ICSI Institute for Clinical Systems Improvement
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MEASURING HEALTH IN MINNESOTA: IMPORTANCE, CHALLENGES AND FUTURE DIRECTIONS

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This paper is a summary of the Global Health Measures Discussion Group convened by the Institute for Clinical Systems Improvement in September 2013.

Background

The Triple Aim[1] of improved population health, care experience and affordability is the driving force behind new health care delivery models such as accountable care organizations, health care homes, total costs of care initiatives, as well as numerous other initiatives in Minnesota and nationally.

In 2013, a framework[2] of accountable care measures within the Triple Aim to measure the value that accountable care organizations provide was proposed at an Institute of Medicine (IOM) workshop on measurement needs for accountable care and later published in a Health Affairs blog. To understand the effectiveness of accountable care reform initiatives, various frameworks that go beyond disease-specific measures have been proposed, ranging from life expectancy and mortality measures to functional well-being and quality of life assessment tools.

The Institute for Clinical Systems Improvement (ICSI) is interested in developing non-disease specific global health measures for several reasons. First, in 2010, ICSI's board of directors made helping members achieve the Triple Aim a key strategic goal for the collaborative.

Second, ICSI understands that health care contributes only 20 percent to the health of a population, while health behaviors, socioeconomic factors and physical environment contribute the other 80 percent[3]. This reality means we must go beyond disease-specific measures to address the other components that contribute to health as well as understand what contributes to functionality and well-being from a patient perspective.

As envisioned in the paper "Achieving Accountability for Health and Health Care[4]," changing the paradigm of addressing disease or health care specific behaviors to addressing patient functionality and well-being will require the engagement of citizens, clinicians, and communities together explicitly addressing all aspects of the Triple Aim supported by global health measurement. ICSI sees an opportunity for communities to establish their own Triple Aim goals and become Accountable Health Communities capable of balancing their investments in both health care and the social determinants of health. Identifying global health measurements of value to patients and communities is seen as critical to creating such sustainable local health systems.

ICSI set out to explore how best to establish global health measures for Minnesota. Janet Corrigan, PhD, MBA, former president and CEO of the National Quality Forum, was invited to address ICSI's board of directors on her co-authored framework in a Health Affairs blog entitled "A Framework for Accountable Care Measures." Her presentation reinforced the need to build a value-based measurement framework that focuses on "functional health," in addition to process and clinical outcomes.

At the same time, initial conversations with ICSI member organizations identified ongoing individual efforts in utilizing measures of self-reported health and well-being. ICSI saw the opportunity to convene state experts to discuss global health measures used statewide. This paper documents the discussion that took place among Minnesota's health care, community, and public health stakeholders. It identifies measures currently used and also suggests areas of alignment for meaningful measurement of health in both clinical and non-clinical settings.

The Global Health Measures Discussion Group addressed the following:

- Current global health measures being used by participating organizations
- Experience with the use of those measures
- Potential global health measures being considered
- Impact of using global health measurements within stakeholder organizations and the communities they serve.

Measures

The various measures being used by stakeholders to understand improvement in population health fall into two categories: Measures of Individual Health and Well-Being, and Measures of Population Health.

Measures of Individual Health

These typically are self-reported measures of a patient's health status, function and/or well-being. In Minnesota, the most frequently used measures are the National Institute of Health's (NIH) PROMIS® instrument and the Centers for Disease Control and Prevention's (CDC) Health-Related Quality of Life Healthy Days (CDC Healthy Days); both measure the functional health of patients. Some groups are beginning to test the measure of life-satisfaction or well-being based on the Gallup organization's Well-Being Index[5], a combined score based on self-reported indicators of overall health, physical health status, emotional status, career satisfaction, happy and fulfilling relationships, financial well-being, and community engagement in relation to healthy behaviors, work productivity and health care costs.

The PROMIS® instrument assesses self-reported health including the ability to function, symptoms, feelings and perceptions. The instrument is available in both pediatric and adult patient versions. The adult measurement framework includes questions in four areas: global health, physical health, mental health and social health. These areas are further broken down into multiple domains containing specific questions about pain, function, feelings, symptoms and perceptions. More information is available at: http://www.nihpromis.org/default.

Similar to PROMIS, EQ5D tool uses patient self-reported status to measure individual patient health. (References: http://www.euroqol.org/). While PROMIS is in the public domain and free of charge, EQ5D is proprietary and includes a fee to use it. In Minnesota, specialists are exploring the use of this tool to measure condition specific patient reported health and functional outcomes. An example of this is Minnesota Community Measurement's measure on Spine Surgery Outcomes which includes measurement of patient overall health using EQ5D tool and which has been adopted into the Minnesota Statewide Quality Reporting and Measurement recommendations for 2014 provider reporting of quality measures. (More information is available at: http://www.health.state.mn.us/healthreform/measurement/recommendations.html.

The CDC Healthy Days tool (HRQOL-14) measures self-reported healthy days in the last 30 days and includes three areas: a core module that includes questions on overall health, physical health, and mental health; an activity limitations module with questions on physical, mental, and emotional problems or limitations in daily life, and a symptoms module

with questions on pain, depression, anxiety, sleep and stress. More information can be found at: http://www.cdc.gov/hrqol/hrqol14_measure.htm#1.

