The Case for Integrated Health Improvement

Gibbie Harris, Heather Gates

Health, clinical, and regulatory factors are driving significant change in health and health care, leading to an increased emphasis on cost, quality, and results. To improve the well-being of all populations, we must focus on connectivity within a functional, communitywide network of diverse partners.

It is increasingly clear that we cannot afford to work in silos; only by working collaboratively can we meet our goals for cost-effective care and positive health outcomes. Indeed, significant improvements in the health of any population can only happen with intentional focus and connectivity at both the macro and micro levels. Whether the goal is to improve the overall health of a region, a county, a specific insured population, or the patients of a particular clinical practice, an integrated health improvement framework can serve as the foundation and support for this complex work. An integrated health improvement framework involves community and population health improvement, use of a collective impact approach, and a process that focuses on shared goals and agreed-upon plans and strategies. There must also be an expectation that everyone will work toward implementing evidence-based practices within and across organizations and partnerships to assure that investments achieve optimal results.

The Current Health Care System

Health care delivery systems are facing a tremendous shift in their business model but have been given limited financial incentives to support the changes they are expected to make. Health systems are striving for improvements in service, quality, and outcomes while making the leap from volume- to value-based markets [1]. Health systems are also being encouraged to connect with an array of clinical and community partners in new ways as part of a growing focus on population health improvement. To support their population health strategy, health delivery systems should use "seamless care across settings" and "mature community partnerships" [2].

Like other components of the health system, public health departments are being pushed toward greater accountability, increased standardization, greater focus on quality, and results-driven health improvements. Over the past several years, heightened focus on the accreditation of local health departments [3] and on continuous quality improvement [4] has enhanced accountability and encouraged greater use of evidence-based approaches. However, much of the community-based work that affects population health occurs through the efforts of private community-based organizations, faith communities, hospitals, and other entities. All partners must work together to increase accountability and use of evidence-based practices as they work to improve health.

In addition, increasing recognition of the significant impact of social determinants on health is requiring a reevaluation of the strategies and partners needed to improve clinical and community outcomes. The County Health Rankings program of the Robert Wood Johnson Foundation is based on a model of population health that emphasizes the many factors that can be improved to help make communities healthier places to live, learn, work, and play. Building on the work of America's Health Rankings, the University of Wisconsin Population Health Institute has been using this model to rank all counties in the United States since 2003 [5]. Research has demonstrated that clinical services and behavior change are important to improving health in communities; however, social determinants—such as education, housing, employment, and transportation—are the major influences on population health in a community. Addressing these issues requires going beyond the typical boundaries of medicine and public health and engaging many other elements of the community.

Population Health

There is growing recognition that the health and social issues affecting the well-being of communities and the health of specific populations cannot be addressed sufficiently by any one organization. A frequently cited definition for population health is "the health outcomes of a group of individuals, including the distribution of such outcomes within the group" [6]. In practice, adoption of this broad definition of population health requires a common language and a shared understanding as we work with a continuum of partners who have different roles and who work with vari-

Electronically published November 7, 2014.

Address correspondence to Ms. Gibbie Harris, Buncombe County Health and Human Services, 200 College St, Asheville, NC 28801 (gibbie.harris@buncombecounty.org).

N C Med J. 2014;75(6):413-416.
0029-2559/2014/75610

ous populations [7]—such as individuals with a particular type of health insurance coverage, residents of a county, or a group of patients served by the same clinical providers. The fact that different health agencies, interventions, and strategies are focused on different subsets of the population should not be a barrier to collective work on population health approaches. Rather, these differences remind us how critical it is that we understand overlapping roles, contributions, and interests and work to better align them. We need to direct renewed attention to the question of how we can connect in ways that drive strategic conversations, action, and results.

