



Multistakeholder Input on a National Priority: Improving Population Health by Working with Communities -- Action Guide 1.0 - DRAFT

April 2, 2014

This report is funded by the Department of Health and Human Services under contract HHSM-500-2012-00009I task order 4.

Contents

Why Focus on Improving Population Health?	3
What is this Guide?	6
How to Use the Guide.....	7
Important Words with Clear Definitions.....	8
Quick View: Action Guide Key Elements.....	12
Ten Key Elements: Overview	13
Element 1: Self-Assessment of Readiness to Engage in this Work	13
Element 2: Leadership Across the Region and Within Organizations.....	16
Element 3: An Organizational Planning and Priority-Setting Process.....	18
Element 4: A Community Health Needs Assessment and Asset Mapping Process	22
Element 5: An Agreed-Upon, Prioritized Set of Health Improvement Activities	25
Element 6: Selection and Use of Measures and Performance Targets.....	29
Element 7: Audience-specific Strategic Communication	33
Element 8: Joint Reporting on Progress Toward Achieving Intended Results.....	35
Element 9: Indications of Scalability	37
Element 10: A Plan for Sustainability.....	38
Conclusion.....	40
Appendix A: Methodological Approach	42
Appendix B: Example Lists of Measures	44
Appendix C: Example Lists of Data Sources	47
Appendix D: Example Lists of Tools	49
Appendix E: Population Health Framework Committee Roster	53
Appendix F: Project Staff.....	55

Why Focus on Improving Population Health?

Unsustainable cost, poor health status and significant disparities in health care are well known. Improving the health within and across populations is an important part of the solution. You are reading this Guide likely because you have an interest in this issue. This Guide is meant for anyone interested in improving health within or among one or more groups of people – whether you are an individual wanting to make a difference in the health of people in your neighborhood or at your workplace, a doctor or nurse working closely with patients to improve their health, a public health professional or other leader in just about any type of organization.

Yet, the health of the total population cannot be improved by one person or organization alone, or solely by public health agencies, or even by the vast health care sector. The reality is that many factors influence health and need to be addressed in a coordinated way by a range of individuals and organizations that include patients, community members, policy makers, health care providers, and other leaders from business, public health, and insurers, among others. This Guide can help you create a path forward to engage with others to increase the likelihood of success in improving population health.

Many people think of health care when talking about how to improve health; however, medical care has a relatively small influence on overall health when compared with individual behavior, the physical environment such as safe neighborhoods and housing, and social factors like education and poverty.¹ Because the issues are wide ranging and the pressure to improve health and reduce health care costs is tremendous, population health improvement can seem too big a challenge for any one sector, organization or individual to take on and have an impact. The only way to improve population health is to coordinate efforts.

Beyond health care and public health, the concept of ‘health in all policies’ suggests that even those who may not think of their work as being about health – such as housing organizations, employers, schools, jails, transit systems, land developers, and the like –make decisions and create environments that can help or hinder good health. Perspectives regarding the role of health improvement for certain sectors are described below, but individuals in every organization have a role in helping to improve health for the people in the subpopulations they affect or influence.

- **Health care providers** have a particular responsibility to improve the health care outcomes for the people under their care, and for society at large. This requires taking clear responsibility for promoting and improving the health of patients, beyond simply caring for them when they are injured or sick. Making this shift is almost counter-cultural for the health care system, as American society tends to value personal independence and responsibility, and can be skeptical about coordinated efforts involving public and private organizations.² But the pressure to move in this direction is increasing.
- **Public health professionals** have focused on population health improvement for many years at the tribal, local, state and national levels. In the public health system, there are different levels of

¹ E. Eggleston, MD MPH and J. Finkelstein, MD MPH. Finding the Role of Health Care in Population Health. American Medical Association 2014. <http://jama.jamanetwork.com> doi: 10.1001/jama.2014.163

² Ibid.

capacities and resources, skill sets, and coordination with partner organizations. The potential for accreditation is an important development to advance the effectiveness of public health agencies in fulfilling their mission. Of the 11 areas in which accredited public health agencies are held accountable, four of them go right to the heart of population health improvement: monitor health status and understand health issues; protect people from health problems and health hazards; give people information they need to make healthy choices; and, engage the community to identify and solve health problems.³

- **Business leaders and purchasers in the public and private sectors** deal every day with the direct and indirect impact of poor health of their employees and family members, and the population overall. This appears as higher health care costs; for example, according to the Centers for Disease Control and Prevention, chronic disease such as heart disease, stroke, and diabetes accounts for 75 percent of the \$2 trillion spent on medical care. In addition, the CDC estimates that the indirect cost of employee absenteeism, turnover, short-term disability, workers compensation and reduced work output may be several times higher than direct medical costs.⁴

The cost of poor health is staggering and the evidence is clear that improving health saves money. A few examples:

- Investing in “community building” – such as advocacy to support low-income or affordable housing, economic and workforce development, environmental improvements, among others – is an effective strategy for improving population health, and there is a financial return on investment. For example, a tobacco cessation program created by the State of Massachusetts yielded a savings of \$571 in avoided hospital costs per participant, after spending \$183 per person in the program. In other words, for every \$1 spent by the Medicaid program, there was a return on investment of \$2.12.⁵
- In Camden, NJ, leaders recognized that a small number of people who frequently used hospital services were generating about 90 percent of the hospital costs. One patient had come to the emergency department 113 times in a single year. Health care providers alone could not solve this problem. However, by taking a community-based team approach to addressing the social and personal needs of these patients – including housing, food, home visits and social contact – they were able to stabilize the health of this subpopulation and head off medical issues that could cost millions of dollars to address. Their coordinated efforts resulted in a 40 percent reduction in emergency department visits and a 50 percent decrease in hospital costs.⁶

³ Final Recommendations for a Voluntary National Accreditation Program for State and Local Public Health Departments. APHA, ASTHO, NACCHO, NALBOH. September 2006. <http://www.phaboard.org/wp-content/uploads/ExploringAccreditationFinalRecommendations.pdf>

⁴ *Reasons for Investing in Workplace Health Promotion*, Centers for Disease Control. Drawn from website as of March 2014 <http://www.cdc.gov/workplacehealthpromotion/businesscase/reasons/index.html>

⁵ A Compendium of Proven Community Based Prevention Programs, NY Academy of Medicine and the Trust for America’s Health, 2013. http://healthyamericans.org/assets/files/Compendium_Report_1016_1131.pdf

⁶ Robert Wood Johnson Foundation, *Building a Culture of Health: 2014 President’s Message*. <http://www.rwjf.org/en/about-rwjf/annual-reports/presidents-message-2014.html>

- The chart below shows a clear example of how working on health improvement is much more effective than waiting until people get sick and need medical care. Within a population of 100,000 people ages 30-84, it is estimated that far more deaths would be prevented or postponed if everyone followed basic guidelines for good health when compared to the impact of consistently and appropriately using key heart-related medical interventions.⁷

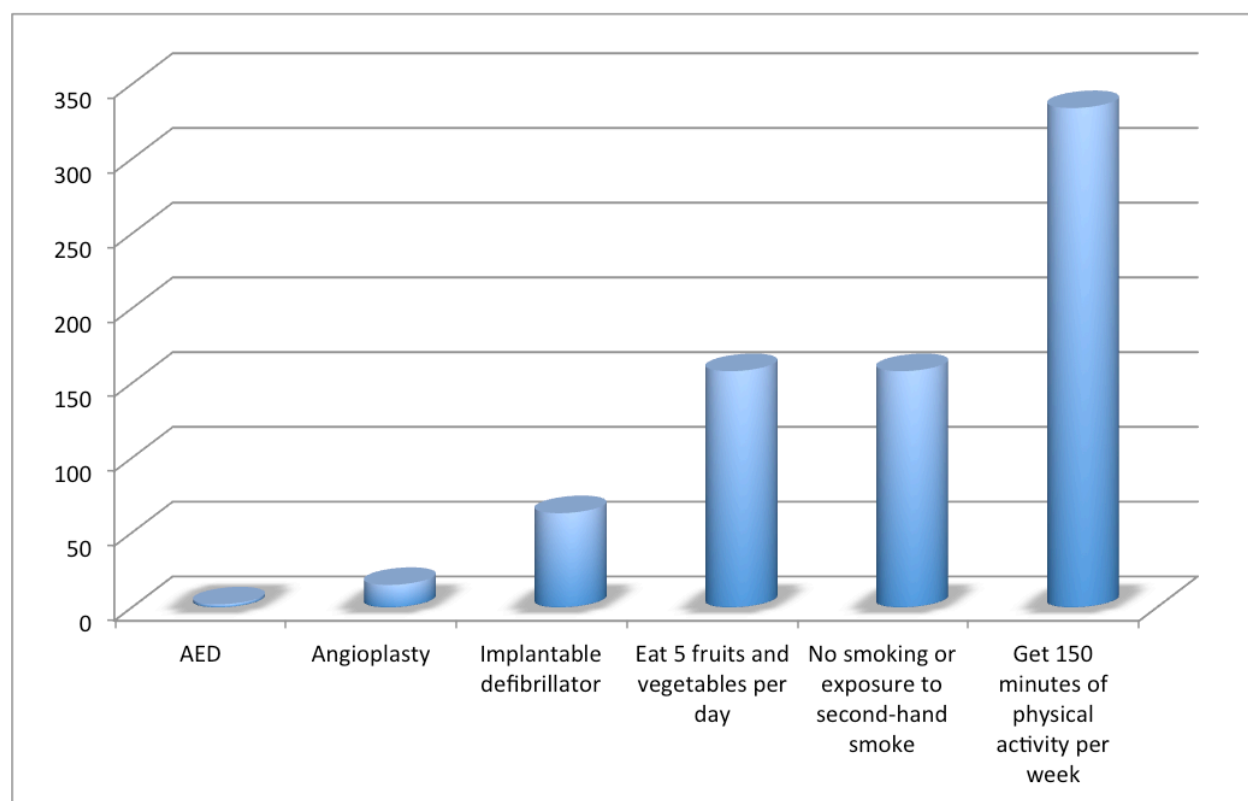


Figure 1: More Deaths Can be Postponed or Prevented by Meeting Good Health Guidelines, Compared to Consistently and Appropriately Using Heart-Related Medical Services⁸

A death prevented or postponed avoids the direct and indirect costs of illness and disease caused by poor health. Heart disease and death caused by smoking or obesity, for example, doesn't happen quickly: the years of poor health result in much higher medical costs, plus the cost of absenteeism and reduced productivity at work.

Above all, improving population health is about making life better for real people: our family members, co-workers, neighbors and ourselves. Preventing and postponing disease increases the odds that every person has the opportunity to live a long and healthy life.

Pieces of the "population health improvement" puzzle are being developed and, in some areas, coming together to create a more complete and effective effort. For example, establishing Accountable Care

⁷ T. Kottke MD MSPH, and N. Pronk PhD, "Creating Health: Finding the Path from Here to There" Population Health Sciences, January 2013. <http://www.improvingpopulationhealth.org/blog/2013/01/creating-health-finding-the-path-from-here-to-there.html>

⁸ Ibid.

Organizations that align goals and perspectives across certain health care organizations is one approach, but not the same as a comprehensive effort to improve population health. Creating clear incentives is certainly an essential part of the big picture to improve population health. This is taking place in programs such as Medicare Shared Savings, the IRS community benefit rules for non-profit hospitals, public health accreditation, and the growing use of health impact statements as part of public policy decision-making. However, certain pieces of the overall puzzle to achieve better population health at the local, state and national levels are still missing or hard to find.

Even with a shared commitment to improving population health, this is challenging work. No person or organization can improve population health alone, so coordinated collaboration is essential. However, different people and groups may be motivated by competing incentives and interests that are not aligned. Capturing and sharing information is often difficult, not only because the technology involved may not be available or interconnected, but also because of differences in definitions, cultures, viewpoints, regulations, and available resources.⁹

This Guide is intended to help light a path forward for any person in any organization to begin to address these issues. It's time for everyone to get more involved.

What is this Guide?

This Guide, tentatively called the *Guide for Community Action (or Guide)*, is a handbook to be used by anyone who wants to improve health across a population, whether in a local, state or national region. It contains brief summaries of ten useful elements important to consider during efforts to work with others to improve population health, along with suggested actions to take and links to examples of practical resources available for your use.

There are many reports, websites, tools and other resources for every aspect of population health improvement. While each item may be very helpful, the sheer volume can be overwhelming. This Guide is intentionally short, with links to more information and resources. It takes a broad look at the issue, without duplicating the great work already done by others.

As an essential forum for driving improvements in health and health care, the National Quality Forum (NQF), with funding from the Department of Health and Human Services, has brought together a multi-stakeholder committee to develop this Guide through an open and iterative process. This "Population Health Framework Committee" (see Appendix E for the Committee Roster) includes population and community health experts, public health practitioners, health care providers, coordinators of home- and community-based services, consumer advocates, employers, and others who influence population health. The committee membership and transparent process mirrors the multi-disciplinary, collaborative nature of effective population health improvement.

The Guide's purpose is to support individuals and groups working together within a region and at all levels – local, state and national – to successfully promote and improve population health over time. This is not about starting a program with a short-term goal that, when reached, one can declare success,

⁹ E. Eggleston, MD MPH and J. Finkelstein, MD MPH. Finding the Role of Health Care in Population Health. American Medical Association 2014. <http://jama.jamanetwork.com> doi: 10.1001/jama.2014.163

shut down the project and go back to business as usual. This Guide encourages thinking of population health improvement work as: a long-term initiative or approach involving many types of organizations and groups across a region and at multiple levels; and, a team effort in which people take on specific types of actions that, in some cases, fundamentally change how things are done. In other words, this Guide describes what it takes to make lasting improvements in population health.

