvement. This variation creates a major opportunity under SIM for shared learning across states.

We need a shared learning system—such as the one being created through a Kresge Initiative called Moving Health Care Upstream (Nemours and UCLA)—where networks are created to test and prototype innovative strategies and to identify common barriers and accelerators (Kresge Foundation, 2015). The outputs are promising tools and strategies from which the field can benefit. This effort will require being intentional about harvesting learnings and sharing them—the good, bad, and ugly—in a safe, nonpartisan environment with the ultimate goal of spreading positive change. CMMI usually incorporates shared learning strategies as an essential component of their model tests, which creates the opportunity for a strong private/public partnership.

It is helpful to be able to describe the spectrum of maturity among the funded states and understand the key influencing factors in order to guide technical assistance and create learning collaboratives to support state efforts. Below, we provide and discuss an initial list of influencing factors:

1. Leadership and vision;
2. A broad definition of population health;
3. A health equity lens;
4. Degree of integration of clinical services, public health programs, and interventions targeted at upstream determinants of health;
5. Development of a community integrator infrastructure for population health improvement;
6. Degree of enabling infrastructure linking clinical and population health activities;
7. Effective community engagement and having the right partners, including payers; and
8. Degree of sustainability.

Leadership and vision. Success for SIM will require leadership and vision at all levels in a state. For example, in Fergus Falls, Minnesota, the chief executive officer of Lake Region Healthcare told his board that they were going to design and participate in community meetings for a health model in rural Minnesota, even though they might not like what they heard from the community. In 2013 with funding from the Bush Foundation stakeholders explored data and goal-setting on all three parts of the Triple Aim⁴ building on their work with a Community Transformation Grant and the Minnesota Statewide Health Improvement Program (ICSI, 2014). Subsequently, a patient advocate from Fergus Falls contacted the Minnesota Department of Human Services about how the community could be more involved in the SIM, including the new integrated health partnership payment model. To understand more about health and health

⁴ The Triple Aim refers to the concept introduced by the Institute for Healthcare Improvement in 2006 referring to better care and improved population health at lower cost (for more extensive discussion see Berwick et al., 2008).

care in rural communities, the Minnesota commissioner of Human Services visited Fergus Falls. Local public health and other stakeholders set a vision for a “Rural Health Model” and were awarded several grants as part of the SIM, including an accountable community for health (ACH) grant. The Ottertail County Public Health Department is the lead ACH agency with many community partners including health care and mental health, the Salvation Army, emergency medical services and a community leadership group Forward Fergus Falls, with “destiny drivers” to make Fergus Falls one of the healthiest communities in Minnesota. Such commitment and vision from all levels of local and state leaders are necessary to set the stage for improved results in population health. A learning system could bring together multiple leaders at all levels from states to learn from and encourage one another to sustain the population health vision.

A broad definition of population. To achieve population health improvement, the broadest geographic definition of population is needed. Initial efforts tend to focus on specific, more limited populations defined by disease, total cost, age and/or payer. New care and payment models focus on patients who can be attributed to a provider by their patterns of where they seek care. As a program matures, the population of concern transitions to a broader scope and ultimately becomes the total population in a geographic area, and the benefits accrue to the community and its systems as whole. For example, in Delaware, focusing on the entire population in the state has shifted the conversation to systematically considering community health workers statewide rather than a siloed approach for a targeted population or condition.

Health equity lens. Even with a broad definition of geographic populations for improvement, states are addressing health disparities. For example, Minnesota communities are being encouraged to identify “health in all policies” approaches that will be foundational to achieving health equity. As targeted populations are identified, the state’s SIM grant calls for targeting resources for greatest impact on populations with the greatest need and emphasizes that Minnesota communities must expand the range and depth of relationships for meaningful leadership and participation by diverse communities.

Degree of integration of clinical services, public health programs and interventions targeted at upstream determinants of health. Moving to an integrated approach that addresses all the determinants of health is essential. A variety of models of the determinants of population health have been developed (see, for example Stiefel and Nolan, 2012; Booske et al., 2010), but all arrive at the conclusion that clinical services account for a relatively small (typically 10-20 percent) impact on population health. Improving the health of a population requires the integration of clinical services, public health programs and community based initiatives targeted at upstream determinants of health such as the built environment, secure housing and the availability of healthy food. Initiatives typically begin with a small number of focused interventions on a narrowly defined target population. For a variety of reasons including familiarity and more rapid impact, these interventions often involve clinical interventions. However, as the effort matures, we believe it should evolve into a more balanced portfolio of interventions covering a broad spectrum of time frames, risk levels and scale (Hester and Stange, 2014).