Greater Community Connectivity

All sectors, including those that have not traditionally thought of themselves as part of the health system, will have to find new ways of working together if we are to deliver the significant health outcomes and savings that are expected. Complicated challenges within and across key health organizations must be addressed, and solutions will likely range broadly—including shifts in financing mechanisms, improvements in technical infrastructure, new workforce skills, and better connectivity and referrals between organizations. Significant improvements in health outcomes will require the development of a coordinated and connected communitywide approach that can support these changes.

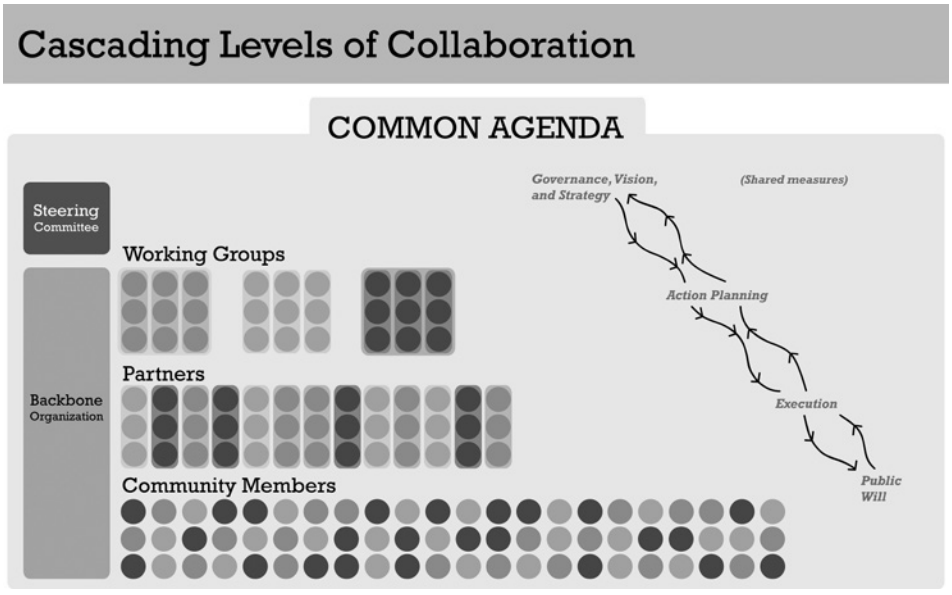
The impacts of poor health and costly systems of care are far-reaching, and the improvement of health and health care will involve complex social issues. Transformation of health and health care can be best supported by connecting evidence-based strategies and the entities that are working to implement them. Such a collective impact approach [8] involves the commitment of a group of actors from different sectors. It must include a common agenda; a shared measurement system; mutually reinforcing activities coordinated through a plan of action; continuous communication; and the presence of a coordinating entity, which can serve as the backbone for the entire system. When collective impact initiatives are effective, "new solutions are discovered that bridge the needs of multiple organizations or are only feasible when organizations work together" [9]. The collective impact model can improve communication and working relationships and increase accountability. As Figure 1 shows, the collective impact infrastructure supports the involvement of the entire community in different levels of work, the connectivity of communitywide efforts, and the ongoing development of public will to sustain action and improvements.

Community Health Improvement

The community health improvement process is emerging as a national standard for community engagement in both the public health and hospital arenas; it can add support and structure to the collective impact model and can better inform the work of population health. This can provide a framework for the efforts of both clinical and community organizations as they come together to address a community's priority health issues. Key features of this work include engaging community members and local partners in a meaningful way, addressing social determinants of health, and using quality improvement and quality planning techniques [10].

This integrated communitywide health process takes a collective impact approach to the health improvement

FIGURE 1.
Infrastructure of a Collective Impact Initiative



cycle, which includes community health assessment, planning, action, and evaluation. These elements connect and align within an intentional system to advance the health of an entire population. The system is strengthened by the implementation of evidence-based practices that target the community's focus areas. Another necessary component of success is the engagement of a broad spectrum of the community in a true partnership that allows for joint decision making and facilitates communitywide ownership of the effort. Pestronk and colleagues suggest, "collaborative community health assessment and community health improvement processes should be standard practice everywhere" [11].