The content in this Guide is based on research and information from expert guidance about what works to improve population health. This first version of the Guide – version 1.0 – includes questions, because more understanding is needed about certain topics. For example:

- The key elements listed in this Guide are based on lessons from research and analyses, plus expert opinion. These ten elements are ready for attention and comment, and practical testing by groups who are directly involved in population health improvement.
- The measures, data, tools, and other resources listed in this Guide were identified through an environmental scan¹⁰ and suggestions from experts. With reactions and ideas from groups who are working to improve population health in the field, these lists will be refined to focus on the items which are most useful and helpful.
- Similarly, practical suggestions and input about the resources included in this Guide will inform stakeholders regarding ways in which these items can be improved or expanded to be more useful for population health improvement.

Based on the answers to questions and comments offered by people who read and use this first version of the Guide, it will be updated.

How to Use the Guide

Like a handbook or “how-to” manual, the Guide suggests ten useful steps toward building or refining initiatives to improve population health. The Guide offers ideas and links to resources for your consideration in building a coalition that can successfully improve population health.

Standard Steps, Custom Approaches

While the ten elements presented in this guide are based on evidence and expert opinion, the exact path forward to improve population health depends on the situation where the work is being done. Many different types of organizations and people, personal decisions, and social and environmental situations influence the health of individuals, sub-populations and populations. The mix and degree of impact from these influential factors, or determinants of health, differs by location.

¹⁰ National Quality Forum. *Multistakeholder Input on a National Priority: Improving Population Health by Working with Communities, Environmental Scan and Analysis to Inform the Action Guide*. 2013. Available at <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=74400>

People focused on any type of population in an area – whether a small neighborhood or nationwide or anything in between – can use this Guide. How the insights from this Guide are applied for a given region will undoubtedly differ to fit the specific circumstances. What a tribe in rural New Mexico may need to do with its employer and community partners will not be the same as the particular actions of a statewide coalition of many different types of organizations in Georgia. Nor will it mirror decisions made by hospitals working with public agencies in Delaware, Maryland and Virginia to improve population health across the area called Delmarva.

Start Where You Are

Whether refining efforts that have been going on for years or starting a new venture, this Guide can help. In many regions, there are long-standing programs to improve population health, several of which are referenced in this Guide. This Guide can be used to assess and further refine or expand such work. In other regions, bringing organizations together to improve population health may be new, so this Guide offers a road map to move forward. Ideas for using this Guide include:

- ✓ **Prepare to get started:** Drive initial thinking about the current situation in your region and what likely needs to be done to succeed.
- ✓ **Bring others on board:** Share the insights you gain and encourage others to come to the table and participate in the initiative.
- ✓ **Take a deeper dive:** Use the description of each of the ten elements for a general overview, then follow the hyperlinks under the examples and resources to dig deeper, explore options and find what is most useful to your region.
- ✓ **Stay on course:** Post or distribute the handy checklist on page 12 as a quick reminder of the ten elements that are important to success.

Important Words with Clear Definitions

It's no surprise that there are differences in the words people use to describe this work, given the many types of organizations and individuals involved in some aspect of population health. Clear communication is critical to working well together, not only to avoid misunderstanding but also to keep everyone focused on the shared goal.

While many words or terms associated with population health may come up in discussions, the terms listed below are among the most important for establishing a common understanding among different groups. These definitions are based on the work of experts and multi-stakeholder groups focused on population health, and are intended to reduce confusion due to different meanings for the same word, or different words used to mean the same thing.

1. **Population Health** -- The health of a population, including the distribution of health outcomes and disparities in the population.¹¹
2. **Population (also, Total Population)** -- All individuals in a specified geopolitical area.¹²
3. **Sub-Population** -- A group of individuals that are a smaller part of a population. Sub-populations can be defined by geographic proximity, age, race, ethnicity, occupations, schools, health conditions, interests, or any of a number of other shared characteristics.¹³
4. **Health** -- A state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.¹⁴
5. **Determinants of Health** -- Factors affecting the health of individuals in a population or sub-population, such as the social and physical environment, behaviors, and health care.¹⁵
6. **Health Disparities** -- Differences in health status or health outcomes within a population.¹⁶
7. **Health Equity** -- The absence of systematic disparities in health or major social determinants of health between groups with different underlying social or economic advantages / disadvantages.¹⁷
8. **Health Inequity**: Differences in health status between groups with varying social and economic advantage/disadvantage (e.g., socioeconomic status; gender; age; physical disability; sexual orientation; race and ethnicity) that are caused by inequitable, systemic differences in social conditions (i.e., policies and circumstances that contribute to health determinants).

These short definitions are intended to be useful for everyone involved in the population health improvement work to “get on the same page” and avoid the pitfalls of miscommunication.

When thinking about these terms and discussing them with others, there are a number of important concepts to keep in mind. For example, the definition of population that we are using in this Guide includes everyone in a geopolitical area in order to promote focus on improving the health of all individuals in a region regardless of other characteristics. Geopolitical areas or regions can be

¹¹ Adapted from the definition of Population Health in David Kindig and Greg Stoddart. What Is Population Health? *American Journal of Public Health*, March 2003: Vol. 93, No. 3, pp. 380-383.

¹² Adapted from Recommendation #1 in: Jacobson, DM and Teutsch S. *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*. 2012.

¹³ Drawn from the definition of “community” in *Public Health: What It Is and How It Works. Fourth Edition*. Boston: Jones and Bartlett, 2009.

¹⁴ Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June 1946.

¹⁵ World Health Organization, retrieved 2014: <http://www.who.int/hia/evidence/doh/en/>

¹⁶ Institute of Medicine (IOM), *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, Washington, DC: National Academies Press; 2002.

¹⁷ Adapted from Braveman - *Annu Rev Public Health*. 2006;27:167-94.

determined by zip code, precinct, ward, county, district, metropolitan statistical area, state, multi-state region, nation, continent, or worldwide. In contrast, a geographic area might be less precise – such as along the coast, or west of the mountains – and therefore may prove difficult in unexpected ways. Using boundaries that coincide with geopolitical designations may increase chances of finding useful data sources, as most publications that assess population health use population-based surveys that pull information across a region that has political and geographic significance.¹⁸ Program funding and government regulation are often based on or defined within a geopolitical boundary, as well.

Sub-populations can be any type of group with shared characteristics, such as race, ethnicity, a group of employees, students at a particular school or education system, patients seen by a certain doctor or medical group, people with a given medical condition, and so on. This can also include people in a group that might be relatively rare – such as people with “orphan conditions,” or transgender people – or some other defined group across long distances, especially because of the way technology and social networks enable people with shared characteristics to connect.

Using the definition of sub-population is important when setting goals and objectives for health improvement activities implemented by clinical care systems, government public health agencies, and multi-sectoral partnerships and collaborations.¹⁹ It allows a “system within systems” approach where each of these sectors or organizations can work with its service sub-population (e.g., covered members, hospital referral area, or an at-risk sub-population) in the context of a total population within a geopolitical area. This approach also accommodates the separate funding, implementation expectations, and data collection systems (often stand-alone) of the various sectors or groups.²⁰

The term “community” is often used interchangeably with “population” or “sub-population”; however, that can lead to misunderstandings because there are many possible meanings of “community.” To avoid confusion, this Guide refers to populations or sub-populations rather than communities and does not define “community health” as a separate concept. However, an important aspect of community is the power of relationships and the inter-connectedness of people, organizations, and systems within a community. Such “system” thinking and focus on relationships is very important to population health improvement work.

The definition of health used here encompasses a complete state of wellness. The World Health Organization established this broader definition and has used it consistently since 1948. Understanding population health also requires noting the variation in health within sub-populations of people in the total population. It includes looking at patterns of health determinants, and the policies and interventions that link health determinants with health outcomes, both within and across the population.

¹⁸ Adapted from Recommendation #1 in: Jacobson, DM and Teutsch S. *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*. 2012. Available at <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=70394>.

¹⁹ Adapted from Recommendation #2 in: Jacobson, DM and Teutsch S. *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*. 2012.

²⁰ Ibid.

Whether people are healthy or not is determined both by individual biology, the environment, and the combination of the two. Factors such as where we live, genetics, income and education level, and relationships with friends and family, have a considerable impact on health. These determinants combine to affect the health of individuals, sub-populations and the total population. While access and use of health care services is often considered when thinking about health improvement, health care has less of an impact on population health when compared to other factors such as the social, economic and physical environment, plus a person's individual behaviors.

Disparities in health usually refer to differences in health status or health outcomes when comparing groups within a subpopulation or the population overall. Health equity, simply put, is the absence of these differences in health status or outcomes among diverse groups of individuals. Groups that are most often considered when addressing disparities are defined by race or ethnicity, such as Blacks/ African-Americans, Hispanics/ Latinos, Asian/ Pacific Islanders, and Native Americans/Alaska Natives, in addition to persons with Limited English Proficiency (LEP). This is an important first step; however, disparities should be assessed for all vulnerable groups—including people who are disabled, pregnant women, children, the elderly, and lesbian/ gay/ bisexual/ transgender (LGBT) individuals.²¹

²¹ Drawn from National Quality Forum (NQF), *Commissioned Paper: Health Care Disparities Measurement*, Weissman et al, 2012. Available at <https://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=67965>

Quick View: Action Guide Key Elements

Ten elements are important to successful approaches to improving population health. Use this checklist as a quick reference for starting a new project, or refining or coordinating programs already in place.

Ten Key Elements for Improving Population Health

1. A self-assessment about readiness to engage in this work
2. Leadership across the region and within organizations
3. An organizational planning and priority-setting process
4. A community health needs assessment and asset mapping process
5. An agreed-upon, prioritized set of health improvement activities
6. Selection and use of measures and performance targets
7. Audience-specific strategic communication
8. Joint reporting on progress toward achieving intended results
9. Indications of scalability
10. A plan for sustainability

For more information, see the full *Action Guide v1.0*. For each element above, the Guide describes what it is, why it is important, gives examples of how it can be done, and provides links to useful resources.

Ten Key Elements: Overview

A variety of factors are important for creating and sustaining successful approaches to improving population health. The ten elements in this Guide were identified based on research and assessments of existing initiatives to improve population health. Many promising programs already include some or most of these elements. To improve the likelihood of long-term success, all ten of the elements should be addressed when starting a new project or when refining or coordinating programs already in place.

Each section below describes what the element is, why it is important, gives examples of how it can be done, and provides links to useful resources. While the elements are presented in a numbered list, the order in which they are addressed may differ, especially after completing the self-assessment.

Element 1: Self-Assessment of Readiness to Engage in this Work

What it is

Whether you are just getting started or working to refine existing population health improvement efforts, taking the time to do a self-assessment of the current situation can identify strengths and weaknesses in existing activities, approaches, or plans for improving population health. A self-assessment can be done using a formal process, an online tool, or even just by thinking through the ten elements in this Guide.

Why it is important

Like a carpenter who first checks if he has the right tools and skills to take on a new project, or an athlete who assesses her strengths and weaknesses to develop an effective training program, a self-assessment creates a foundation for understanding the current situation and environment. The assessment can highlight assets or capabilities, and reveal gaps or areas where there is a need for more resources or attention. Results of a self-assessment are important for making informed decisions when identifying key groups to participate in the work, setting goals and objectives, developing strategies, creating plans, then taking steps to move forward to achieve the desired results.

The steps to take after the self-assessment depend on what you learn from this first element. For example, if the assessment indicates that there has been little or no collaborative work in the region to improve health within or across the population, the next step might be to identify and bring together a small group of interested leaders to explore how to get started. In contrast, a self-assessment that reveals a number of existing population health improvement projects in the region call for bringing together the natural leaders to identify where new or stronger connections are needed. It could also inform decisions about which organizations are well positioned to participate in a broader multi-stakeholder effort.

How it can be done

Such a self-assessment can be done informally as an initial individual review. It can also be done using a more structured and resource-intensive approach, which might involve research, surveys of key organizational partners or other stakeholders, interviews, and other ways to gather information. There are also online tools to assist with self-assessments (see the resource links below). Just as there is no one correct way to approach the self-assessment, the questions to explore may differ by region. The

questions may also differ depending on whether this is the first or the fifteenth time a self-assessment is being done.

For each of the elements in this Guide, any number of questions might be explored during a self-assessment. This can help to generate ideas or hypotheses about how best to approach the work, including where to start. The questions below are examples that can help kick-start the process.

1. **A self-assessment about readiness to engage in this work:** *What types of assessments have already been done in efforts to improve the health of this population?*
2. **Leadership across the region and within organizations:** *Which individuals or organizations in the region are recognized or potential leaders in population health improvement?*
3. **An organizational planning and priority-setting process:** *Which organizations in the region engage in collaborative planning and priority setting to guide activities to improve health in the region?*
4. **A community health needs assessment and asset mapping process:** *Which organizations in the region already conduct community health needs assessments or asset mapping regarding population health?*
5. **An agreed-upon, prioritized set of health improvement activities:** *What are the focus areas of existing population health improvement projects or programs, if any?*
6. **Selection and use of measures and performance targets:** *Which measures, metrics or indicators are already being used to assess population health in the region, if any?*
7. **Audience-specific strategic communication:** *What is the level of skill or capability to engage in effective communication with each of the key audiences in the region?*
8. **Joint reporting on progress toward achieving intended results:** *Which organizations in the region publicly or privately report on progress in improving population health?*
9. **Indications of scalability:** *For current or new population health work in the region, what is the potential for expansion into additional groups or other regions?*
10. **A plan for sustainability:** *What new policy directions, structural changes, or specific resources in the region may be useful for sustaining population health improvement efforts over time?*

After the self-assessment is done, the findings should be helpful to identify the next steps to take. For example, the self-assessment may indicate that it is not clear what is already happening in the region, so a basic mapping of assets would be helpful to identify existing population health improvement activities along with organizations or individuals who might be great potential partners. The results of the asset mapping could inform whether to start a new approach or, instead, focus on expanding or connecting existing activities.

