As we learn more about approaches that have the greatest potential to develop and improve communities, the well-being of community members has become a critical indicator of success. We have long recognized that an individual’s productivity is influenced by family stability, physical and emotional health, and educational success, and that these influences interact to shape well-being across life stages from early childhood into adulthood. More and more, we center our efforts and interventions on achieving collective impact by simultaneously addressing a combination of factors influencing a population of residents. The geography may be a neighborhood, city, county or state. A more holistic perspective on the inputs to well-being is influencing how and what we measure to understand a community’s growth and success. The concept of well-being is replacing traditional indicators of success, such as counts of services, program participants, and graduates.

The challenge is that optimizing well-being requires an approach that considers more than a single human capacity such as physical health or emotional intelligence; a single service sector, provider, or program such as health care or preschool; and a single life stage such as pregnancy, early childhood, or young adulthood. Additionally, as we have seen in previous articles in this issue of Community Investments, comprehensively working toward

The Magnolia Community Initiative: The Importance of Measurement in Improving Community Well-Being

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the goal of community well-being requires the coordination of a variety of funding sources and programs and the cooperation of an array of education, health care, child welfare, community development and financial providers. Moreover, communities are constantly changing, rendering it nearly impossible to fully plan for community success without a flexible and adaptive approach.1

What does this mean for measurement, and for achieving enduring improvement in communities? The goal of measurement is to drive a change. Therefore, measures should help people understand the behavior of a system and take steps to improve its performance. Measurement must also help stakeholders respond to the constant change in communities and the dynamics of any initiative. How can measurement support an adaptive change process in a community system striving to optimize population well-being? How can integration and management of data collection and analysis work in practice? This case study of the Magnolia Community Initiative describes such a measurement system, and offers it as an example to illustrate a set of principles for measurement.

The Magnolia Community Initiative: A Measurement and Learning System in Practice

The Magnolia Community Initiative (MCI) is a voluntary network of 70 organizations in a five-square mile area near downtown Los Angeles. The network came together with the vision of helping the 35,000 children living in the neighborhoods within a 500-block area break all records of success in their education, health, and the quality of nurturing care and economic stability they receive from their families and community. Poor health outcomes are common here; about 35% of children are overweight, 73% are not proficient in reading by third grade, and 40% will fail to graduate from high school. Partners include multiple departments operated by the Los Angeles County Chief Executive Office (CEO) including social services, child support, and child protection; regional organizations responsible for populations of children such as the Los Angeles County Unified School District, Women Infants and Children (WIC) Nutrition Program, and child care resource and referral; and private and non-profit community-based organizations providing health care, early care and education including Head Start and Early Head Start, family support, and banking and economic development services and supports.

The partners cooperate, coordinate, and collaborate to align their own activities within the 500 blocks toward the ideas for change adopted by the Initiative.2 Partner organizations strive to work as a system, changing institutional practices from a focus on delivering isolated services to a preventive and holistic approach to each client regardless of the organization’s primary mission. The partners use an agreed-upon set of design elements for a well-functioning system to shape their practice in ways that fit within their scope and expertise, and augment the impact of their respective services. The design elements include activating parents to address their child’s developmental needs and to care for their own physical, social and emotional health needs; improving linkage and flow across organizations and service providers; and increasing the effectiveness of services through family-centered care that is consistent with advances and new understandings in neuroscience and the impact of trauma on human development. The Initiative is tapping into the expertise of its diverse network to create cross-sector pathways to address the largest causes of preventable losses in health and developmental potential. These include parent depression, social isolation, and developmental concerns in young children.

The network capitalizes on the intrinsic motivation of the partners. They get value from the connections and from a shared measurement and change process. To move from concept and commitment to actual changes in practice, the Initiative created a learning system around the design elements with measurement and a structured innovation and improvement method.3 Through monthly network meetings, working groups, and improvement projects, the network partners reflect on how to form and function as a system to improve conditions and outcomes for the full population of local families. For their part, community members interact with neighbors to forge connections and work collectively. They share information about protective factors, the meaning of belonging in a community, the current well-being of young children and families in the neighborhood, and local resources for families. Increasingly they take actions together such as advocating for clean streets and safe parks, establishing walking groups, and making changes in their own lives that lead to well being.