Development of a community integrator infrastructure for population health improvement. Mature population health improvement plans are integrated at multiple levels: practitioner, community, state/regional and national. The most important, yet least well understood of these is the community entity which has been given a variety of names, such as backbone organization, quarterback, and so forth; here we will call it the integrator. The community integrator has a

number of key roles such as bringing key stakeholders together to assess and prioritize needs, managing a balanced portfolio of interventions, and assessing progress to drive rapid cycle improvements. A number of the SIM states are testing different community models such as the Community Health Innovation Regions (Michigan); Accountable Health Communities (Minnesota, Washington state, and Vermont); and Healthy Neighborhoods (Delaware). However, at the other end of the spectrum are several states that have not yet identified any form of community integrator. There is much to learn about exactly how to structure an effective integrator; for example, in some scenarios multiple integrators or nested integrators might be appropriate. Ultimately, a successful integrator benefits the community by making the whole system transparent to those who pay for it and those who use it. The integrator first catalyzes, and then facilitates the integrated systems-work necessary to address the upstream social determinants of health.

Degree of enabling infrastructure linking clinical and population health activities: In addition to the community integrator, mature population health plans also have infrastructure that links clinical strategies to population health strategies. For example, integrated data systems that include key population health and clinical data enable interdisciplinary teams of practitioners to more fully understand the determinants of health, track and manage needs, improve decision-making, and eventually develop new ways of addressing problems. These communities have moved past the identification of data sources and shared data agreements to joint platforms from which data is shared. Some programs, such as Cincinnati Children’s Hospital, are using their electronic medical records to capture and share data on the social determinants.⁵ In addition, because clinicians do not have the time or competencies to address the upstream determinants of health, there are structures to make connections to what is available in a patient’s community or neighborhood. These structures can facilitate the connection to community supports through technology and human resources, such as Community RX⁶ in Chicago, Cherokee Nation Health Services⁷ and Vermont’s Blueprint for Health. The Blueprint for Health is an enhanced Patient Centered Medical Home program which uses community health teams embedded in the community to provide additional staff who support the practices in connecting patients to community resources. The cost of the additional staff is paid by all public and private payers in proportion to the percentage of the attributed population. This model was piloted for a number of years, and has now been expanded to include more than three quarters of the practices in the state (Department of Vermont Health Access, 2013).

There is also the need to explore what is happening in the home or community that may be contributing to poor health outcomes discovered in clinical settings. More sophisticated initiatives have community health workers or navigators integrated in a well-coordinated multidisciplinary team at the clinical setting who are ultimately paid for by health plans or providers. For example, in Delaware, Nemours Children’s Health System community health workers identified bus idling as an asthma trigger which led to educating bus drivers on reducing harmful fumes.⁸

⁵ On this subject, see also IOM, 2014.

⁶ <http://www.healthit.gov/buzz-blog/electronic-health-and-medical-records/clinicalcommunity-linkages/> (accessed March 17, 2015).

⁷ <http://www.cherokee.org/Services/Health/AboutHealthServices.aspx> (accessed March 17, 2015).

⁸ The Delaware project is supported by Grant Number 1C1 CMS331017-01-00 from the Department of Health and Human Services, Centers for Medicare & Medicaid Services.

Effective community engagement and having the right partners, including payers.

Sophisticated community engagement has the following characteristics: (1) movement from silos to collaboration and integration, and (2) movement from a few partnerships to coalitions where partners actively contribute and where all key decision makers are at the table. Community engagement is more than soliciting input. It is authentic community participation from the beginning and collaboration to determine shared goals. To achieve community transformation, an ongoing working group or coalition where key decision makers are actively working together to solve problems and feel joint ownership, is critical. It is essential that payers and providers (with senior leadership support and representation) as well as government agencies and community-based and consumer organizations are actively involved. One common issue is the difficulty in recruiting private employers, who are key purchasers of health care, to engage, even though they have a long standing interest in the wellbeing of their employees. The multiple demands on employers who have to deal with all the other changes stimulated by reform have created “health care reform fatigue” and reduced their capacity to participate in efforts to improve community health.