After completing the self-assessment, the rest of the elements do not need to be followed in order. The elements should be addressed in a way that fits the regional situation. In addition, some elements, such

as leadership and strategic communication, will be important throughout the process, updated and adjusted to adapt to the evolving situation.

The chart below offers one example. Under step one shown in the blue column, a self-assessment (Element 1) is done. If this shows that there is a lack of information about health improvement activities in a region, during step two in the purple column, it may be useful to map the assets in the region (Element 4) to identify organizations already involved in improving population health. This could also inform which leaders to invite to the table (Element 2) and require audience-specific strategic communication (Element 7). Then, in step three in the green column, an expanded group of committed participants defines the organizational planning and priority setting process (Element 3) and completes a broader community health needs assessment and asset mapping process (Element 4), while continuing to apply effective leadership and communication skills along the way.

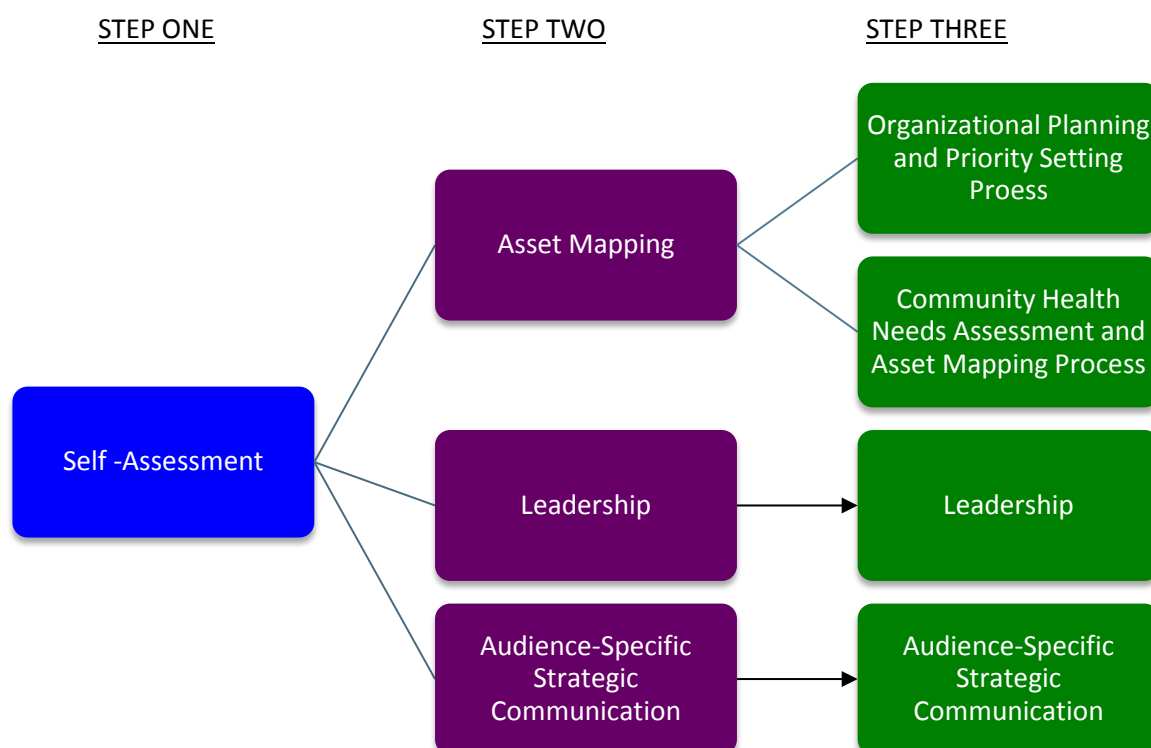


Figure 2: Example of Applying Self-Assessment to Determine Next Steps for Population Health Improvement

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **Community Health Ranking and Roadmaps – Tools and Resources:** This database includes a large number of tools to help assess readiness and the resources and needs of your region. [http://www.countyhealthrankings.org/resources?f\[0\]=field_global_action_steps%3A18389](http://www.countyhealthrankings.org/resources?f[0]=field_global_action_steps%3A18389)
- **Are You Ready to Pursue the Triple Aim?:** This is an online assessment provided by the Institute for Healthcare Improvement intended to help health-related organizations or systems, or coalitions of organizations working to improve health and health care, get ready to pursue the

Triple Aim -- including population health improvement.

<http://www.ihl.org/Engage/Initiatives/TripleAim/Pages/TripleAimReady.aspx>

- **Community Commons – Community Health Needs Assessment Toolkit:** This toolkit is a free web-based platform designed to help hospitals and organizations understand the needs and assets of their communities, and work together to make measurable improvement in population health.

<http://assessment.communitycommons.org/CHNA/>

Element 2: Leadership Across the Region and Within Organizations

What it is

Simply put, leadership is the ability to guide or influence people. It is particularly important when bringing individuals and organizations together to accomplish a common task. Leadership has been the subject of study for centuries; it was part of the teachings of Confucius and Aristotle, even Sun Tzu's *The Art of War*. While the exact definition is still studied and debated, there are certain clear leadership skills and abilities. These include cultivating a shared and inspiring vision, thinking strategically, applying individual and collective intelligence, managing relationships and roles, using effective social skills in different situations, and being resilient, adaptable and able to manage change over time. Leadership is important within an organization, and across participating groups. Coalition leaders, for example, act as an integrator, playing the important quarterback role.

Improving health in and across a population requires leaders in several types of organizations and individuals to work together. **At a minimum, this**

should include groups from public health, health care, and other key stakeholders. The stakeholders most important to be involved initially and over time may vary, including representatives from Medicaid, citizens or consumer groups, tribes, employers, educators, transportation officials, housing advocates, community service providers, the military, corrections administrators, farmers, and the faith community.



In this type of work, leadership is more like putting together a complex puzzle, rather than directing the actions of others from the top of a pyramid.

Why it is important

Leadership is needed to bring this variety of groups together. Whether it is a single leader or a small group of people who provide the vision and inspiration and effectively guide others to get involved, creating this kind of momentum does not happen without leaders at the helm. This requires skills in managing relationships and roles, strategy, and knowing how to find the right people. The organizations at the table will likely have differences in perspectives, organizational culture and terminology (e.g., beware of using acronyms that other people don't understand), and why they want to improve overall health in the population. Leaders of such population health improvement initiatives must be able to build bridges across these groups to create shared values and goals, while tapping into the motivations

of the different organizations and individuals. Such leadership is best done by a “trusted broker” who understands the importance of being an informed yet neutral convener.

Leadership is important at many levels. For example, each participating organization and individual shows leadership when they choose to come to the table to be a part of this work. In addition to the work “at the table” to build common ground among different groups, a critically important aspect of leadership takes place *inside* each organization involved. In other words, successful health improvement efforts involve people who are, in turn, able to lead inside their own organization to create an inspiring vision and understanding of the high priority of improving population health.

The success of an effort like this depends on the engagement, commitment, involvement and support (financial and otherwise) from each organization. This requires internal leaders who can inspire the people they work with to do their part for one or more of the activities described in this Guide. This willingness to get involved in health improvement, and adapt as the work evolves, is important for activities that may include: assessing health needs and identifying existing assets in the region (Element 4); engaging in specific health improvement activities that fit with each organization’s focus and role (Element 5); supporting data collection, measurement (Element 6) and joint reporting on the progress being made (Element 8); and, helping to expand (Element 9) and support the work over time (Element 10).

How it can be done, with examples

Listed below are examples of reports or initiatives that address this topic.

- **The YMCA’s Pioneering Healthier Communities (PHC):** PHC teams take a “shared leadership” approach with community partners, which led to the revision of YMCA directives and activities based on a broader view of health. One of the seven leading practices that came from these relationships is the need to “adapt to emerging opportunities.”
<http://www.ymca.net/healthier-communities>
- **Healthy Memphis Common Table:** This collaborative of community partners leads multiple population health improvement projects and oversees partnerships with around 1,000 individuals from 200 organizations in the community. Stakeholders run the gamut and include individual consumers, schools, hospitals, physicians, nurses, nutritionists, dentists, and other healthcare providers, medical advocacy and support groups, insurance executives, health plans, quality improvement organizations, colleges and universities, businesses and employers, government including Medicaid, media, youth groups, faith-based organizations and churches, health-, fitness- and recreation-related affiliates, and nonprofit agencies and foundations. Healthy Memphis Common Table serves as a convener, bringing seemingly disparate elements of the community together to take a comprehensive view of health.
<http://www.healthymemphis.org/af4q.php>
- **National Association of Medicaid Directors:** This organization offers a starting point to build leadership connections with Medicaid in any state. Medicaid is the nation's health care safety net, jointly financed by the states and the federal government. Each state administers Medicaid, within a federal framework, so there is great variation regarding who is covered, the services included, and how the services are provided and paid for. Medicaid's role can be broad and complex: across the US, Medicaid pays for more than 40 percent of all births, the majority of

publicly financed long-term care, HIV/AIDS related treatments, mental health services, and others.

<http://medicaiddirectors.org>

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **Pioneering Healthier Communities — Lessons and Leading Practices:** This document shares the seven “leading practices” learned through YMCA initiatives and explains how other organizations can implement these principles.
<http://www.ymca.net/sites/default/files/pdf/phc-lessons-leading-practices.pdf>
- **Working Together, Moving Ahead: A Manual to Support Effective Community Health Coalitions:** This handbook is designed to support those who participate in coalitions, provide staff support to coalitions, provide funding or in-kind resources to coalitions, or require their grantees to organize and utilize coalitions in their work. It provides practical advice on common concerns and problems facing coalitions. The Manual aims to get people thinking about why they have chosen to use coalitions in their work, about their assumptions in building coalitions, and about the structures and processes they are using with coalitions.
<http://www.policyarchive.org/handle/10207/21720>
- **Community How-To Guide on Coalition Building:** This guide from the National Highway Safety Transportation Administration provides guidance on bringing together a diverse group of people in pursuit of a common goal. The guide is part of a set to assist with underage drinking prevention efforts; however, the information is not topic-specific and can be applied to various population health improvement projects.
http://www.nhtsa.gov/people/injury/alcohol/Community%20Guides%20HTML/Guides_index.html

Element 3: An Organizational Planning and Priority-Setting Process

What it is

An organizational planning and priority-setting process is the clearly defined approach that will be taken to define the goals, objectives, and activities of the population health improvement initiative – both within an organization and across organizations or groups that will come together in this work. This is not simply an acknowledgement that planning and priority setting will happen, but rather a deliberate step to define *how* the planning will be done and *how* the participating individuals and groups will identify priorities.

The process includes evaluation planning from the outset. Determining – up front – how you will assess, measure, and learn from the progress of the work over time will help define the pathway forward, and then guide decision-making and refinements along the way. Using clear approaches or models can inform how the evaluation is designed and implemented. This can include evaluating the program overall, measuring the success of key processes, assessing the impact of the work, and tracking changes in health outcomes over time. These issues are discussed further under Element 6.

Why it is important

Given the need to build and maintain trust with participating organizations, being transparent about *how* decisions are made is a necessary backbone of the work. Holding open meetings is one option for transparency, and establishing a unifying theme or focus for the different participants can be helpful to ground everyone in the same purpose for the overall work. In addition, achieving results is what motivates most people – that is, healthier individuals and populations, along with the related benefits of better health such as lower health care costs, less absenteeism, better workplace productivity, and reduced financial impact affecting schools, community services, jails, and so on. However, the intended results will not be achieved if the participants are not clear about how the overall group expects to get there, or if the decision-making process is perceived as being unfair.

Some may want to jump into getting the work done to achieve better outcomes, rather than spending time up front defining the process. However, defining the way in which the groups at the table will make plans and set priorities, then deliberately communicating how that process is being followed, is a core element of success. Over time, modifications to the process being used are likely to be needed as the initiative matures and adapts to changing circumstances.

In addition, too often evaluation is treated as an afterthought; this increases the likelihood of losing important information because it is not being captured while it is happening (or soon afterward). Incorporating evaluation into the process from the beginning also creates the opportunity to gather important information that will be useful for learning in real time to adapt and improve, and for making a compelling case to current and potential partners and funders.

How it can be done, with examples

Several models are available to use when defining and communicating the process that will be used for planning and setting priorities. For example, the table below offers criteria that can be applied when prioritizing population health problems, in addition to criteria to help choose actions to address the problem(s).

Table 1: Common Criteria for Prioritizing Population Health Problems and Interventions²²

Criteria to Identify Top Priority Population Health Needs(s)	Criteria to Identify Intervention(s) for Health Need(s)
<ul style="list-style-type: none"> • Cost and/or return on investment • Availability of solutions • Impact of problem • Availability of resources (staff, time, money, equipment) to solve problem • Urgency of solving problem • Size of problem (e.g., number of individuals affected) 	<ul style="list-style-type: none"> • Expertise to implement the solution • Return on investment • Effectiveness of the solution • Ease of implementation or maintenance • Potential negative consequences • Legal considerations • Impact on systems or health • Feasibility of the intervention

There are many approaches to prioritization. Other examples include: the multi-voting technique; use of strategy grids; the nominal group technique; the Hanlon Method; and creating a prioritization matrix. These approaches are described in detail in a brief developed by the National Association of County & City Health Officials (NACCHO).²³ The brief includes step-by-step instructions on how to use these approaches, with examples and templates. There is no right or wrong method for prioritization. What works best should be tailored to fit the situation.