MCI designed a measurement system that could endure for the length of time necessary to improve health and human capital in the community.4 We designed the measurement system with the following goals in mind.

- **Focus the diverse network partners on shared outcomes.** We developed a one-page dashboard of measures that includes child health and development outcomes that all network partners adopted as their “true north.” Differing from traditional scorecards, this “Population Dashboard” also includes the major influence on these outcomes. The dashboard includes outcomes; the parenting actions (such as daily book-sharing) that influence the outcomes; the family conditions (such as food security, and absence of depression) that enable parents to take these actions; and the care processes of organizations in the network (such as providing empathy, and linking clients to other partners that offer...
“The goal of measurement is to drive a change; measures should help people understand the behavior of a system and improve its performance”

Concrete resources that help create these family conditions. The dashboard also includes measures of the internal capacity of organizations to reflect on their practice and make improvements. Taken together, the dashboard measures reflect the capacity, the improvement, and the impact that all organizations and sectors are striving for.

- **Encourage network partners to think and work as a system.** We set measures that provide organizations with insight (understanding the properties of a system that lead to the family conditions, and that in turn lead to desired outcomes); reflection (how do I contribute to a change?); goal-setting (what could be achieved by my actions and by working together collectively?); and actions (what can I do differently as a provider). For example, measures of the reach and depth of the network as reported by local residents helped partners realize the value of “in reach” strategies such as improved linkage and referral. When they learned that 89% of residents are linked to at least one network partner, but that most residents are linked to only one partner, they realized that it is more efficient for organizations to refer and link clients to each other, than for each organization to undertake its own direct outreach to community members. Similarly, measures of connectivity between the organizations such as familiarity with each other’s services, the ease of linking clients to one another, and the frequency of linkage helped partners reflect on steps they could take to have an immediate and community-wide impact.

- **Establish shared accountability among the partners for reaching goal targets in outcomes, parenting actions, family conditions, and care processes.** The partners agreed to reliably provide the care processes that are reported on the dashboard. One such process is routinely eliciting several types of concerns and needs from clients in all encounters. For example, the partners committed to provide empathy, including taking time to understand the specific needs of a client and treating the parent as an expert on their child. The child care programs began asking routinely about financial needs, while for their part, the financial/social service partners began asking about family stressors and depression. Organizations identify their specific contribution to the measures on the dashboard, stretching their practice but not beyond their expertise or their ability to sustain the practice.

- **Establish specific expectations for change.** Each measure has a numeric goal target, identified by the network as the best that has been achieved in any system, and the best that the network could achieve by working collectively with resources on hand. We established high performance targets of 90% for processes such as providing empathy, eliciting concerns, and offering resources in addition to what the client requested. The high targets remind partners that we only create an experience for community members of being supported by a system if these key expressions of interest in well-being happen in all encounters. The high targets also remind partners that implementing one process (such as eliciting concerns) but not others (such as linkage and follow-up) does not create the full cycle of steps necessary to get the desired result, and could actually throw the system out of balance. For example, asking about a range of needs without having some pre-determined pathways in mind, and without encouraging the family to come back if that pathway does not work as planned, does not produce a consistent, effective response.

- **Support improvement with frequent and real-time information.** The Dashboard displays monthly measurements to track progress in care processes of multiple organizations and sectors. Examples include empathy and linkage. The monthly data come from surveys collected by network partners, including physicians, child care programs, and others. The data show which care processes occur inconsistently, and where there is variation in practice within the network between sectors and between organizations. Sharing and assessing these data makes it easier for organizations to learn from each other. Organizations collect small numbers of short anonymous parent surveys to produce the data. Unlike typical program evaluations that compare performance in two points of time, we provide regular monthly data so partners can iteratively learn and adjust their actions.