Degree of sustainability. Although grant support may be important for testing programs and building infrastructure, mature population health programs build a path to sustainable financial models that support and reward improvements in population health. This requires not only integrating population health considerations with new payment and care models, but also exploring innovative financing vehicles such as social impact bonds and community development investment funds. Finally, an optimal financing model that is truly sustainable over the long term should allocate a portion of the savings that accrue from improved health and lower health care costs for reinvestment in the community, especially in upstream factors.

OBSERVATIONS AND LESSONS LEARNED FROM ROUND ONE

There were some noteworthy lessons from Round One of the SIM initiative. A first, perhaps primary lesson is that it takes an explicit commitment to population health as a priority in order to incorporate it into health system transformation. This does not happen naturally. Health plans and health care providers are often so overwhelmed by the magnitude of the tasks associated with moving from fee-for-service to value-based contracting and to patient-centered medical homes that they have little time to think creatively about new approaches to prevention and population health.

A second lesson learned is that even if population health is identified as a priority, as it has become in Round Two, states differ in their awareness of and readiness to take action steps. In some instances state Medicaid programs, commercial payers and large provider organizations are the lead drivers and have limited knowledge of or interaction with their population health counterparts in the state. CMMI and the CDC are collaborating to support SIM states; however, there are no proven roadmaps for how to transform from a volume-driven system to a value-driven system that focuses not just on individual care but also on population health as a priority.

Finally, even when population health was a priority and when technical assistance was provided by CDC, the type of population health activities that were most often included veered towards clinical preventive measures – such as counseling and treatment during a clinical visit to support tobacco cessation. It is certainly a positive development to increase the incorporation of clinical preventive measures into routine care. But it would be a lost opportunity if that is the only way that population health is incorporated into the process. There is a need to nurture the

consideration of innovative clinical measures and total population health measures co-created and shared by clinical and community partners. The latter would seem to be a genuine possibility as the SIM grants move to the goal of coverage of value-based contracting for 80 percent of a state's population and the alignment of quality (and eventually population health) measures and action steps among both the public and private payers. CMS's recent announcement of the Technical Expert Panel on Population Health Measures: Assessment and Design is a step along this path.

There are several ways to broaden the incorporation of population health into the SIM process and other attempts at integration. One is to ensure that state and territorial (as well as local and tribal) senior health officers are at the table as full members of the leadership teams. Such participation was uneven in Round One. If the defined population health priority was limited to a particular categorical area – such as tobacco – then the participation of the health department might be limited to that of a subject matter expert. The state health commissioner was not always integral even when she/he was involved in other statewide, big-picture prevention planning. Inclusion of senior public health leaders in Round Two decision-making bodies would lead to more active engagement and an opportunity for population health to be in the forefront. To make the most of being included in the SIM teams, those senior health officers need support from the CDC, the Association of State and Territorial Health Officials and the National Association of County and City Health Officials in thinking in new ways, presenting the return on investment for creative population health approaches and presenting such concepts within a framework familiar to payers and providers. Leaders at the national, state and local levels should determine what resources can be allocated to support such efforts. Another strategy is to create an explicit population health champion within the SIM implementation structure for each state. For example, Vermont created a Population Health Workgroup which was a resource for the other workgroups responsible for payment models, care models and metrics. The Vermont work group was chartered not only to develop its own initiatives, such as an Accountable Health Community pilot, but also to bring a population health perspective to the work of the other groups.

The effort to incorporate prevention into SIM will likely benefit from additional non-SIM funding that is focused on strengthening the participation of public health advocates and officials and the piloting of complementary innovative prevention-oriented initiatives. For instance, the Robert Wood Johnson and DeBeaumont Foundations and others have recently released new funding, through the Build Health Challenge,⁹ to support new models that advance total population health. These efforts—particularly when linked to existing SIM efforts where they exist—increase the likelihood that the population health focus will not be neglected and that the lessons learned will be used in a meaningful way.

CHALLENGES FOR STATES TO INTEGRATE POPULATION HEALTH INTO TRANSFORMATION

The challenges to effectively addressing population health have their roots in asking two worlds—clinical health care and public health/community health—that were separated at birth to rejoin in the pursuit of common goals. Clearly, there have been multiple calls to define the business of health care as the business of health (Asch and Volpp, 2012). The requirements of community benefit plans for nonprofit hospitals are a step in that direction. There are hospital

⁹ <http://www.buildhealthchallenge.org/> (accessed March 17, 2015).

leaders who are going outside their clinical “walls” to join with community partners in the pursuit of improving environmental conditions for patients with certain diagnoses such as asthma and diabetes.¹⁰ But in a fee-for-service system, the result of such an effort may be less revenue for hospitals and clinics, creating an unsustainable business model. Responsible hospitals and emerging ACO systems are addressing waste and titrating their inpatient costs downward. Such efforts are accelerated by the increasing transparency of quality and costs, such as in the recent Minnesota statewide release of total-cost-of-care data for all primary care clinics. However, without clear roles and acceptance of common goals by all community stakeholders, it will be a challenge to improve population health.