Part of this process should involve the review of national priorities, as there is clear emphasis being placed on promoting health in all policies and creating regulatory and financial incentives that reward those who improve individual and population health. Top priority areas, based on assessments of health needs across the country, are addressed in [Healthy People 2020](#) and the [National Quality Strategy](#) for example. To get the greatest possible impact, and maximize the potential benefits from alignment, consider where there are connections between the priority topics or needs identified through the needs assessments, asset mapping, and national priorities for health improvement.

Once prioritization has taken place, the next step is to plan. Most planning models are cyclical, recognizing that these are not one-time activities but an ongoing process that should be designed to learn from what has already occurred and then adapted to improve the likelihood of success. Feedback loops are also a key feature, deliberately seeking out information or input, then using it to improve. A helpful model is the “Plan-Do-Study-Act” process, illustrated below.

²² “First Things First: Prioritizing Health Problems” Brief with templates, NACCHO. See:

<http://chfs.ky.gov/NR/rdonlyres/B070C722-31C1-4225-95D5-27622C16CBEE/0/PrioritizationSummariesandExamples.pdf>

²³ Ibid.

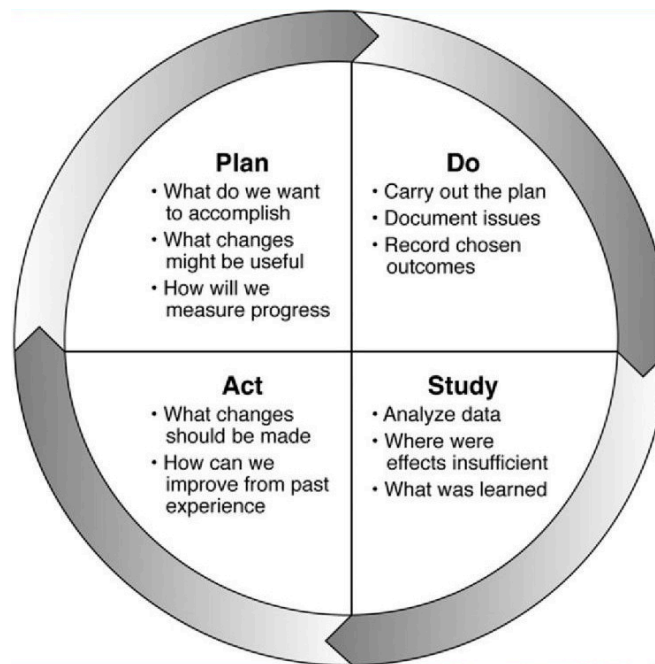


Figure 3: Plan-Do-Study-Act Cycle. Source: Medscape / AGA 2012

In each of the segments in the Plan-Do-Study-Act model shown above, there are steps that require more detailed thinking. For example, under the Plan step, when determining goals and changes that might be useful to improve health in your region, there are a number of ways to think about what actually impacts or drives health.

Listed below are additional examples of reports or initiatives that address this topic.

- Mobilizing for Action through Planning and Partnerships (MAPP):** This is a community-driven strategic planning process for improving population health. It is a framework used by public health leaders and others to apply strategic thinking to prioritize public health issues and identify resources to address them.
<http://www.naccho.org/topics/infrastructure/MAPP/index.cfm>
- The National Service Frameworks:** This set of frameworks for improving care in various high-priority fields was developed by advisory groups from diverse fields, such as patient groups and non-profit organizations. The frameworks determine research-based strategies and interventions, along with detailed processes for measurement and specific, timed targets. Each one is intended for use by all facets of the National Health Service (NHS) public health system, and as a resource for collaborative organizations spanning social services, community institutions and more.
<http://www.nhs.uk/nhsengland/NSF/pages/Nationalserviceframeworks.aspx>
- The Family Wellness Warriors Initiative:** This organization works one-on-one with Alaska-native communities to plan, implement, and assess a three-year-model aimed at reducing domestic violence, abuse, and neglect. The three-year model and curriculum was developed by a steering committee of Alaska-native people and mental health professionals, who worked on adaptation and development for two years by analyzing research-based evidence and projects from around

the world.

<http://www.fwwi.org/index.cfm>

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **Guide to Measuring the Triple Aim: Population Health, Experience of Care, and Per Capita Cost:** This 2013 white paper from the Institute for Healthcare Improvement offers a useful logic model for considering drivers of health, with related examples for measuring population health. <http://www.ihl.org/resources/Pages/IHIWhitePapers/AGuidetoMeasuringTripleAim.aspx>
- **Practical Playbook:** The “Stages of Integration” framework encourages organizational planning and offers guidance on the process. <https://practicalplaybook.org/stages-integration>
- **County Health Rankings and Roadmaps:** The “Roadmaps” framework provides guidance on the organizational planning process and how to determine priorities. <http://www.countyhealthrankings.org/roadmaps>
- **Plan, Do, Study, Act (PDSA):** The PDSA model has been utilized by the National Health Service in the United Kingdom to encourage trials of new policies before implementation. The model consists of four recommended steps to test an idea and assess its impact: planning the change to be tested or implemented (Plan); carrying out the test or change (Do); Studying data from before and after the change and reflecting on what was learned (Study); and, finally, planning the next change cycle or full implementation (Act). http://www.institute.nhs.uk/quality_and_service_improvement_tools/quality_and_service_improvement_tools/plan_do_study_act.html
- **ReThink Health.** This suite of interactive tools opens up new ways of looking at population health improvement. The intention is to guide leaders in considering the impacts of different policies and interventions and make better and more creative decisions about redesign. <http://rippelfoundation.org/rethink-health/dynamics/>

Element 4: A Community Health Needs Assessment and Asset Mapping Process

What it is

A community health needs assessment and asset mapping process is a way to look at the current environment or situation to identify any health-related gaps or needs and potentially helpful resources or strengths. Needs assessments typically involve defining the geographic focus or the region of interest (e.g., zip code, county, state, service area), collecting and interpreting data (e.g., population characteristics or demographics, health status), and identifying and prioritizing the health needs in that region. Similarly, asset mapping is a deliberate review of a given region, yet focused on the strengths or positive attributes rather than deficiencies or needs. Assets can be tangible – such as financial strength, physical structures, businesses or other organizations, natural resources – or intangible, such as individual or organizational skills or capabilities, regional heritage, readiness for change that can lead to improvement, resiliency and adaptability, or other special community characteristics or attributes.

While asset mapping and health needs assessments might be characterized as being separate and potentially at odds, the processes are complimentary and both need to be done. Health needs assessments and asset mapping processes that may have historically been done by several different organizations should be combined to create a shared understanding based on a more comprehensive view of the region. Both are important ways to listen and learn about what is already in place and what is needed.

Why it is important

Conducting a community health needs assessment and asset mapping will ensure that the selected priority areas for the population health improvement will align with actual needs and make best use of resources in the region. Doing this work as a larger collaborative of organizations, rather than developing competing reports, will increase the likelihood of effectiveness, eliminate duplication of effort, reduce expenditures, and create a shared understanding among all of the groups involved in the initiative. Learning from each other can be a powerful way to make more rapid progress.

Many groups have been conducting needs assessments for accountability and planning purposes. The use of community health needs assessments has been growing quickly and presents one of the most fertile opportunities for coordinated population health improvement efforts. This is largely due to changes in federal law, including new accreditation requirements for health departments and rules that govern non-profit hospitals registered with the IRS as a 501(C)(3) organizations. There are nearly 3,000 non-profit hospitals in the US, according to the American Hospital Association. The new IRS requirement affecting these hospitals passed into law in 2010 as part of the Affordable Care Act.²⁴ It directs non-profit hospitals to conduct a community health needs assessment once every three years—in collaboration with public health entities and others—and to develop and annually update a related “implementation strategy” which is an improvement plan with measurable goals and objectives. Starting in 2012, hospitals must conduct such assessments or pay a sizeable fine. While market competition may be a factor when there is more than one hospital in the same region, the IRS regulations, which are soon to be finalized, requires a non-profit hospital to consult with public health organizations and encourages collaboration with others in the same community, including other hospitals and medical systems.

In addition, the IRS has adopted a standardized nationwide reporting system (Schedule H filed with non-profit hospitals’ annual Form 990) that captures more complete information about the community benefit activities of each hospital, and includes a standard definition of “community benefit.” Based on the IRS definition, non-profit hospitals must engage in activities that include “community health improvement” work, done by the hospital or by providing support to community-based organizations, in addition to “community building” work. Community building efforts must have a direct connection to promoting the health of the population served by the hospital, including reducing disparities and meeting the needs of vulnerable populations. Examples might include: physical improvements and housing; economic development; environmental investments; leadership development and training for community members; coalition building; community health improvement advocacy; and, workforce development.²⁵

²⁴ See Section 9007 of the [Patient Protection and Affordable Care Act](#).

²⁵ “Encouraging Nonprofit Hospitals to Invest in Community Building: the Role of IRS ‘Safe Harbors’” S. Rosenbaum, A. Rieke, M. Byrnes. Health Affairs Blog, February 11, 2014. <http://healthaffairs.org/blog/2014/02/11/encouraging-nonprofit-hospitals-to-invest-in-community-building-the-role-of-irs-safe-harbors/>

The annual value of the non-profit tax exemption for non-profit hospitals exceeded \$12.6 billion in 2002. With the new IRS requirement that non-profit hospitals must engage in community health needs assessments and annual improvement plans, and report their population health improvement or community building activities, there is the potential for greater coordination of – and investment in – population health improvement aimed at meeting the specific needs in the region. If non-profit hospitals were to shift 20 percent of their community benefit expenditures to population health improvement efforts, this would infuse \$2.2 billion in additional funds for prevention.²⁶

How it can be done, with examples

Listed below are examples of reports or initiatives that address this topic.

- **Assessing and Addressing Community Health Needs:** This was developed to help not-for-profit health care organizations strengthen their assessment and community benefit planning processes. The book offers practical advice on how hospitals can work with community and public health partners to assess health needs and develop effective strategies for improving health in their community.
http://www.chausa.org/docs/default-source/general-files/cb_assessingaddressing-pdf.pdf?sfvrsn=4
- **Vermont Blueprint for Health:** As part of the implementation of the Blueprint, various workgroups and teams are created, including a Community Health Team and an Integrated Health Services workgroup, to assess specific needs and coordinate efforts within the community and in the clinical care field.
<http://hcr.vermont.gov/blueprint>
- **DC Health Matters:** This community-driven, interactive web portal provides local health data, resources, best practices and information about local events to help community organizations and researchers understand and act upon health issues affecting D.C. communities. The database is a collaborative effort and a “living” project that continues to evolve as users contribute and share the information, which can be used to assess population health needs and assets. The website provides demographic, economic and health data for the communities of the D.C. area and includes report-creation tools.
www.dchealthmatters.org [Note: a number of communities have similar websites, based on the model developed by the Healthy Communities Initiative, which support continuous learning. Other examples include www.healthysonoma.org and www.healthymarin.org]

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **ACHI Community Health Assessment Toolkit:** The toolkit provides detailed guidance on six core steps of a suggested assessment framework, including, but not limited to, data collection.
<http://www.assesstoolkit.org/>

²⁶ Ibid.

- **Asset Mapping from the Southern Rural Development Center:** This article explains a process for mapping the assets of a community and provides guidance on collaborating with various organizations and individuals with the goal of community development and enhancement. The article offers an overview of the needs assessment process and then a step-by-step work plan for each element of the model.
http://www.nebhands.nebraska.edu/files/227_asset_mapping.pdf
- **Practical Playbook:** The “Stages of Integration” framework encourages public health entities to analyze the most recent community health needs assessment to identify population health projects. The framework also offers guidance on the prioritization process and how various entities can work together to identify needs in the community.
<https://practicalplaybook.org/stages-integration>
- **Regional Equity Atlas 2.0 and Action Agenda:** This population health improvement tool maps the intersection of chronic disease prevalence data and data on the social, economic, and physical determinants of health for the Portland metro region, providing insight into key findings. As a resource, the Regional Equity Atlas has been used by various AF4Q projects to identify target areas for health improvement in specific geographic areas.
<http://clfuture.org/equity-atlas>
- **Community Commons – Community Health Needs Assessment Toolkit:** This toolkit is a free web-based platform designed to assist hospitals and organizations understand the needs and assets of their communities, and work together to make measurable improvement in health in the community.
<http://assessment.communitycommons.org/CHNA/>
- **Resources for Implementing the Community Health Needs Assessment Process:** This set of resources from the CDC helps to translate the requirements of the Affordable Care Act, with the intent to encourage active engagement between hospitals and public health.
<http://www.cdc.gov/policy/chna/>

Element 5: An Agreed-Upon, Prioritized Set of Health Improvement Activities

What it is

An agreed-upon, prioritized set of health improvement activities is a list of strategies and actions that will be taken by organizations or individuals involved in population health improvement initiatives. This involves agreeing together what the focus areas will be, then defining the specific “ask” for each of the various participants. That is, be clear about what they are each being asked to do, and what the benefit or value proposition will be for each of them. Together, the organizations identify one or a few high priority topics for which they will lead health improvement activities in the region. This topic or topics are identified as a result of shared planning, assessment and decision-making. These priority topic(s) will drive the individual activities that each organization commits to doing with the people in the population or subpopulation(s) with whom they interact.