The following principles reflect the Magnolia Community Initiative experience. What we have learned can be generalized to help inform other collective impact efforts. We offer the following recommendations based on our experiences and knowledge of how to manage change in organizations and in complex systems.
Measures need to tell a story that shapes understanding of what matters and how to influence it.

Working toward a shared goal should involve formulating an idea, stating assumptions, testing under a range of conditions, and adapting to get the intended result consistently. This moves beyond a shared goal to a shared theory of change. Measures are only useful for guiding improvement when they provide a point of reflection from which to judge the situation and give meaning to experience. For example, an indicator set with rates of low birthweight, overweight, smoking, high school graduation rates, and median income does not help organizations or residents understand what they can do to make a difference and, in particular, what are the highest leverage actions they can take collectively to make a difference. Assembling measures that show there is a problem but do not tell a story of what should be done are difficult to use for directing improvement efforts within a complex system. Organizations need to know what they can do and why they are doing it. For example, we can increase third grade reading scores by tutoring children and providing breakfast on testing days, but that does not change aspects of their home environment that predict later learning outcomes, such as study habits, family stability, and parent interest in their child’s academic success. As another example, linkage to resources does not by itself improve population outcomes; increasing referrals to low quality services in health care, child care, or social services may not have the intended impact. These examples are a reminder that working as a system is more than drawing a line between parts of the system that should be connected. It is about shared processes, cooperation and practice change.

What types of measures should a Population Dashboard on well-being include? We have found it best to include several categories of measures which reflect the current knowledge about the range of determinants of human capacity:

- **Outcomes** include early life predictors of capability in adulthood. Examples are low birthweight, social competence of kindergarteners, third grade reading proficiency, and positive peer relationships in middle childhood. Sharing these outcomes across sectors and programs focuses all parties on the same “true north”. Outcomes help leaders align their resources and policies, and they motivate improvement at all levels of policy and practice.

- **Behaviors** are the health- and development-promoting routines of parents and community members, including consistent home routines such as parent-child reading, that have the greatest impact on the outcomes.

“The right measures can crystallize the operating rules so that organizations understand how their actions contribute to the results”

- Family and neighborhood **conditions** can enable or detract from those desirable behaviors. Family conditions include social connections, maternal depression, financial well-being, food security, and stable housing for the family. Neighborhood conditions include perceived safety, knowing one’s neighbors, and the degree of collective efficacy such as the extent to which neighbors look out for each other.

- Daily and monthly measures of **actions** show how well and how reliably the service system is supporting families toward positive behaviors. Examples of these actions include using empathic care, activating individuals to care for their own needs and those of their children, and linking individuals to needed services and supports.

- **Reach** is the extent to which the target population is linked into the network or system, and therefore experiencing the improvements. For example, if several health clinics improve their services, but together serve only 20 percent of the local population, we are unlikely to see significant change in the community.

**Measures should reflect design imperatives for the system.**

The right measures can crystallize the “operating rules” so that organizations understand how their actions contribute to the results for a geographic population. To inspire collective action that is likely to make a difference at a systems or population level, measures should cut across institutions, sectors, and disciplines. For example, helping parents learn how to establish routines with their young children, such as reading together daily or limiting screen time, gives them skills that they can apply in later stages of childhood as well. Focusing on actions and approaches such as striving for empathy in all encounters and activating parents, rather than counting visits to health clinics or service providers, helps partners focus on what it means to work collaboratively as a system. Measures should ideally be indicators that remain relevant across life stages, such as the presence of predictable, stable, consistent and nurturing families; safe neighborhoods; and responsive healthcare and education providers. Relying exclusively on measures that appear relevant to only one life stage
“Any community change process requires a measurement system robust enough to support efforts over the long term”

can detract from a shared understanding that certain root causes cut across life stages and are therefore relevant for all to work toward.