There needs to be more of a commitment to accountability for and understanding of the linkage between spending in health care and spending on nonmedical factors, such as social services and education in order for the public and policymakers to understand the trade-offs. Although there are models such as ReThink Health system dynamics model for community investments, we need more real world experiments to help us understand how to make these bridges and transitions between clinical care and a healthy community. One noteworthy example is NorthPoint Health and Wellness Center (NorthPoint), a federally qualified health center, that is part of Hennepin Health (part of the foundation of Minnesota’s SIM). NorthPoint has transformed its capital expansion plan from the limited and traditional approach of adding new clinic space to a more community-oriented development initiative that includes a grocery store on the ground floor of the clinic parking ramp as well as incorporation of expanded social services.

Some specific challenges faced by the SIMs states are listed and described below, along with promising developments or emerging solutions. The challenges are as follows:

- (1) nomenclature and roles,
- (2) reallocation of resources,
- (3) new payment models, and
- (4) realistic and credible measurement systems.

Nomenclature and roles. Although the term “population health” is often used for the SIM activities, it may be helpful to differentiate between population medicine and population health or total population health (Jacobsen and Teutsch, 2012; Sharfstein, 2014). For example, preventive clinical services and immunizations are necessary components of population health but do not address upstream factors such as physical activity, early childhood education, or poverty. However, the development of bridges between clinical and community leaders can facilitate addressing common goals that require public health interventions in multiple settings. Encouraging clinical and community leaders to set common goals is both necessary and challenging for two groups with such different languages, cultures, and funding streams. Yet developing definitions, roles and responsibilities that are informed by clear goals and measures will help local, state, and federal leaders focus. CMS’s identification of population health as an essential component of the SIM Round Two efforts is a helpful start. Its recently stated intention to move beyond a traditional payer to become a catalyst in improving population health signals an expanding role (Kassler et al., 2015).

¹⁰ See, for instance, examples provided in the archived February 5, 2015, webcast at www.iom.edu/PHandHC (accessed March 17, 2015).

Reallocation of Resources. The continuing rise of health care spending must be addressed for national and local economic stability as well as for health reasons. Although clinicians increasingly understand the need to decrease the cost of care, it is not one that they quickly embrace. The challenges of discussing costs with clinicians and the public should not be underestimated but may be best addressed by framing decreasing costs within the Triple Aim or the National Quality Strategy.¹¹ Analytic models such as the Community Health Advisor, a program of the Robert Wood Johnson Foundation “developed by HealthPartners Institute for Education and Research, in conjunction with Partnership for Prevention, and with guidance from the National Commission on Prevention Priorities” can help both citizens and policymakers understand that focusing only on clinical care is not the answer, and that waste in health care is actually part of the problem.¹²

The appropriate balance of community investments needs extensive critical assessment that will guide the prioritization of limited resources and discourage unnecessary capital investments linked more to public relations and market share than to health outcomes and improvements. Creating new vehicles for capturing savings and reinvesting these savings in upstream community interventions can make the total health system more effective and improve health.

New Payment Models. Ultimately, the health care delivery system needs to accelerate the transition to new payment models that create sustainability for providers and communities as they invest in more upstream factors and less in volume-based clinical interventions that do little to add to health but create revenue for hospitals and clinics. Shared savings models for ACOs such as the Medicare Shared Savings Program are a first step, but they were never intended to be the final model. The transition to population-based global budgets has begun, but it has been painstakingly slow. However there are some promising approaches within several of the Round One SIM states:

- Maryland with its renewed CMS waiver and legislatively authorized option of global budgets for hospitals offers unique incentives for community partnerships and population health outside the clinical walls.¹³
- Vermont has rapidly expanded the percent of its population attributed to ACOs by supplementing the Medicare SSP with state designed shared savings programs for Medicaid and the commercially insured population covered by the state’s health insurance exchange. Expansion has been accelerated since the state is served by three statewide ACOs, one including all 14 acute care hospitals, one for federally-qualified health centers and other safety net providers and one for independent physicians. However, a number of providers have concluded that the shared savings model is not sufficient to drive the needed transformation so the state is designing a population based global budget model that could be a component of a CMS waiver.
- Minnesota has attempted to link its voluntary Medicaid ACO demonstrations—Integrated Health Partnerships (IHPs)—to “accountable communities for health” to align the financial incentives for investments in social services and population health. With

¹¹ More information about the National Quality Strategy is available at <http://www.ahrq.gov/workingforquality/> (accessed March 17, 2015).