Why it is important

With so many factors that can influence health, even the best efforts of a solo project or program are at risk of having little impact. Population health is complex, involving a number of different drivers and determinants, making it difficult for any one organization alone to make a measureable difference. This can lead to a sense that the problem is too big to solve and that improving individual health and the health of the population overall is beyond the control of any single organization or type of group.

Together, organizations can accomplish far more than anyone could ever do alone. By collectively identifying one or a few top priority focus areas, and individually committing to engaging in specific activities that promote improved health related to the focus, the collective initiative is much more likely to make an impact and see measureable improvement. This alignment also helps to create a shared awareness about the importance of the particular priority issue – whether that be reducing domestic violence or child abuse (or the incidence of any adverse childhood event), addressing depression and other mental health needs, reducing obesity, or promoting stronger social and family connections that are important to overall wellbeing.

How it can be done, with examples

After identifying top priority focus areas (Element 3), and drawing from insights from the community health needs assessment and asset mapping process (Element 4), appropriate actions to address the priority topics or needs should then be considered in more detail. Another way to think about it is to first identify contributing factors and likely causes for a given need or problem, and then use this information to drive potential solutions. This can be done using a “root cause map” like the one below for obesity.²⁷

²⁷ Rudolph, L., Caplan, J., Ben-Moshe, K., & Dillon, L. (2013). *Health in All Policies: A Guide for State and Local Governments*. Washington, DC and Oakland, CA: American Public Health Association and Public Health Institute.

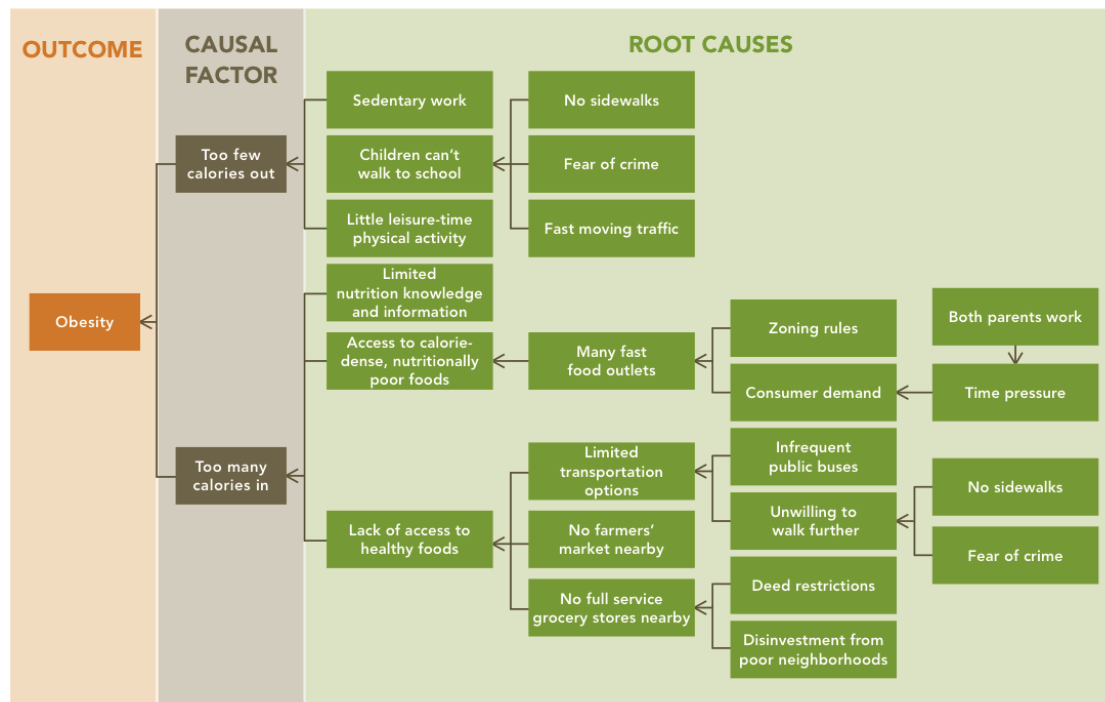


Figure 4: Root Causes of Obesity

Each outcome stems from causal factors, which can be traced to basic or root causes. Certain causes – stemming from genetics or biology, for example – may be difficult to address. On the other hand, root causes such as unsafe neighborhoods, poor access to affordable and healthy food options, a community ethic that tolerates unhealthy behavior, and so on, might illuminate possible actions or changes that can disrupt or eliminate the root cause of the poor health outcome.

Building on this example, if everyone agrees on a priority focus to reduce obesity in a region, a variety of activities could be identified for different organizations to commit to doing based on the root causes like those illustrated in the chart above. Such actions might include:

- *Employers – including public, private and the military* – ensuring that salads and other nutritious foods are offered in the cafeteria and are noticeably more affordable than unhealthy options;
- *City planners and schools* working together to make neighborhoods around schools safer for biking and walking;
- *Hospitals, doctors and nurses* measuring the body mass index of every patient and, where needed, discussing ideas for better nutrition and adding physical activity;
- *Grocery stores* highlighting healthy food options in each aisle and offering cooking demonstrations of healthy recipes;
- *Community groups* starting a Saturday market where local farmers can sell fresh fruits and vegetables in underserved areas;
- *Churches and others in the faith community* organizing weight loss support groups through parish nurses and addressing obesity in the context of faith and spiritual health;

- And so on...

Listed below are examples of reports or initiatives that address this topic.

- **Healthy Base Initiative:** The aim is to assess best practices and lessons learned at 14 military bases selected by the DOD, to promote healthier and more resilient service members, families, retirees, and civilian employees.
<http://www.militaryonesource.mil/hbi>
- **The Blue Zones Project:** Through international research, the Blue Zones Project has identified nine healthy living principles and provides guidance on health improvement activities within these nine principles. The project uses social media and an online forum to communicate these ideals and foster connection around healthy living information and tips. This includes a “daily challenge” sent out to participants via email, with a corresponding forum for participants to share successes and advice. The website also provides guidance for individuals and organizations, such as schools, on implementing these principles.
<http://www.bluezones.com/>
- **The National Prevention Strategy:** This strategy was developed by a council comprising 17 heads of departments, agencies and offices in the federal government and includes a set of directives designed for broad implementation based on promoting wellness and prevention. The plan lists strategic directions and priorities along with related actions and guidance on measuring progress. Priorities span clinical care fields and community environments to individual behaviors, and include: Tobacco-Free Living, Preventing Drug Abuse and Excessive Alcohol Use, Healthy Eating, Active Living, Injury and Violence-Free Living, Reproductive and Sexual Health, and Mental and Emotional Well-being.
<http://www.surgeongeneral.gov/initiatives/prevention/strategy/>
- **Let’s Move:** Let’s Move! is an executive initiative dedicated to solving the problem of childhood obesity. The program emphasizes that everyone has a role to play in reducing childhood obesity, and provides "5 simple steps" guides for parents, schools, community leaders, chefs, children, elected officials, and healthcare providers that give tips and strategies for adopting healthier lifestyles.
<http://www.letsmove.gov/>

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **The Guide to Community Preventive Services:** The Community Preventive Services Task Force (Task Force) was created by the US Department of Health and Human Services to determine which interventions work for improving population health in various settings. Recommendations of the Task Force are available in the Guide to Community Preventive Services, a free resource to help identify programs and policies to improve health and prevent disease in the community. Systematic reviews are used to explore program and policy interventions, effective interventions for specific communities, and the cost and potential return on investment of interventions.
<http://www.thecommunityguide.org/index.html>

- **A Compendium of Proven Community Based Prevention Programs:** This report from The Trust for America's Health and the New York Academy of Medicine highlights nearly 80 evidence-based prevention programs that have been proven to improve health and save lives. Topics addressed include tobacco use reduction, asthma, injuries, sexually transmitted infections, alcohol abuse, physical activity and eating habits.
http://healthyamericans.org/assets/files/Compendium_Report_1016_1131.pdf

Element 6: Selection and Use of Measures and Performance Targets

What it is

Selecting and using measures and performance targets starts with the process of identifying goals and measurable objectives that are relevant to the priority topics and associated health improvement activities. Available data sources must be identified for each of the measures so that they can be used to periodically assess the progress toward improving health and meeting the performance targets. Some regions may choose a set rate of improvement as a reasonable performance target, or a specific level of performance such as “everyone should achieve a score of at least 90%.” Others seek to exceed national or statewide benchmarks, such as the statewide average rate or the national top ten percent.

Why it is important

The purpose of this work is to *improve* health across a population. Measuring progress, ideally against performance targets, is the only way to know whether the initiative is on track. Measurement against performance targets can also reveal when it's time to modify the approach in order to achieve better results. Measurement is one important part of evaluation, as described under Element 3.

Public- and private-sector leaders are increasingly holding certain types of organizations accountable for improving health outcomes, including public health agencies, health care organizations, and health plans. The accountability is also expanding into other sectors: consider “health in all policies” approaches that recognize the national imperative to improve health, understanding that health outcomes are affected by decisions and actions of a wide range of organizations and individuals. To meet accountability expectations, measurement is needed to show that health outcomes are improving.

The state of available measures and data sources is an interesting mix of abundance, with literally hundreds of metrics and a vast array of data from many sources. Many organizations are “drowning in raw data” but are not able to effectively apply this data for measurement and decision-making. The process of using many of the currently available data sources requires specialized skill and sufficient time to address problems such as: finding the relevant data source; unlocking data that is available only in a “raw” format; and, creating meaning from that data through analysis and visual presentation of the results in engaging, useful ways. What is needed is better access to available data that is translated into “actionable” information that can be used by leaders in public health, health care, and other sectors to assess and improve population health.²⁸

²⁸ “Local Health Data: From Buried Treasure to Everyday Commodity” A. Krackov, Health Affairs blog, September 9, 2013. <http://healthaffairs.org/blog/2013/09/05/local-health-data-from-buried-treasure-to-everyday-commodity/>

NQF has endorsed 70 measures related to population health across varying levels of analysis, including health care providers and communities. These measures address the following topic areas:

- Health-related behaviors (e.g., smoking, diet) and practices that promote healthy living
- Community-level indicators of health and disease (e.g., incidence and prevalence) and community interventions (e.g., mass screening)
- Primary prevention and screening (e.g., influenza immunization)

There are also significant gaps in the measures available for population health improvement. Work is being done on a number of fronts to fill those gaps. NQF, for example, is engaged in identifying and endorsing measures that focus on healthy lifestyle behaviors, community interventions that improve health and well-being, and social and economic determinants of health.²⁹ There is a strong interest in population-level measures that are appropriate for assessing shared accountability among a variety of sectors and organizations. Examples of measure topics that NQF is seeking for consideration for endorsement include:

- Health outcomes of individuals, including health/functional status, life expectancy, mortality, and quality of life
- Measures that assess the health of a total population or a subset of a population (subpopulation), including disparities across the population
- Measures that cover the lifespan, including those that focus on children, adolescents, and the elderly
- Adoption of healthy lifestyle behaviors
- Population-level measures in priority areas (e.g., obesity, physical activity, tobacco use, nutrition and diet)
- Receipt of health promotion and education services
- Social, economic, and environmental determinants of health with a clear connection to population health outcomes

NQF is providing guidance for measure developers to ensure a shared understanding of population health improvement and the related needs for new or modified measures. Such guidance recognizes that population health measures can reflect any point along the following continuum:

- Upstream factors that determine health, including socioeconomic, social norms, physical environment factors, and preventive health services
- Individual factors (i.e., behavior and genetics)
- Intermediate health outcomes (e.g., rates of disease and injury)
- Various states of health, including functional status
- Quality of life

Several types of measure gaps have been identified in NQF's prior projects, including the need for more outcome measures; population-level blood pressure screening measures for the Million Hearts Campaign; and composite measures that take into account process, outcome, access, structure, population experience, population management, population costs, and population services. Other areas

²⁹ See http://www.qualityforum.org/Topics/Health_and_Well-Being.aspx.

of interest include measures with a focus on built environments; measures that assess patient and population health outcomes that can be linked to public health activities, such as improvements in functional status; assessments of community interventions to prevent elderly falls; and measures that focus on counseling for physical activity and nutrition in younger and middle-aged adults (18-65 years).

How it can be done, with examples

There is no universally recommended, practical set of population health measures for which there are widely available data sources. A helpful resource that may offer guidance will be available in June 2014 when the Institute of Medicine is expected to release a report with a core set of high-level measures for population health improvement.

Given the dependence on available data and other differences among regions, the best approach may be to choose from a menu of relevant measures, and use what is possible now and expand over time. In other words, take a phased approach to measuring performance based on available data. Data sources continue to expand, in part due to increased reporting requirements and support for transparency in public and private activities. Advances in technology have enabled collection and sharing of de-identified health care data. New data sources are also appearing, such as consumer-generated data drawn from discussions on social media.

Among measures to use, consider disparities-sensitive measures to assess differences in health status or outcomes for ethnic or racial groups, and other vulnerable populations. These measures can be used to detect differences in quality across settings or in relation to certain benchmarks, and differences in quality among populations or social groupings based on race, ethnicity, language, and other characteristics.

Taking a practical approach is necessary. Identify the basic data available for the region, and use the sources that are relevant, understandable, and timely, if possible. Over time, what may start as a short list of population health measures will undoubtedly become more robust as the field evolves.

Drawing from a previous assessment of 26 reports that evaluate population health improvement, the following chart lists the most common measures and indicators that were used, grouped by topic or domain.³⁰

Table 2: Example of Population Health Measures by Topic

Topic / Domain	Measures / Indicators
Health status / health related quality of life (total population level)	<ul style="list-style-type: none">• Live expectancy• Healthy life expectancy• Years of potential life lost• Healthy days (physically, mentally)

³⁰ Jacobson, DM and Teutsch S. *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*. 2012.