The Gallup Index of Well-Being provides both a composite and separate scores in each of the following six sub-indexes: life evaluation, emotional health, work environment, physical health, healthy behavior, and basic access. More information is available at: http://www.gallup.com/poll/128186/gallup-healthways-index-work.aspx.

Health risk assessments are commonly used to assess health status, estimate health risk, and provide information on behavior change (e.g., diet and exercise) to reduce health risks. Information gathered often centers on age and gender, diet, and lifestyle (exercise habits, tobacco and alcohol use).

Additional disease-specific measures are being used by some organizations to assess health improvement in specific sub-populations. For example, the PHQ-2 or PHQ-9 tools are being used to measure depression symptoms improvement in patients. These tools may also be used as part of individual health risk assessments to understand areas where patients need the most help.

Providers in the Minnesota discussion group are also measuring patient experience and engagement. By studying the connection between patient experience (including patient engagement in their treatment plan and services) and health outcomes, health care organizations can better understand additional factors impacting health improvement. The most common tools cited include: Clinician & Group Consumer Assessment of Healthcare Providers and Systems (CG-CAHPS)[6], Patient Activation MeasureTM (PAM)[7], and Patient Assessment of Chronic Illness Care (PACIC)[8].

Minnesota's 2008 health reform law requires clinics with sufficient patient volume to report performance via the CG-CAHPS visit specific survey[9]. The data is collected as part of Minnesota's Statewide Quality Reporting and Measurement System. Results in four categories (access to care, provider-patient communication, courteous and helpful office staff and exceptional provider ratings) are available from Minnesota Community Measurement (www.mnhealthscores.org).

PAM is used to measure patients' engagement and activation with their care[10]. Because it is proprietary, there has been limited uptake by providers due to the usage fee. The PACIC tool assesses the extent to which patients with chronic illness receive care that aligns with the Chronic Care Model (care that is patient-centered, proactive, planned and includes collaborative goal setting; problem-solving and follow-up support)[11].

Measures of Population Health

These measures are usually employed by public health organizations to gauge the health trends of populations at a community, state or national level. They measure health across geographical, racial or ethnic as well as disease, health behavior and health status areas to understand trends in the health of entire communities.

Since the social and physical environments are determinants of health in addition to health behaviors and health care, population measures such as neighborhood safety, high school graduation, exposure to environmental hazards, and access to parks, walking trails and biking paths are also used to understand the health of the community.

State and local public health departments regularly conduct health assessments[12] that examine an array of population health measures as a first step toward identifying health improvement activities needed in a particular community. A commonly used source of population health data is the Minnesota Behavioral Risk Factor Surveillance System[13]. Other measures of population health being explored at individual organizations are measures of mortality (Years of Potential Life Lost-YPLL) and measures of morbidity (Disability Adjusted Life Years-DALY).

Early Lessons Learned

Discussion group participants shared lessons learned based on their efforts to develop global health measures. One key point is that both individual patient health and population health measures are critical to ultimately improve the health of citizens in a community. The latter informs health care systems and community organizations on the overall trends in health in the community.

Representatives from several groups noted the value of conducting their own community health needs assessments to help their organizations move beyond the clinic into the community. With this knowledge, they can decide which measures of individual patient health they need to use to reach goals, not only for their system but also for the community as a whole. Individual patient health measures can be aggregated to provide an overall picture of the health of the local population.

Participants also noted that what providers are measuring might not always align with patients' health concerns. Patients often equate health with quality of life and whether they can function and live productive lives. This is especially important for those living with chronic disease. Using patient self-reported outcome measures has been found to help inform patients which areas of their health (physical, mental, emotional) they need to improve. It has also helped clinicians better understand which interventions and strategies they can undertake to improve the health status of their patients.

One organization's medical home pilot with a high-risk population showed that CDC's Healthy Days is a measure of functional health that is easy for patients to understand. Moreover, in terms of the impact on patients' health, this measure has shown improvement in healthy days when interventions are applied in highly complex patients. Higher scores on healthy days were also associated with improvement in symptoms of depression.

Another organization has found that high scores on domains of life satisfaction and well-being correlate with better adherence to optimal lifestyle behaviors (healthy eating, physical activity, alcohol and tobacco use), increased work productivity and lower health care costs.

Challenges

While many of the global health measures discussed are gaining wider acceptance, challenges still exist in both their collection and useful application of data, including:

- Difficulty in reaching a consensus on which tools and measures to use across an organization.
- Data collection may be dependent on the care setting – patients are more willing to answer global health questions in an ambulatory setting than in an in-patient setting.
- Determining the most effective and consistent way to apply data to understand the impact (or potential impact) on health outcomes.
- Inconsistent use of measures within an organization.
- Lack of sharing with other organizations that may also benefit from the data.
- Sharing feedback with providers through electronic medical records.

We need to develop ways to more efficiently incorporate data from national public health surveys and local and state public health agency assessments at the community level to enable clinics and health care systems to improve population health. Armed with local health trends data, systems can focus on clinical care initiatives that help patients improve their individual health and well-being, moving health care systems closer to achieving the Triple Aim.