¹² <http://www.communityhealthadvisor.org/> (accessed March 17, 2015).

¹³ Completed Global Budgets under the All-Payer Model. <http://www.hscrc.maryland.gov/global-budgets.cfm> (accessed March 17, 2015)..

Minnesota's recent announcement of six additional care delivery systems, the one-to-one linkages have increased. Currently, the IHPs have cost and quality targets; they can share in savings in their first year and share the risk for losses in their second year. Discussions are underway about consistent population health targets across IHPs.

Creating upside and downside risk models are not easy tasks especially when new population health measures are in development, and the roles and rewards for actors are not clear. The lessons learned from these SIM experiments will be extremely helpful, and we must learn from successes as well as failures.

Realistic and Credible Measurement Systems: Given the short time frames under SIM together with the lack of clear measures of population health, it is critical that we be realistic about how we measure success under SIM. Measures need to reflect time period expectations. For short-term measures, that is, the four-year time period under SIM, process or proximal measures should be the focus, such as whether practitioners are changing their practices or whether key enablers such as integrated data systems are in place. For long-term measures, policy/system changes that affect the population in a community as well as health behavior changes are more realistic. Because SIM programs are primarily led by Medicaid or health financing leaders, a tendency to focus on short-term achievable clinical measures will be the norm. There is a need to address this issue proactively at the beginning of the grant period to set expectations for a different set of measures that includes total population health measures. Some examples of this work includes the Institute of Medicine's efforts on Triple Aim metrics,¹⁴ the health reform dashboard used by the state of Vermont,¹⁵ and the Robert Wood Johnson Foundation's efforts to develop metrics, including the "Health of the States" conducted by Steven Woolf at Virginia Commonwealth University and the Urban Institute.¹⁶

CONCLUSION

CMMI has once again demonstrated its commitment to accelerating the pace of health care reform, especially in accelerating population health improvement. The SIM Round Two initiative reinforces the importance of states as drivers of transformation by meeting a critical mass of states where they are and moving them along the path of change. Having 38 states participating in SIM presents a unique opportunity for transformation at the state level and represents a major commitment to "open the door" and improve population health. We need to set realistic expectations, but what might we see on the other side of that door; and what would be some signs of success? Some indicators include the following:

- Experiments with population health measures beyond clinical preventive measures, including equitable outcomes (beginning with intermediate outcomes); health behaviors and the social determinants of health; and measures of health and well-being
- Communities/states setting goals on all three parts of the Triple Aim: total population health, experience of care and quality, and total cost of care
- Engagement of communities with the greatest disparities in health indicators

¹⁴ http://iom.edu/~media/Files/Activity%20Files/Quality/VsRT/Core%20Metrics%20Workshop/Core%20Metrics_1pager_13Mar12.pdf (accessed March 17, 2015).

¹⁵ <http://gmcboard.vermont.gov/dashboard2> (accessed March 17, 2015).

¹⁶ <http://societyhealth.vcu.edu/work/the-projects/health-of-the-states.html> (accessed March 17, 2015).

- Multisectoral collaborations including clinical care, public health, and other community stakeholders with named integrators
- Leadership councils reflecting these multiple sectors
- Use of current community needs assessments, including those conducted jointly by public health and nonprofit hospitals
- Exploration of new and sustainable payment models that reward improvement in total population health outcomes
- Financial models that return a portion of savings to the community for investment in upstream factors that influence the health of a population

The SIM states are key drivers, but they cannot be successful without the support and active engagement of other key stakeholders. The SIM awards last for only four years. By the time they end, the foundations for a sustainable structure for improving health must be laid. More important, we desperately need a handful of success stories of pilot communities that have stepped up, created an initial structure and actually made real changes, improving the health of their residents. It is time for those who have adopted the Triple Aim to accelerate and deepen their engagement. Private foundations can use the public investment in SIM by providing targeted support that complements the CMS funding and fills in key gaps. Health care systems can use their financial and organizational resources to renew their commitment to the community they serve and accelerate their transition to new payment models. Public health can build on some of their core competencies in needs assessment and evidence-based interventions while they learn new skills to collaborate with new partners.