New collaborations have arisen from the requirement that nonprofit hospitals conduct community health needs assessments and adopt implementation strategies [12]. For example, this requirement created a catalyst for many hospitals and health departments to work collaboratively to meet these requirements, and many of them have gone beyond compliance to work collectively on communitywide plans and issues. Strengthening partnerships among health care systems, public health departments, and other community partners is challenging, as it requires bridging cultures, clarifying roles, and sometimes seeking support from a neutral convener, but the potential benefit is worth the effort [11, 13]. [Editor's note: The sidebar by Gates and Harris on pages 404–405 provides a case study of such work in Western North Carolina.]

Evidence-Based Practice

Sackett and colleagues [14] defined evidence-based practice in clinical medicine as follows:

> Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research.

Organizations that maintain fidelity to evidence-based practices appear to achieve and sustain the best outcomes. In public health, evidence-based practice incorporates scientific evidence into management decisions, program implementation, clinical services, and policy development [15]. Using evidence-based strategies in public health yields many benefits, including not only an increase in public resource efficiency but also an increased likelihood of success for programs, clinical interventions, and policies implemented at the state or local level [15].

A Best Practices Workgroup convened by the Centers for Disease Control and Prevention classified evidence-based practices into 4 stages (See Table 1) [16]. On one end of the continuum are "emerging" practices that are supported only by in-progress evaluations or field-based summaries. At the other end of the continuum, "best" or "proven" practices are supported by the most rigorous assessments, such as systematic reviews and evaluation studies [16]. This continuum can serve as a guide for communities that are attempting to approach population health holistically, effectively, and efficiently.

TABLE 1.
A Continuum of 4 Stages of Evidence-Based Practice

Emerging practices These practices are supported by field-based summaries or evaluations in progress that show some evidence of effectiveness and plausible evidence of reach, feasibility, sustainability, and transferability.
Promising practices These practices are supported by unpublished intervention evaluations that have not been peer reviewed but which demonstrate some evidence of effectiveness, reach, feasibility, sustainability, and transferability.
Leading practices These practices are supported by peer-reviewed studies or by nonsystematic review of published intervention evaluations that show growing evidence of effectiveness and some combination of evidence of reach, feasibility, sustainability, and transferability.
Best practices These practices are supported by the most rigorous assessments, including systematic reviews of research and evaluation studies that show evidence of effectiveness and growing evidence of reach, feasibility, sustainability, and transferability.

Source: These definitions of the 4 stages are excerpted from Spencer et al [16].

If all parties can agree on the benefits of utilizing practices that have been researched and found to be effective, this shared understanding can provide common ground for moving forward with strategies that cross health sectors and for collectively securing sufficient resources to implement these strategies. Not only can evidence-based strategies help guide specific interventions, but there is also growing evidence that such strategies can be combined for optimal results.

Conclusion

Public health professionals and other health care leaders are being nudged to integrate their strategies in new ways as they respond to increasing financial pressures and a growing push to create health, rather than just treat illness. Although envisioning and executing a population health strategy is complex, the potential for enhanced connectivity has exciting implications for the health of our communities. Implementation of evidence-based approaches will require a range of changes in the operations of many cross-sectored partners—both collectively and separately. Fortunately a growing body of evidence supports this approach, and there are many opportunities and potential points of connection.

If we are to collectively create a sustainable solution, it is crucial that we find a way to adequately resource all aspects of this work. Collective success in improving health outcomes depends on an integrated process that is supported by a functional framework that aids all elements of the system and helps them work together, regardless of how partners define their specific target populations. As Pestronk and colleagues recently noted, "Effective collaboration will

require intent and patience as very different cultures come to know each other better. Leadership must encourage the awkward steps that will no doubt precede the more elegant and practiced choreography of effective collaborations" [11]. NCMJ

Gibbie Harris, MSPH public health director, Buncombe County Health and Human Services, Asheville, North Carolina.
Heather Gates, MPH executive director, WNC Health Network, Asheville, North Carolina.