**Dashboards with population-level measures are a useful tool for change when they include the right type and periodicity of measures.**

Measures can help to keep partners focused and aligned. Unlike typical community health profiles, report cards and scorecards, our “Population Dashboard” was designed to provide insight, reflection and guidance for change. It enables leaders and organizations to track family conditions and care processes that drive the desired outcomes, and encourages organizations to see their contributions through a systems lens. We can draw from evidence-based selection criteria for performance measures that can drive a change. These criteria include importance, feasibility, timeliness, and modifiability of the action or outcome being measured. Few existing community profiles employ all of these criteria.

There is ample evidence that selecting a modest, balanced number of measures (10-15) is much more effective in driving improvement than larger sets. It is also essential to shift to providing real-time, monthly progress on process of care measures overall and by service sector to provide diverse programs and providers with shared accountability and a common change process. Understanding variation within an organization, or across a system, is a cornerstone of effective improvement. Few existing community profiles employ all of these criteria.

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Measurement is effective when embedded in a learning system.

It is necessary to continually nurture understanding of the system and the design elements across many people and organizations. A learning system is a combination of measurement and change methods that enables organizations to iteratively adapt knowledge so it works in practice. Measurement is the essence of a learning system, because it can increase the degree to which organizations think of themselves as part of the same system, identify the root causes of suboptimal results, and track improvement over time. The Institute of Medicine (IOM) is promoting the “learning healthcare organization” concept to emphasize the importance of innovation and improvement in health and human services to close the large gap between what we know and what we do. A disciplined approach to learning enables organizations to move quickly from an idea for change to actually testing and implementing that change. A learning system designed for a community enables partners to learn not only what works within their practice, but what actions they should take in partnership with others. The concept of a learning system is especially relevant to communities because they are so dynamic, with changing programs and resources. It has been said that the only constant is change. A learning system is robust to changing resources and policies because organizations have a method of learning their way forward in any context. This capability is essential for achieving scalable, spreadable, and sustainable improvement.

**Actors need measures at their level of influence**

Measurement at multiple levels gives the different stakeholders in a community system the specific information they need on progress of the system toward its goals. There are distinct needs for information at different levels of a system, which include policymakers, service sectors and organizations, frontline providers, and community members. Information should match the sphere of influence of the stakeholder it is intended to support. For example, organization leads need information about the capacity of their organization and others to change, whereas providers need information about how consistently they delivered a specific process last month. The following examples show the kind of information that is useful at different levels of a system.

- **Network and organization leads** need measures around the manner in which a system should operate to accomplish an intended aim. For example, understanding
the extent to which organizations in a network have a supportive climate for improvement helps the leaders craft strategies that address it. This is important because having the right ideas for change does not produce results if organizations do not have an internal infrastructure that encourages innovation, improvement, and sustains the gains from improvement. The network and organization leaders also need to understand the network’s depth and reach to the local population so they can nurture active participation and growth. The network leadership needs to see a set of measures that provide a snapshot of the “full system,” which includes measures of reach and organizational capacity in addition to the measures of outcomes, behaviors, conditions, and actions.

- **Frontline providers** such as doctors, educators, and staff in financial and social services organizations are ultimately responsible for whether or not their services are offered consistently and with quality. While frontline providers often spend considerable time gathering and entering data, they often do not receive it back in a meaningful time frame if they receive it back at all. Service providers need to see their own results each month and be able to compare them to past months, to goal targets, and to the results of other organizations in the network.

- **Community members** also need data to support their own change efforts. Community members use data in different ways depending on their focus. Measures may be relevant to them in their capacities as neighborhood residents; as participants in services; as clients working in partnership with organizations; as parents striving to create safe, nurturing and development-promoting home environments for their child; or all of these. As residents, community members work toward taking positive actions in their own sphere of influence – neighborhood life – so they need information about the perspectives and actions of residents to plan and track change. For example, a community member may need to see safety or neighborhoodness measures on her block or cluster of blocks. Some will use outcome measures to advocate for changes or new resources in their neighborhoods with entities such as neighborhood and city councils. Others respond directly to data about crime or other topics by participating in parent associations or neighborhood watch programs. Some respond to measures of health behaviors by making personal changes such as exercising or changes to home routines such as reading together with their child. Some community members use the different types of measures to do all of these things. It is important to provide community members with the right data tailored to purpose, rather than assuming that the kinds of data that motivate one to advocate for resources or safety are the same as those needed to help a parent change their personal behaviors within the home.