	<ul style="list-style-type: none"> • Self-assessed health status • Expected years with activity limitations • Expected years with chronic disease
<p>Health outcomes</p> <ul style="list-style-type: none"> • Ultimate / final (total population level) 	<ul style="list-style-type: none"> • Mortality (death rates) • Morbidity (e.g., disease or injury rates, obesity rates, mental health) • Pregnancy and birth rates • Health status and health-related quality of life
<p>Health outcomes</p> <ul style="list-style-type: none"> • Intermediate (total population level) 	<ul style="list-style-type: none"> • Levels of risk behaviors (e.g., diet, physical activity, tobacco use, alcohol/drug use) • Rates of access to, use of, and coverage of preventive services (e.g., cancer screening, immunizations, weight loss intervention, smoking cessation) • Physiologic measures (e.g., controlled blood pressure or cholesterol levels)
<p>Determinants of health (total population level)</p> <ul style="list-style-type: none"> • Social environment • Physical environment • Clinical care • Behaviors 	<ul style="list-style-type: none"> • Poverty level • High school graduation rates • Exposure to crime and violence, neighborhood safety • Affordable and adequate housing • Built environment (transportation options, availability of healthy foods, recreational facilities and parks, neighborhood walkability) • Exposure to environmental hazards (air, water, food safety) • Natural environment (e.g., access to green space, protection from natural disasters) • Access to health care services and insurance coverage • Unmet health needs or delayed care • Rates of tobacco use, alcohol misuse, physical inactivity, and unhealthy diet
<p>Health improvement activities – capacity, process, and outcomes (subpopulation level)</p> <ul style="list-style-type: none"> • Capacity • Processes 	<ul style="list-style-type: none"> • Electronic health records and integrated surveillance systems • Preparedness surge capacity and response times • Materials translated, health literacy • Quality improvement projects • Effective and efficient care coordination and case management

<ul style="list-style-type: none"> • Outcomes 	<ul style="list-style-type: none"> • Adherence to health promotion or treatment advice • Levels of risk behaviors (e.g., diet, physical activity, tobacco use, alcohol/drug use) • Rates of access to, use of, and coverage of preventive services (e.g. cancer screening, immunizations, weight loss intervention, smoking cessation) • Physiologic measures (e.g., controlled blood pressure or cholesterol levels) • Preventable hospitalizations and readmissions • Patient satisfaction • Timely and appropriate care received
--------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **Population Health Measures Endorsed by NQF:** This list or portfolio of measures are those which have been identified by the National Quality Forum as being relevant for population health measurement.
<http://www.qualityforum.org/QPS/QPSTool.aspx?p=3863>
- **Disparities-Sensitive Measures Endorsed by NQF:** This subset of measures are those which have been identified by the National Quality Forum as being appropriate for assessing disparities, within the population health measure portfolio.
<http://www.qualityforum.org/QPS/QPSTool.aspx?p=3865>
- **Health Indicator Warehouse:** This online library provides access to national, state and community health indicators. It serves as the data hub for the HHS Community Health Data Initiative and is a collaboration of various agencies within the department. The Health Indicator Warehouse is referenced by the County Health Rankings and Roadmaps to Health as a resource for those working on population health projects.
<http://healthindicators.gov/>
- **ESRI Health Information Maps:** Using weekly data updates from the CDC, this interactive map uses social media posts from Twitter to indicate flu outbreaks.
<http://www.esri.com/news/maps/2013-flu-outbreak/information-map.html>

Element 7: Audience-specific Strategic Communication

What it is

Audience-specific strategic communication is the ability to customize messages and approaches in ways that effectively connect with the target audiences – across the organizations participating in the population health improvement work and with individuals and groups affected by it. While the vision and goals of the initiative should stay consistent, the content, style and even the method of communication may need to be adapted to speak to the values, priorities, and cultural filter of the

intended audience. This requires cultural humility on the part of the communicator, understanding that what is intended may not always be what is heard. The goal of audience-specific strategic communication is to deliberately understand the perspective of others, then communicate in ways that reflect that understanding.

Why it is important

Effective communication can make or break this work. As described in Element 2, the wide range of organizations and individuals who have a role in improving health means that communication must take place in ways that span different cultures, terminology, goals, and values. Addressing differences across audiences requires culturally sensitive interaction, and is at the heart of strategic communication.

How it can be done, with examples

Many sectors use unique terminology that can be confusing to others, and this is especially true in health care and public health. Using words that are easy for everyone to understand, explaining commonly misunderstood terms, and avoiding acronyms are a few basic principles to follow.

Communication that works for one group will not work for everyone. For example, some individuals and organizations are driven by business principles and will look for the value-proposition and evidence of likely return-on-investment in any initiative. Understanding that time and financial resources are limited, and cost reduction is imperative, these groups will respond to discussions about improving health at the population level if there is a compelling business case. At the same time, some individuals and organizations engage in population health improvement because it reflects social values such as equity and fairness, dignity, and opportunity. In this case, discussing population health improvement using business-oriented perspectives and terminology may not be as effective.

Listed below are examples of reports or initiatives that address this topic.

- **Health in All Policies:** Exploring a collaborative approach to improving population health, “Health in All Policies” offers guidance for state and local governments on incorporating health considerations into diverse sectors of public policy. The glossary includes a comprehensive and generally applicable list of terms that spans health, business strategy, environmental planning, sociology and policy. See specific communication guidance starting on page 101.
<http://www.phi.org/resources/?resource=hiapgguide>
- **HHS Action Plan to Reduce Racial and Ethnic Disparities:** This outlines the goals and actions that the US Department of Health and Human Services (HHS) will take to reduce health disparities among racial and ethnic minorities, including making a strong case for providing culturally sensitive communication and care.
<http://www.minorityhealth.hhs.gov/npa/templates/content.aspx?lvl=1&lvlid=33&ID=285>
- **White Earth Nation Tobacco Coalition:** This action plan to reduce commercial tobacco use in the tribal community of White Earth in Minnesota focuses on culturally relevant outreach materials and policy guides to provide information about the effects of smoking and its cultural impact on the tribe. Materials are aimed at individuals, health care providers, and community institutions, and include the use of language specific to the tribal community, such as use and explanation of the word “Asayma” to mean “sacred tobacco.”
http://www.whiteearth.com/programs/?page_id=405&program_id=4#Tobacco

- **Family Wellness Warriors Initiative (FWWI):** This initiative involves working with communities to implement a three-year model designed for Alaska-Native areas. The model was developed by a group of 30 stakeholders, including Alaska-Native people and mental health professionals, who researched internationally for programs pertaining to domestic violence and abuse. The model is designed for scalability within Alaska-Native areas, since it is designed specifically to be culturally relevant to these communities.
<http://www.fwwi.org/index.cfm>
- **Primary Care and Public Health: Exploring Integration:** This report recognizes and attempts to bridge differences in the cultures of medical and public health systems. Examples include charts that contrast areas such as training approaches, perspective in levels of analysis, and funding sources.
<http://www.iom.edu/Reports/2012/Primary-Care-and-Public-Health.aspx>

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **Simply Put: A Guide for Creating Easy-to-Understand Materials:** This resource from the Centers for Disease Control and Prevention (CDC) offers insight on how to use plain language, visuals, clear formatting, and cultural sensitivity to communicate effectively with health-related materials.
http://www.cdc.gov/healthliteracy/pdf/simply_put.pdf
- **YMCA Pioneering Healthy Communities:** This is a practical toolkit that includes a useful framework for considering how to communicate effectively, using culturally respectful plain language.
<http://www.ymca.net/healthier-communities>
- **Disseminating Relevant Health Information to Underserved Audiences: Implications of the Digital Divide Pilot Projects:** This paper examines the digital divide and its impact on health literacy and communication. The digital divide can be a significant impediment in health literacy and information dissemination.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1255755/>

Element 8: Joint Reporting on Progress Toward Achieving Intended Results

What it is

Joint reporting on progress toward achieving the intended results is a way for the participating groups and organizations to share insights from the needs assessment and asset mapping (Element 4), the evaluation of activities (Element 3), and the use of measures and performance targets (Element 6).

Why it is important

Joint reporting establishes the accountability of each organization to the others in the initiative. In addition, pulling together the results for actions across the initiative (described in Element 5) and sharing that information with all participants keeps everyone informed about the progress of the work.

It also helps to identify where changes might be needed to improve results. This reporting should align with the areas of evaluation that are part of the planning and priority-setting process (Element 3), to reinforce the shared commitment to achieving the intended results at a variety of levels.

How it can be done, with examples

In addition to health outcomes, the content of such reports might address impact on social values or perceptions about health, return on investment, and elements that indicate the progress of the overall initiative. Such reporting might typically begin as private sharing of results among the collection of participating organizations, either reported individually or developed as a single report about the collaborative and individual efforts. Given the importance of transparency and accountability, ultimately the goal is to share the progress reports with the general public.

Listed below are examples of reports or initiatives that address this topic.

- **Primary Care and Public Health: Exploring Integration to Improve Population Health:** The Institute of Medicine identifies a set of core principles derived from successful integration efforts that involve the community in defining and addressing needs for population health improvement. The framework emphasizes that the collection and use of data to assess needs and progress is important to the integration process, and that sharing data appears to be a natural way in which primary care and public health can work together.
<http://www.iom.edu/Reports/2012/Primary-Care-and-Public-Health.aspx>
- **Hennepin Health:** This pilot program uses an integrated data warehouse and analytics infrastructure to support timely, actionable feedback to members, providers, and administrators and to align metrics across medical care, public health, and social service providers. Metrics specifically address goals to: reduce hospitalizations; increase compliance to keep chronic diseases in control; reduce emergency department visits; reduce detox utilization; assist with a safe and stable living situation; increase functional skills/independence; decrease substance abuse; decrease health risk factors; assist with a healthy natural support system; and maintain Medicaid eligibility for each enrollee.
<http://www.hennepin.us/healthcare>
- **National Health Service Care Data:** While the National Health Service (NHS) in the United Kingdom has collected and used hospital data for the last few decades as part of its national database, a new initiative is expanding the reach of the NHS Information Centre to include patient information from General Practitioner (GP) doctor surgeries across the U.K. The NHS claims that “better information means better care” and will ensure consistency in quality and safety, and highlight areas where more investment is needed.
<http://www.england.nhs.uk/ourwork/tsd/care-data/>

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **Community Health Ranking and Roadmaps – Tools and Resources:** This resource shows results for a number of measures and indicators by county across the United States, and clearly describes their methods for developing the rankings that are reported.
<http://www.countyhealthrankings.org/Our-Approach>

- **Data.gov:** The U.S. government’s data portal provides access to more than 1100 federal, state and local data sources, as well as tools and research resources. The “Health” section includes data sets, tools and applications related to health and health care and can be used as a resource for groups or individuals looking for examples of data or actual data sets for reporting purposes. <https://www.data.gov/health/>
- **The Network for Public Health Law: Checklist of Information Needed to Address Proposed Data Collection, Access and Sharing:** This tool provides a checklist to assist public health practitioners in providing relevant factual information to address issues of legality, privacy and ethics. https://www.networkforphl.org/resources_collection/2014/01/07/400/tool_checklist_of_information_needed_to_address_proposed_data_collection_access_and_sharing

Element 9: Indications of Scalability

What it is

Scalability is the ability for an initiative to expand, either by becoming more deeply involved in the region – for example, increasing the number of participating organizations or taking on new priority topics and related health improvement activities – or by spreading to additional regions. The latter can happen either as the initiative grows geographically or when a new group learns from the work and decides to take a similar approach within their own region.

Why it is important

Poor health is a problem everywhere in the US. To the degree that existing health improvement efforts are refined and new successful initiatives started, from which others can learn then adopt in their own region, this expands the possibility for achieving better health for more people. That being said, achieving traction in other regions may not always be possible, especially if the population health improvement work relies on assets or characteristics that are unique to a region.

How it can be done, with examples

During the planning process (Element 3), consider and emphasize activities that can be easily expanded or adopted by others. At the same time, during the asset mapping process (Element 4) consider which assets might be unique to either one sub-population or to a smaller geographic part of the whole geopolitical area. These unique assets may limit the ability to spread the initiative across the entire population and/or geopolitical region.

Listed below are examples of reports or initiatives that address this topic.

- **State Innovation Models Initiative:** This initiative led by the Centers for Medicare & Medicaid Services (CMS) is intended to foster the testing and development of state-based models for improving health system performance through multi-payer payment reform and other system changes. The projects are broad-based and focused on enrollees of Medicare, Medicaid and the Children’s Health Insurance Program (CHIP). The initiative is exploring models that could form a foundation for expansion into larger health system transformation. <http://innovation.cms.gov/initiatives/state-innovations/>

- **Beacon Communities Initiative:** This program is currently operating in 17 communities across the U.S. and focuses on exploring how health IT investments and Meaningful Use of electronic health records (EHR) can advance a goal of patient-centered care, improved health, and lower costs. The communities are making inroads in the development of secure, private and accurate systems of EHR adoption and health information exchange, while creating a collaborative community that can share lessons and leading practices.
<http://www.healthit.gov/policy-researchers-implementers/beacon-community-program>

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **Let's Move Initiative:** This national initiative focused on reducing childhood obesity uses its website as a tool for sharing best practices and promotional material that can be used by others. The initiative has encouraged "Let's Move Meetup" programs in more than 400 cities nationwide, where community members get together to share success stories and discuss ways to tackle childhood obesity. Let's Move also uses its Facebook page as a connector for communities to share tips and news from across the country.
<http://www.letsmove.gov/>
- **Practical Playbook:** This resource for public health and primary care groups features an interactive tool that guides users through the stages of integration for population health improvement projects. Information on how to scale up efforts is included.
<http://www.practicalplaybook.org/>

Element 10: A Plan for Sustainability

What it is

Sustainability is essentially the ability to continue operating, funding the work, and remain productive over time. In addition to developing a sustainable business model, adaptability and resilience are key characteristics of sustainable initiatives.