Engaging implies accepting risk because in learning what works, some of the pilots will fail. That is the price of innovation. However, the SIM Initiative is a once-in-a-lifetime door of opportunity, and we should mark our success for what lies on the other side must be nothing less than a sustainable health system worthy of the populations we serve.

REFERENCES

- Auerbach, J., D. I. Chang, J. Hester, and S. Magnan. 2013. *Opportunity knocks: Population health in state innovation models*. Discussion Paper, Institute of Medicine, Washington, DC.
<http://www.iom.edu/Global/Perspectives/2013/OpportunityKnocks>.
- Berwick, D. M., T. W. Nolan, and J. Whittington. 2008. The Triple Aim: Care, health, and cost. *Health Affairs* 27(3):759–769, <http://content.healthaffairs.org/content/27/3/759.abstract>.
- Booske, B. C., J. K. Athens, D. A. Kindig, H. Park, and P. L. Remington. 2010. *County health rankings working paper: Different perspectives for assigning weights to determinants of health*. University of Wisconsin Population Health Institute.
<https://uwphi.pophealth.wisc.edu/publications/other/different-perspectives-for-assigning-weights-to-determinants-of-health.pdf> (accessed March 17, 2015).
- CMS (Centers for Medicare & Medicaid Services). 2014. *State Innovation Models: Round two of funding for design and test assistance*. Funding opportunity announcement.
<http://innovation.cms.gov/Files/x/StateInnovationRdTwoFOA.pdf> (accessed March 17, 2015).
- . 2015a. *Bundled Payments for Care Improvement (BPCI) initiative: General information*. <http://www.medicare.gov/Medicare-CHIP-Program-Information/By-Topics/Long-Term-Services-and-Supports/Integrating-Care/Health-Homes/Health-Homes.html> (accessed March 17, 2015).

- . 2015b. *Bundled payments*. <http://innovation.cms.gov/initiatives/bundled-payments/> (accessed March 17, 2015).
- . 2015c. State Innovation Models Initiative Round 2 Fact Sheet. <http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2014-Fact-sheets-items/2014-05-22.html>
- Department of Vermont Health Access. 2013. *Vermont blueprint for health 2013 annual report*. <http://hcr.vermont.gov/sites/hcr/files/pdfs/VTBlueprintforHealthAnnualReport2013.pdf>.
- Hester, J. A., and P. V. Stange. 2014. *A sustainable financial model for community health systems*. Discussion Paper, Institute of Medicine, Washington, DC. <http://iom.edu/Global/Perspectives/2014/SustainableFinancialModel.aspx>.
- ICSI (Institute for Clinical Standards Improvement). 2014. *Community conversations*. Videos. https://www.icsi.org/health_initiatives/accountable_health/community_conversations/ (accessed March 17, 2015).
- IOM (Institute of Medicine). 2014. *Capturing social and behavioral domains and measures in electronic health records: Phase 2*. Washington, DC: National Academies Press. <http://www.iom.edu/Reports/2014/EHRdomains2.aspx>.
- Jacobsen, D., and S. Teutsch. 2012. *An environmental scan of integrated approaches for defining and measuring total population health by the clinical care system, the government public health system, and stakeholder organizations*. Commissioned Paper. <http://www.improvingpopulationhealth.org/PopHealthPhaseIICommissionedPaper.pdf> (accessed March 17, 2015).
- Kassler, W. J., N. Tomoyasu, and P. H. Conway. 2015. Beyond a traditional payer: CMS's role in improving population health. *New England Journal of Medicine* 372:109–111.
- Kresge Foundation. 2015. *Kresge invests \$4.5 million in effort to capture and share health innovations that shift focus upstream from care to health*. News Release. <http://kresge.org/news/kresge-invests-45m-effort-capture-and-share-health-innovations-shift-focus-upstream-care-heal-0> (accessed March 17, 2015).
- Sharfstein, J. 2014. The strange journey of population health. *Milbank Quarterly* 92(4):640–643.
- Stiefel, M., and K. Nolan. 2012. *A guide to measuring the Triple Aim: Population health, experience of care, and per capita cost*. IHI Innovation Series White Paper, Cambridge, MA: Institute for Healthcare Improvement. <http://www.ihl.org/resources/Pages/IHIWhitePapers/AGuidetoMeasuringTripleAim.aspx> (accessed March 17, 2015).