**The limitations and challenges of traditional measurement approaches**

Current measurement systems and formats are not sufficiently helping communities and the organizations within them visualize themselves as operating as or within a system. Existing measurement strategies have limited utility for large-scale improvement because they typically focus on long-term measures and do not use a family of measures that tells a story of what changes will lead to those outcomes. Some small several with no information about the conditions that lead to those outcomes or the them. Some measurement sets are too large, with many measures representing all the factors that could matter and all that could be done to respond. This can be overwhelming to those trying to make sense of complexity, and defeats the purpose of using a set of measures to sharpen a narrative that motivates diverse organizations toward collective action. Clustering measures by sector or program type also can reinforce a siloed rather than aligned approach. Such sector-specific measures, such as health care access and participation in child care, tend to focus sectors inward rather than toward common and linked actions across sectors, such as providing empathy and linkage.

Current measurement sets often draw exclusively from existing data, rather than what is meaningful for changing practice. This may be the most significant limitation. Measurement systems are unlikely to drive meaningful change when they do not provide real-time data to inform day-to-day improvements in practice. Finally, designing a measurement system that can scale, spread, and be sustained over time is also essential. Any community change process requires an enduring large-scale improvement effort with a measurement system robust enough to support efforts over the long term.

**Conclusions**

Measurement with the right context, type, and frequency can drive a change process. Creating a set of measures that meets this criteria would be a service to many community development efforts. Offering appropriate measures for gauging the reach and depth of networks could inspire more community development efforts to focus on their value working as a system. Public sectors including public health departments could support change efforts by contributing measurement sets that meet these criteria. While no single public program can be held responsible for developing human capacity, agencies that have a measurement focus and/or a population orientation are well-positioned to consider how they can augment their
current efforts to support the types, level and frequency of metrics for purposes of improvement.

Providing a shared story of how well-being is formed is a cornerstone of effective collective action. As a result, tying together measurement sets across children’s developmental stages could go a long way toward uniting collective action initiatives and change efforts that currently target specific age groups and the organizations that influence them. To that end, it may be productive to create template dashboards that represent human capital formation across the life course. The rationale is that when a community has more than one set of measures to direct change – for example, having an early childhood initiative and an adolescent initiative – using measures that explicitly address common domains such as family life can be a highly effective way of linking historically disparate efforts together into a cradle to career (life course) orientation. Templates for early childhood, middle childhood, and adolescents could use similar measures, with some tailoring. For example, home routines and family conditions are relevant to children of all ages, even though the specific measures such as measuring communication skills for younger children and peer influence for older children may differ. Similarly, the roles of services and supports have some commonality across childhood. The concept of eliciting concerns may be represented by rates of developmental screening for young children and rates of parents attending annual parent-teacher conferences for older children.

It can be effective to use several dashboards, each tailored to a specific stage of development and linked to the others by a bridging measure – for instance, a school readiness measure that is the outcome of the early years and the starting point in middle childhood. Such linked measurement models would support national efforts such as “Cradle to Career” that strive for understanding of how early investments lead to later outcomes, and could connect early childhood initiatives with school-age efforts such as Community Schools. This can support collective action both within and across distinct initiatives.

In summary, there is an opportunity to augment the purposes of measurement so that it supports not only planning but also action. This may require different approaches to public health surveillance, such as using smaller samples with greater periodicity, and displaying data as time series rather than as annual or pre-post measures. Providing guidance to collective impact initiatives on how to measure for improvement could help community development efforts use limited resources for data more efficiently, providing just enough information to provide insight, promote reflection, and test changes and track improvement over time.