Why it is important

In the current policy environment, health improvement has gained new relevance: poor health outcomes are widely understood as a major problem, coupled with unsustainable health care costs. Population health improvement is a complex field, and although public health agencies and others have been working to improve population health for years, the only way to achieve a lasting positive impact is through multifaceted, sustainable approaches that address health improvement in activities across all of the determinants of health over the long term.

How it can be done, with examples

Developing a sustainability plan or a business plan based on a sustainable model is the most effective approach. Knowing what approaches can be continued over the long run, with appropriate support and financial stability, is not an easy task. For example, receiving a multiyear grant or being funded through a

government project are likely no substitute for a solid sustainability plan, as even multiyear grants and government programs eventually come to an end.

Opportunities exist given the rapidly changing health policy environment. When engaging in population health improvement, where there is the ability to motivate changes that are structural, this can increase the likelihood that the change will be sustained. Examples include new or revised commitments (e.g., public or private policy or contract provisions that incentivize better health or incorporate health in all policies), new patterns of care and coordination among different organizations, and linking medical and public health information systems. Examples of new policy opportunities include structures being developed or implemented such as Accountable Care Organizations, Accountable Health Communities, Patient Centered Medical Homes, community health improvement requirements for nonprofit hospitals (see Element 4), and Public Health Accreditation.

While activities that encourage changes in public or private policy sometimes involve political advocacy, this is not always the case. An example of a private-sector policy change is to support employers in encouraging employees to use preventive services and smoking cessation services to realize the full value of this health coverage. Employers could also begin assessing and reporting (Element 8) the degree to which their employee population is using such benefits.

Listed below are examples of reports or initiatives that have successfully addressed this topic.

- **Health in All Policies:** The Health in All Policies guide for state and local governments defines sustainability as “the need of society to create and maintain conditions so that humans can fulfill social, economic, and other requirements of the present without compromising the ability of future generations to meet their own needs.” The document focuses on environmental sustainability as an essential part of ensuring the longevity of health improvement plans, with examples referenced throughout.
<http://www.phi.org/resources/?resource=hiapguide>
- **A Healthier America 2013: Strategies to Move from Sick Care to Health Care in Four Years:** This guide for improving the nation’s health system includes a focus on various strategies and priorities for achieving sustainability, in addition to recommendations for governmental funding shifts. Suggested policies include ensuring sufficient and stable funding for public health departments, with recommendations to explore new funding models based on supporting basic capabilities.
<http://healthyamericans.org/report/104/>
- **Correctional Health Outcomes and Resource Dataset (CHORDS):** CHORDS is a quality improvement initiative that provides a national performance measurement and data sharing system within the correctional health care field. The project focuses on the importance of benchmarking to enhance the quality and effectiveness of care across the correctional health care system.
<http://www.ncchc.org/chords>
- **Moving Healthy:** The U.S. Department of Transportation Federal Highway Administration (FHWA) has set out policy guidelines to ensure the integration of health-related considerations in the planning and execution of its programs. The FHWA claims that health is implicit in

transportation, and the agency has a responsibility to ensure the promotion of positive health outcomes and the mitigation of negative health outcomes through the programs and resources it provides, such as safe and accessible facilities for biking and walking.

https://www.fhwa.dot.gov/planning/health_in_transportation/resources/moving_healthy.cfm

- **National Prevention Strategy:** This national initiative aims to create healthy and safe communities, expand clinical and community-based preventive services, empower people to make healthier choices, and eliminate disparities through four strategic directions and seven targeted priorities. The Strategy uses Healthy People 2020 as a foundation, and provides recommendations based on the latest scientific research, with emphasis on the economic benefits of preventing disease. The overarching goal is to achieve a prevention-oriented society where all sectors work together to improve health for all Americans.
<http://www.surgeongeneral.gov/initiatives/prevention/strategy/>
- **The Guide to Community Preventive Services:** The Community Preventive Services Task Force (Task Force) was created by the U.S. Department of Health and Human Services to determine which interventions work for improving population health in various settings. Recommendations of the Task Force are available in the Guide to Community Preventive Services, a free resource to help identify programs and policies to improve health and prevent disease in the community. Systematic reviews are used to explore program and policy interventions, effective interventions for specific communities, and the cost and potential return on investment of interventions.
<http://www.thecommunityguide.org/index.html>

Links to Additional Resources

Listed below are links to more information, tools and other resources about this topic.

- **Healthier Worksite Initiative:** This resource from the CDC addresses workforce health promotion and offers information, resources, and step-by-step toolkits to help worksite health promotion planners in the public and private sectors improve the health of employees.
<http://www.cdc.gov/nccdphp/dnpao/hwi/>
- **A Sustainability Planning Guide for Healthy Communities:** The CDC's Healthy Communities Program has worked with more than 300 community coalitions to help create a culture of healthy living while building national networks for sustainable change. The Sustainability Planning Guide provides evidence-based insights to help coalitions, public health professionals, and other community stakeholders develop, implement, and evaluate a successful sustainability plan.
http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/pdf/sustainability_guide.pdf

Conclusion

This draft Guide v1.0 is the first step toward developing a practical handbook – which may become an online resource in the future – and is intended to be short, with links to more information and useful resources. It takes a broad look at the issue, without duplicating the great work already done by others. To help us refine this Guide, please provide comments on the questions below or any other issue.

1. What would make the Guide more useful, if anything?
2. Which of the ten essential elements are most helpful, and why?
3. What types of examples might still be needed to help illustrate topics that are unclear or particularly challenging?
4. Are there any changes you would recommend to the lists of resources to make them more practical for the work you are doing? (Please see Appendices B, C, and D.)
5. Do the actions suggested in this Guide align with your organization's goals and values? Why or why not?

Appendix A: Methodological Approach

This is the first draft version of the Guide, developed with the intention to gather input from the project Committee of experts and the public. The comments on the name and content of this document will be used to refine the Guide (version 1.0 or v1.0).

Pending continued support of this work by the Department of Health and Human Services into the second year, the Guide v1.0 will be shared with the project Committee of experts, the public, and selected groups engaged in population health improvement who volunteer to review, apply and help refine the Guide v1.0. The project team will regularly interact with these selected groups or “feedback communities” to learn from their implementation activities associated with the Guide v1.0. Requested input on the Guide v1.0 will focus on both the content and the format (e.g., written report with hyperlinks, online site, interactive application), driving modification of the Guide to be more specific and practical at the local, state and national levels. The refinements will be included in the second version of the Guide (v2.0).

Likewise, the third year of this project will involve the development of the final version of the Guide (v3.0). During this year, various iterations will be shared with the project Committee of experts, the public, and the “feedback communities” to gather additional input on the content and format. This guidance will be used to finalize the Guide.

This draft Guide v1.0 builds on insights from the following sources:

- NQF Population Health Framework project, funded by the federal Department of Health and Human Services and led by a multi-stakeholder committee of experts providing guidance regarding the development of the *Action Guide*. For a summary of the project and a list of committee members, go to http://www.qualityforum.org/projects/population_health_framework/#t=1&s=&p=
- *Multi-stakeholder Input on a National Priority: Working with Communities to Improve Population Health. Environmental Scan and Analysis to Inform the Action Guide*, developed by a project team at NQF in 2013. This paper assessed key elements in conceptual frameworks in academic papers and articles, in addition to core aspects of programs being implemented at the local, state or national levels, to identify insights regarding potential content for the *Action Guide*.³¹
- *An Environmental Scan of Integrated Approaches for Defining and Measuring Total Population Health*,³² commissioned by NQF in 2012. Jacobson and Teutsch established definitions for key concepts and a list of recommendations that provided a starting point for this environmental scan, including criteria that were used to assist with selection of the 40 frameworks and initiatives addressed in this report. Given the tremendous amount of research and thousands of programs

³¹ StollenWerks Inc and NQF, *Environmental Scan and Analysis to Inform the Action Guide*, 2013. Available at <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=74400>

³² Jacobson, DM and Teutsch S. *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*. 2012. Available at <http://www.qualityforum.org/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=70394>.

focused on population health improvement, this report was designed to gather a representative range of examples that present a strong cross-section of insights.

Appendix B: Example Lists of Measures

Notes

- The goal by the end of this project (Option Year two) is to have a recommended menu of measures to choose from, listed in the final Action Guide
- Feedback Communities will help identify the most useful measures

Questions

1. Which measure lists or measures are useful and easy to use, just as they are now (e.g., as *currently* structured, described, available, etc.)?
2. Which measure lists or specific measures *could be useful or easier to use* if they were changed in some way (e.g., structure, description, availability, frequency of updates)?
3. Which measure sources (listed below or not) are you using and how are you using them?
4. What other types of measures or measure lists would you like to use and for what purpose?

Sources for Lists of Measures that Might be Included in the Final Version of the Guide

Healthy People 2020 –

Measure Domains

This national project defines four areas of health measures used to monitor progress toward promoting health, preventing disease and disability, eliminating disparities, and improving quality of life. These broad, cross-cutting areas of measurement include: General Health Status; Health-Related Quality of Life and Well-Being; Determinants of Health; and Disparities.
<http://www.healthypeople.gov/2020/about/tracking.aspx>

Leading Indicators of Health

Representing a smaller set of objectives for high-priority health issues, the 26 Leading Health Indicators have baseline and target levels specified, as well as data sources included for each.
<http://www.healthypeople.gov/2020/LHI/2020indicators.aspx>

County Health Rankings and Roadmaps

The County Health Rankings score communities according to a variety of health measures based on health outcomes and health factors, which are broken down into eight composite areas and then into subcomponent areas.

http://www.countyhealthrankings.org/sites/default/files/resources/2013Measures_datasources_years.pdf

A Healthier America 2013: Strategies to Move from Sick Care to Health Care in Four Years

This strategic paper suggests Public Health Accreditation Board (PHAB) accreditation standards in 12 domains: 10 essential public health services; management and administration; and governance. See

page 10 of the report.

<http://healthyamericans.org/report/104/>

Clinical-Community Relationships Measures Atlas

This measurement framework lists existing measures for clinical-community relationships and explores ways to define, measure and evaluate programs that are based on such relationships for the delivery of clinical preventive services. The list of existing measures includes detailed information on the measure's purpose, format and data source, validation and testing, applications, and key sources. The Master Measure Mapping Table provides an overview of domains and the relationships involved. See page 10 of the report.

<http://www.ahrq.gov/professionals/prevention-chronic-care/resources/clinical-community-relationships-measures-atlas>

Early Education Readiness Using a Results-Based Accountability Framework

A collaborative of parents and child-serving organizations in Los Angeles County worked together to establish a set of school readiness indicators. The workgroup used the National Education Goals Panel's (NEGP's) working definition of school readiness: children's readiness for school, school's readiness for children, family and community supports and services that contribute to children's readiness for school success. Indicators were also chosen to reflect the five outcomes adopted by Los Angeles County: Good health; Safety and survival; Economic well being; Social and emotional well-being; and Education/workforce readiness.

<http://www.first5la.org/files/ShapingtheFutureReport.pdf>

Guide to Measuring the Triple Aim: Population Health, Experience of Care, and Per Capita Cost

This 2013 white paper from the Institute for Healthcare Improvement presents suggested measures for the three dimensions of the Triple Aim, accompanied by data sources and examples, with descriptions of how the measures might be used.

<http://www.ihl.org/resources/Pages/Measures/default.aspx>

Healthy Communities Data and Indicators Project (HCI)

In order to serve a goal of enhancing public health, this project includes the development of a standardized set of statistical measures for use in community health planning and assessment. A draft core list of indicators was developed in 2013 and more than 50 indicators are being vetted and constructed, with information on the impact, evidence, data sources, bibliographic references, and methods and limitations of each.

<http://www.cdph.ca.gov/programs/Pages/HealthyCommunityIndicators.aspx> - *Healthy Communities Framework Indicators*

http://www.cdph.ca.gov/programs/Documents/Healthy_Community_Indicators_Core_list1-15-13Table1-5.pdf - *Draft core list of indicators*

HHS Action Plan to Reduce Racial and Ethnic Disparities

The action plan is based on national goals and objectives for addressing health disparities identified by the Healthy People 2020 initiative and focuses on evidence-based programs and best practices. Stakeholders include public and private partners of HHS, as well as other federal partners collaborating on the initiative, including the Departments of Agriculture (USDA), Commerce (DOC), Education (ED), Housing and Urban Development (HUD), Labor (DOL), Transportation (DOT), and the Environmental

Protection Agency (EPA). See Appendix C, page 44 for key disparity measures.
<http://minorityhealth.hhs.gov/npa/templates/content.aspx?lvi=1&lvid=33&ID=285>

Regional Equity Atlas 2.0 and Action Agenda

This population health improvement tool maps the intersection of chronic disease prevalence data and data on the social, economic, and physical determinants of health for the Portland metro region, providing insight into key findings. The tool covers a set of domains that includes measures spanning clinical care, demographics, environment and social characteristics.

<https://clfuturity.org/programs/regional-equity-atlas/maps-and-analysis>

Toward Quality Measures for Population Health and Leading Health Indicators

Measurement domains include the 26 leading health indicators outlined in Healthy People 2020 as well as 12 additional topics: access to health services; clinical preventive services; environmental quality; injury and violence; maternal, infant, and child health; mental health; nutrition, physical activity, and obesity; oral health; reproductive and sexual health; social determinants; substance abuse; and tobacco. See page 15 of the report.