Acknowledgements

Potential conflicts of interest. G.H. and H.G. have no relevant conflicts of interest.

References

1. Managing population health: the role of the hospital. Chicago, IL: Health Research and Educational Trust; April 2012. http://www.hpoe.org/resources/hpoehretaha-guides/805. Accessed July 23, 2014.
2. Health Research and Educational Trust. The second curve of population health. Chicago, IL: Health Research and Educational Trust; March 2014. www.hpoe.org/pophealthsecondcurve. Accessed July 25, 2014.
3. North Carolina Institute for Public Health (NCIPH). Assuring the health of North Carolina through local health department accreditation. NCIPH Web site. http://sph.unc.edu/nciph/nciph-home/. Accessed July 15, 2014.
4. Center for Public Health Quality (CPHQ). NC Public Health Quality Program. CPHQ Web site. http://www.centerforpublichealthquality.org/index.php/nc-public-health-quality-program. Accessed October 22, 2014.
5. County Health Rankings and Roadmaps: Building a Culture of Health, County by County. Our approach. County Health Rankings Web site. http://www.countyhealthrankings.org/our-approach. Accessed July 3, 2014.
6. Kindig D, Stoddart G. What is population health? Am J Public Health. 2003;93(3):380-383. http://ajph.aphapublications.org/doi/pdf/10.2105/AJPH.93.3.380. Accessed July 25, 2014.
7. Monroe J. National Perspective on Changes Impacting the Public Health System. Paper presented at: North Carolina Hospital Association Summer Meeting; July 17, 2014; Hilton Head, SC.
8. Kania J, Kramer M. Collective impact. Stanford Soc Innov Rev. 2011;9(1):36-41. http://www.ssireview.org/articles/entry/collective_impact. Accessed September 1, 2014.
9. Kania J, Kramer M. Embracing emergence: how collective impact addresses complexity. Stanford Social Innovation Review blog. http://www.ssireview.org/pdf/Embracing_Emergence_PDF.pdf. Posted January 21, 2013. Accessed July 25, 2014.
10. National Association of County and City Health Officials (NACCHO). Developing a community health improvement plan. NACCHO Web site. http://www.naccho.org/topics/infrastructure/CHAIP/chip.cfm. Accessed July 21, 2014.
11. Pestronk RM, Elligers JJ, Laymon B. Public health's role: collaborating for healthy communities. Health Progress. 2013;94(1):20-25. http://www.chausa.org/docs/default-source/health-progress/db58522c02524c899bba93725fee36741-pdf.pdf?sfvrsn=0. Accessed August 3, 2014.
12. Internal Revenue Service (IRS). New requirements for 501(c)(3) hospitals under the Affordable Care Act. IRS Web site. http://www.irs.gov/Charities-&-Non-Profits/Charitable-Organizations/New-Requirements-for-501(c)(3)-Hospitals-Under-the-Affordable-Care-Act. Page last reviewed or updated March 4, 2014. Accessed September 1, 2014.
13. Trevanathan E. Introducing public health: your new partner. Health Prog. 2013;94(1):4-5. http://www.chausa.org/docs/default-source/health-progress/8eacf4c225694e909a1f21e37592017e1-pdf.pdf?sfvrsn=0. Accessed August 3, 2014.
14. Sackett DL, Rosenberg WM, Gray JAM, Haynes RB, Richardson WS. Evidence based medicine: what it is and what it isn't. BMJ. 1996;312(7023):71-72.
15. Brownson RC, Fielding JE, Maylahn CM. Evidence-based public health: a fundamental concept for public health practice. Annu Rev Public Health. 2009;30:175-201.
16. Spencer LM, Schooley MW, Anderson LA, et al. Seeking best practices: a conceptual framework for planning and improving evidence-based practices. Prev Chronic Dis. 2013;10:130186. http://www.cdc.gov/pcd/issues/2013/13_0186.htm. Accessed August 30, 2014.