Health Care System and Community Engagement to Improve Individual Health

For health care systems to truly impact and improve the health and well-being of their patients, it is necessary to go beyond the health care system itself and engage with the communities. Minnesota pilot projects are showing that it is possible for health care systems to engage communities to drive improvement in health. Participants shared the following strategies as examples of how to successfully engage communities:

- Determine the best measures based on their importance to patients and the local community by reviewing and sharing data with patients to develop strategies that can lead to improved health. For example, a discussion regarding health risks and measures identified at a community level (such as prevalence of tobacco use or obesity), combined with a patient health risk assessment, may result in community-level strategies that address common patient concerns such as educating teens about tobacco use or adding walking trails.

- Build partnerships between health care and local businesses, community organizations, schools, local governments and others to implement strategies that improve lifestyle behaviors, and provide information on availability of services offered by a health care system.
- Create community advisory teams with patient participation to foster ideas on how health care systems can better meet their needs.
- Increase health coaching so that community members can coach others on how to take care of their health, and reinforce the importance of connecting with the health care system when appropriate.

Considerations for Future Development

An improvement in individual health ultimately affects population health, pointing to the importance of partnerships among health care systems, public health and community organizations. Similarly, population-based activities intended to improve community health (e.g., ordinances or laws to create smoke-free environments, walking trails) can play an important role in helping individuals stay healthy, and further illustrates the importance of these cross-sector partnerships.

Understanding and applying global health measurement will help align patients' concerns about their health with what health care providers and other stakeholders can provide. The following themes are emerging on what can be done to drive adoption of global health measures to achieve the Triple Aim of improved population health within a health care system and community:

Health Care Systems

- **Collect and share data.** Determine what measures are most meaningful to patients, and share that data.
- **Simplify.** Use measures that are easy to understand, such as the CDC's Quality of Life Healthy Days.
- **Think, plan and act holistically.** Consider basing life satisfaction measures on aspects of well-being; e.g., perceived health status, emotional status, career satisfaction, happy and fulfilling relationships, financial well-being, community engagement.
- **Consider the impact on clinics.** Resources may shift from specialty to primary care, and from the health care system to the community. Individual roles within care organizations may also need to change to enhance interactions between the health system and the community.

Community Partnerships

- **Get local.** Measure at the smallest reasonable clinical and/or geographic level, and involve the community partners in the development and implementation of measurement tools and assessments. Extend these assessments to behaviors that act as triggers for poor health status indicators.
- **Tap into public health.** Understand the value of state and local public community health data and know how to use it to support improvement and measurement in the community.

The group also noted that development of a more consistent, meaningful and useful set of global health measures should consider the following:

- Understand what constitutes "health" and "well-being" for a community and measure what matters most to that community. Explore patient perspectives, motivations and understanding of health and well-being and its relationship to health care and clearly delineate the similarities or differences between the two.
- The way we define "health" and "well-being" is very important, because the meaning of these terms may be dependent on the perspective of different stakeholders. Develop an appropriate, working definition of "health" and "well-being" that resonates equally for citizens, clinicians, organizations and communities.
- Explore how well-being and life satisfaction relate to the Triple Aim.
- Collect consistent, balanced data from multiple sources, including points of care, electronic medical records, public health agencies, health plans and elsewhere.
- Understand how disparities; e.g., racial, ethnic, language, socioeconomic; impact measurement and be prepared to react appropriately.

- Build trusting relationships and solid feedback loops among health care organizations, providers and communities.
- Examine the role and accountability of the health system in improving population health, and understand how it interacts with other social determinants and systems such as transportation and education.

Conclusions and Next Steps

It is time to move toward common global health measurements of individual and population health. In Minnesota, health care systems are already exploring the use of patient self-reported measures to better understand if their interventions are improving the health of their patients. Health systems need to work in partnership with community-based agencies where their representatives gather and have trust to bring their expertise to bear in these initiatives. This will move both communities and health systems closer to being accountable to the Triple Aim. Engaging health systems, community organizations and public health agencies at the community level to address social determinants of health will be key to achieving sustainable health and health care. Measurement aimed at how this partnership can be supportive and productive as evidenced by patient outcomes will also be important.

Several next steps are under consideration to move in this direction, including:

- Continue to build on this initial discussion in an effort to identify a common measure of population health.
- Test specific measures such as the PROMIS® instrument, CDC Healthy Days, and well-being in one or more health care systems to see how they can help achieve the Triple Aim.
- Identify opportunities to use individual health measures and public health data within health care systems and communities to identify intervention strategies that most impact health and function.

An ideal set of global health measures will help clinicians identify the most meaningful interventions to pursue to affect the health and well-being of patients and populations they serve. These measures should also align with patients' concerns about their health and function. In the end, the ultimate goal is to use global health measures to help point the way toward achieving the Triple Aim of improved population health, improved delivery and experience of health care and reduced health care costs.

Footnotes

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13 MN Behavioral Risk Factor Surveillance System. http://www.health.state.mn.us/divs/chs/brfss/.

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