<http://www.iom.edu/Reports/2013/Toward-Quality-Measures-for-Population-Health-and-the-Leading-Health-Indicators.aspx>

Appendix C: Example Lists of Data Sources

Notes:

- The goal by the end of this project (Option Year two) is to get input on key data sources (credibility of methodology, desired uses and whether the age / recency of the data is an issue, understandability)
- Feedback Communities will help identify the most useful data sources

Questions

1. Which data sources are useful and easy to use, just as they are now (e.g., as *currently* structured, described, available, etc.)?
2. Which data sources *could be useful or easier to use* if they were changed in some way (e.g., structure, description, availability, frequency of updates)?
3. Which data sources (listed below or not) are you using and how are you using them?
4. What other types of data sources would you like to access and use, and for what purpose?

Data Sources Under Consideration for Inclusion in the Final Version of the Guide

Center for Vital Statistics Health Data Interactive

This resource presents tables with national health statistics for infants, children, adolescents, adults, and older adults. Tables can be customized by age, gender, race/ethnicity, and geographic location to explore different trends and patterns.

<http://www.cdc.gov/nchs/hdi.htm#tutorials>

Behavioral Risk Factor Surveillance System (BRFSS)

BRFSS is an on-going telephone health survey system focused on collecting behavioral health risk data. The annual survey data is published online and used by the Centers for Disease Control and Prevention (CDC) and other federal agencies.

<http://www.cdc.gov/brfss/about/index.htm>

Correctional Health Outcomes and Records Data Set (CHORDS)

CHORDS is a clinical outcomes data sharing system being designed for correctional health care settings. Data is supplied by jails and other correctional facilities.

<http://www.ncchc.org/chords>

County Health Rankings and Roadmaps

The County Health Rankings score communities according to a variety of health measures based on health outcomes and health factors, which are broken down into eight composite areas and then into subcomponent areas.

<http://www.countyhealthrankings.org/app/home>

Data.Gov

The U.S. government's data portal provides access to federal, state and local data, as well as tools, research resources and more. The "Health" section includes 1,125 data sets, tools and applications related to health and health care and can be used as a resource for groups or individuals looking for examples of data or actual data sets for reporting purposes.

<https://www.data.gov/health/>

Data.CDC.Gov

This online database provides access to data sources from the Centers for Disease Control and Prevention (CDC).

<https://data.cdc.gov/>

National Institutes of Health (NIH) Data Sharing Repository

The National Library of Medicine (NLM) website provides a table of NIH-supported data repositories that accept submissions of appropriate data from NIH-funded investigators (and others). Also included are resources that aggregate information about biomedical data and information sharing systems.

http://www.nlm.nih.gov/NIHbmic/nih_data_sharing_repositories.html

Appendix D: Example Lists of Tools

Notes

- By end of this project (Option Year two), the Action Guide may be an online resource.
- Feedback Communities will help identify the most useful tools

Questions

1. Which resources or tools are useful and easy to use, just as they are now (e.g., as *currently* structured, described, available, etc.)?
2. Which resources or tools *could be useful or easier to use* if they were changed in some way (e.g., structure, description, availability, frequency of updates)?
3. Which resources or tools (listed below or not) are you using and how are you using them?
4. What other types of resources or tools would you like to access and use, and for what purpose?

Resources or Tools Under Consideration for Inclusion in the Final Version of the Guide

ACHI Community Health Assessment Toolkit

The ACHI Community Health Assessment Toolkit is a guide for planning, leading and using community health needs assessments to better understand and improve the health of communities. Tools include checklists, budgets and timeline guides and templates for each of the six steps in the framework, with specific guidance on skills needed, budget drivers, time drivers and a task checklist.

<http://www.assesstoolkit.org/>

The Blue Zones Project

The Blue Zones Project focuses on encouraging individuals and community members to aspire to healthy lifestyle ideals, which are based on research into communities around the world with the highest number of centenarians. An online community provides guidance and tips ranging from healthy eating to stress management, and the project also includes “policy pledge actions” for schools, workplaces, local government entities and communities pertaining to the physical environment, food and smoking.

<https://www.bluezonesproject.com/>

Camden Care Management Program and Cross-Site Learning

This program through the Camden Coalition of Healthcare Providers includes development of a database to analyze and quantify the utilization of hospitals by Camden residents. This tool relies on data from the Camden’s Health Information Exchange (HIE) to target and coordinate care for patients who lack consistent primary care and often suffer from chronic illness, mental illness, and substance abuse. The Cross Site Learning program is being implemented in ten cities. Tools, planning guides and other materials are being provided to expand “hot spotting” to other locations.

<http://www.camdenhealth.org/cross-site-learning/>

County Health Rankings and Roadmaps

The County Health Roadmaps is an interactive framework (“The Action Cycle”) for organizing and planning initiatives, projects and collaborative actions aimed at population health improvement. The County Health Rankings is a tool rating the health of the population by county, based on health factors identified in a population health model that includes the policies and programs and health factors affecting health outcomes. The website provides access to a guide to evidence-based policies, programs and system changes (“What Works for Health”) and a “Tools & Resources” page with external links to educational materials and additional tools.

<http://www.countyhealthrankings.org/>

Family Wellness Warriors Initiative

This anti-domestic violence initiative holds multi-day trainings to educate “natural helpers” and community members on how to work with people affected by violence, reduce abuse in the community and implement the program’s anti-violence curriculum. The program’s website also includes a map with localized resources, such as counseling centers, for violence and abuse prevention.

<http://www.fwwi.org/index.cfm>

Green Strides

This is a U.S. Department of Education initiative aimed at making all schools healthier, safer and more sustainable. Resources include a webinar series, blog and social networking to facilitate sharing of best practices and resources. The resources page lists tools for schools, teachers, parents and students to use in planning and execution of improvement strategies, such as reducing environmental impact and cost, promoting health and wellness and learning about environmental sustainability.

<http://www2.ed.gov/about/inits/ed/green-strides/resources.html#topic2>

The Guide to Community Preventive Services

The Guide to Community Preventive Services is a free resource to help identify programs and policies to improve health and prevent disease in the community, based on recommendations from the Community Preventive Services Task Force.

<http://www.thecommunityguide.org/index.html>

Healthy Communities Network (HCN)

The Healthy Communities Network (HCN) is a customizable web-based information system designed to provide access to data and decision support for use in health indicator tracking, best practice sharing and community development. The database includes more than 75,000 quality of life indicators for any community, and also comprises more than 1,800 “promising practices” or actions to improve population health. Trackers built into the system help evaluate the effectiveness of the local group’s programs and the health of the community using this system, compared against local and national goals.

<http://new.healthycommunitiesinstitute.com/healthy-communities-network-2/>

Health in All Policies: A Guide for State and Local Governments

The Health in All Policies guide includes “Food for Thought” questions in each section that leaders of a Health in All Policies initiative are encouraged to consider. The guide also includes tips for identifying new partners, building meaningful collaborative relationships across sectors, and maintaining those partnerships over time, as well as more than 50 annotated resources for additional support.

<http://www.phi.org/resources/?resource=hiapgide>

Let's Move

Online resources from the Let's Move initiative include "5 simple steps" guides for parents, schools, community leaders, chefs, children, elected officials and health care providers on how to play a role in preventing and reducing childhood obesity and living and promoting healthier lifestyles. The website also includes educational materials for printing and distribution within communities.

<http://www.letsmove.gov/action>

Moving Healthy

This overview of the health-related strategies being explored by the U.S. Department of Transportation Federal Highway Administration (FHWA) references tools and resources to help transportation professionals and health practitioners identify and address the health impacts of transportation.

https://www.fhwa.dot.gov/planning/health_in_transportation/resources/moving_healthy.cfm

The National Prevention Strategy

The Surgeon General's website for this national initiative features resources related to the National Prevention Strategy, including fact sheets, infographics, implementation and scientific resources.

<http://www.surgeongeneral.gov/initiatives/prevention/resources/index.html>

The National Service Frameworks

This is a collection of strategies from the National Health Service (NHS) in the U.K. to address the prevention and treatment of cancer, coronary heart disease, COPD, diabetes, kidney care, long-term conditions, mental health issues and stroke, as well as caring for the elderly and providing end of life care. The webpages for each framework include educational materials and links to additional resources, such as non-profit organizations and further information within the NHS.

<http://www.nhs.uk/nhsengland/NSF/pages/Nationalserviceframeworks.aspx>

One in 21 Muskegon County

This is the umbrella program for local initiatives like "Project Healthy Grad" and includes educational information, links to farmers' markets and other local resources for Muskegon County, Michigan.

<http://1in21.org/resources>

Operation Live Well

This initiative aimed at improving the health of military personnel and their families includes resources related to key focus areas and preventive health, plus a list of health tools from various organizations.

<http://www.health.mil/livewell>

Practical Playbook

This resource for public health and primary care groups features an interactive tool that guides users through the stages of integration for population health improvement projects.

<http://www.practicalplaybook.org/>

Regional Equity Atlas 2.0 and Action Agenda

This project includes maps the Portland region using data on chronic disease prevalence and social, economic, and physical determinants of health, and provides key findings. A mapping tool allows for customized creation of maps on issues affecting the region.

<https://clfutur.org/equity-atlas>

Shaping the Future Report

This report presents school readiness goals and indicators to guide planning and accountability around children's readiness for school in Los Angeles County. The tool was created to engage community stakeholders, monitor trends, and implement a results-based accountability framework.

<http://www.first5la.org/research/shaping-the-future-report>

The Substance Abuse and Mental Health Services Administration (SAMHSA)

SAMHSA provides resources and guidance on substance abuse, mental illness, trauma and justice, health reform, health information technology, public awareness and support, outcomes and quality and recovery support. This includes access to tools, materials and links to external organizations.

<http://www.samhsa.gov/>

Vermont Blueprint for Health

This is a State-led initiative aimed at transforming the way that health care and health services are delivered in Vermont by providing the community with a continuum of seamless, effective, and preventive health services, while reducing medical costs. Tools include healthier living and tobacco cessation workshops, plus educational materials and guidance on how to implement the Blueprint.

<http://hcr.vermont.gov/blueprint>

YMCA Healthier Communities Initiatives

The YMCA provides resources for promoting healthier communities, including a guide on linking policy and environmental strategies to health outcomes and the Community Health Living Index (CHLI), which contains self-assessments and provides best practices to promote improvement.

<http://www.ymca.net/healthier-communities>

Appendix E: Population Health Framework Committee Roster

Co-Chairs

Kaye Bender, PhD, RN, FAAN

Public Health Accreditation Board, Alexandria, VA

Bruce Siegel, MD, MPH

America's Essential Hospitals, Washington, DC

Members

Catherine M. Baase, MD

Dow Chemical Company, Midland, MI

Georges C. Benjamin, MD, FACP, FACEP

American Public Health Association, Washington, DC

Christina Bethell, PhD, MBA, MPH

Child and Adolescent Health Measurement Initiative, Portland, OR

Kevin L. Bowman, MD, MBA, MPH

WellPoint, Inc., Baltimore, MD

Debra L. Burns, MA

Minnesota Department of Health, St. Paul, MN

JoAnne M. Foody, MD, FACC, FAHA

Harvard University and Brigham and Women's/Faulkner Hospital, Boston, MA

Beverly Franklin-Thompson, PharmD, MBA

GlaxoSmithKline, Piney Flats, TN

Reneé Frazier, MHSA, FACHE

Healthy Memphis Common Table, Memphis, TN

Rahul Gupta, MD, MPH, FACP

Kanawha-Charleston and Putnam Health Departments, Charleston, WV

Shelley B. Hirshberg, MA

P2 Collaborative of Western New York, Williamsville, NY

Charles J. Homer, MD, MPH

National Initiative for Children's Healthcare Quality, Boston, MA

Paul E. Jarris, MD, MBA

Association of State and Territorial Health Officials, Arlington, VA

Keith C. Kosel, PhD, MHSA, MBA

VHA Inc., Irving, TX

Jeffrey Levi, PhD

Trust for America's Health, Washington, DC

Doris Lotz, MD, MPH

New Hampshire Department of Health and Human Services, Concord, NH

J. Lloyd Michener, MD

Duke University Medical Center, Durham, NC

Doriane C. Miller, MD

Center for Community Health and Vitality of the University of Chicago Medical Center,
Chicago, IL

David B. Nash, MD, MBA

Thomas Jefferson University, Philadelphia, PA

David Stevens, MD

National Association of Community Health Centers, Bethesda, MD

Matthew Stiefel, MS, MPA

Kaiser Permanente, Oakland, CA

Steven M. Teutsch, MD, MPH

Los Angeles County Department of Public Health, Los Angeles, CA

Julie Trocchio, RN, MS

Catholic Health Association of the United States, Washington, DC

Appendix F: Project Staff

National Quality Forum Staff

Karen Adams, PhD, MT

Vice President, Strategic Partnerships

Elizabeth Carey, MPP

Project Manager, Strategic Partnerships

Allen Leavens, MD, MPH

Senior Director, Strategic Partnerships

Elisa Munthali, MPH

Managing Director, Performance Measurement

Zehra Shahab, MPH

Project Analyst, Performance Measurement

Danitza Valdivia

Administrative Manager, Strategic Partnerships

Consultants

Diane Stollenwerk, MPP

President, StollenWerks Inc.

Emily Henry, MA

Research Director, StollenWerks Inc.

National Quality Forum
1030 15th St NW, Suite 800
Washington, DC 20005
<http://www.qualityforum.org>