

VIEWPOINT

Academic Health Systems' Third Curve Population Health Improvement

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Spurred by a rapidly changing health care landscape, many academic health systems are reconfiguring to move beyond individual patient care to population-specific management. During this time of transition, academic health systems also have a compelling opportunity to significantly advance broader population-wide health improvement efforts using nominal additional resources. Capitalizing on this opportunity requires systems to refocus on their ultimate mission of improving health and to collaborate with an expanded set of partners to address the diverse factors determining health in their communities.

Evolution to Population Health Improvement

Academic health systems have traditionally focused on individual patient care. This is the "first curve" of academic health systems (Figure, top). Most of their efforts have been directed at addressing the needs of individual patients for treatment of illness and disease, with little attention paid to individuals not seeking care. Fee-for-service related to episodic care has been the predominant payment model driving this prioritization, although other factors, such as clinical training, practice patterns, and culture, also may be involved. While critically important for thousands of patients, the delivery of clinical care by academic health systems has only marginally improved the overall health status of the communities in which they are located.

More recently, many academic health systems have focused on adaptations they must make to effectively engage in population health management.¹ This is the "second curve" (Figure, top). Population health management refers to using a global budget to manage the health of a specific population, generally those who seek care or may eventually seek care at a health system or institution. The population may be defined by geographic area, insurance enrollment, health center or health care professional group, demographic profile, similar health conditions, or other criteria.

In response to the emerging reality of population health management, academic health systems are now beginning to realize, engage in, and, for some systems, excel at the complementary tasks of illness management for patients and health promotion for specific populations, depicted in the first and second curves (Figure, top). Coordination of care for individual patients is enhanced, along with counseling and education and other preventive measures across entire managed populations. Academic health systems are already expanding local and regional partnerships to meet the broader needs of the new populations under management.

The second curve, population health management, is an important step toward building sustainable, value-oriented systems of care for populations. However, to address entire regional populations, and the social determi-

nants of health, effective interventions will require broader cross-sectoral partnerships than most academic health system accountable care organizations have undertaken.

By extending and augmenting their emerging capabilities in population health management, academic health systems can contribute significantly to advancing broader population health improvement. This is the "third curve" (Figure, top and bottom). The goal of population health improvement is to enhance the health of all individuals in a population, often characterized as a city, zip code area, or specific geography. Compared with the first and second curves, the third curve requires greater emphasis on factors and influences unrelated to health care. Health behaviors, such as exercise and diet; social and economic factors, such as education and employment; and factors related to the physical environment, such as air quality and transportation availability, are among the principal determinants of health beyond clinical care.²

The value of this complementary emphasis on population health improvement has been recognized in the United Kingdom and adopted into national policy. Following a 2007 initiative that established 6 officially recognized Academic Health Sciences Centres, National Health Services England created 15 Academic Health Sciences Networks in 2013.³ Whereas the principal aim of Academic Health Sciences Centres is to "improve patient care and healthcare delivery," the goal of the new Academic Health Sciences Networks is to "improve patient and population health."

Why Academic Health Systems?

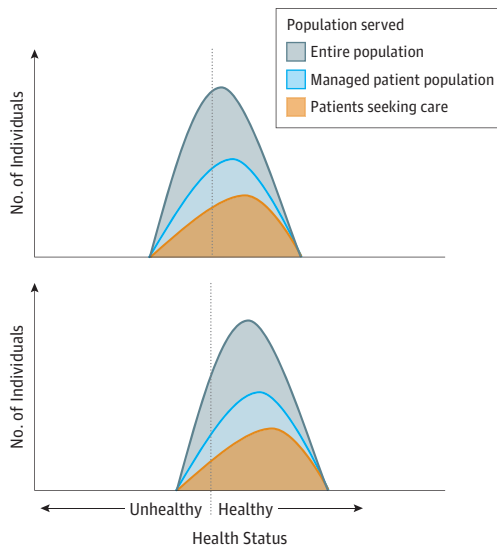
Pursuing population health improvement is in the self-interest of academic health systems. First, there is the prospect of a healthier community from which to draw their future workforce. Second, benefits accrue from convening leaders for a shared community benefit, providing an advantage in attracting new employees, patients, and business partners. Third, working with partners from other sectors will strengthen core health promotion and disease prevention by deepening the understanding for how academic health systems can best influence broader health determinants. Fourth, these population health improvement programs will facilitate compliance with regulatory requirements to assess and address community needs.

Beyond this business case, academic health systems should be pushing toward the third curve to help fulfill a broader societal need. This is a time of transformation and transition for both the health care and public health enterprises.^{1,4} In the past, when communicable diseases represented the major cause of morbidity and death, the purview of public health agencies covered most of the important determinants of health. Today, with noncommunicable diseases causing the bulk

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Figure. The "3 Curves" of Academic Health Systems



Bottom panel illustrates the potential shift to healthier status for overall population through academic health systems' augmented focus on the third curve.

of morbidity and death, partnerships with leaders in multiple sectors beyond health care will be needed to improve community health. Although public health agencies might be expected to lead this effort, their budgets and staffing have been diminished as delivery systems and health plans provide clinical preventive services.

New leadership is needed now to advance population health improvement. Given their mission, expertise, and resources, many academic health systems are well positioned to take on this broader societal responsibility.

Moving to the Third Curve

Add Population Health Improvement to the Mission. From the 15th century to the present, academic leaders have argued that the ultimate mission of medical schools and the care provided by their clinical departments is to improve the health of society.⁵ The vital missions of education, research, and patient care are indispensable means to this end. Yet while some academic health systems have expanded their scope to build programs for community health engagement, few have explicitly added population health improvement to their core mission and built cross-sectional partnerships to accomplish this aim.

Practice at Home. Academic health systems can begin by creating healthy campuses. The workforce of academic health systems represents a microcosm of the surrounding cities or counties, and their daily presence on academic health system campuses provides an important opportunity to influence the health of thousands of individuals each day. DukeHealth, for example, is home to approximately 65 000 faculty, staff, trainees, and dependents—essentially a small city.

Forge Necessary Partnerships. In collaboration with other groups, academic health systems should help forge the multisector, multistakeholder partnerships required to meaningfully tackle the panoply of factors underlying health outcomes. These partnerships will cut across government, nonprofit, and private organizations in multiple sectors, including health care, public health, business and industry, education, philanthropy, policy making, religion, media, social services, agriculture, law enforcement, and many others.⁶ The coalitions may ultimately be led by partners from other sectors, but academic health systems should not hesitate to convene initial efforts and, when appropriate, continue in leadership.⁷

Leverage Current Core Missions. Academic health systems will find that these endeavors harness their core strengths and bring a wide variety of campus schools and disciplines together to collaborate for population health improvement. Research is needed to establish baseline health status, conduct needs assessments, evaluate interventions, and define sustainability for each sector. Innovation will aid in forging partnerships, leveraging the use of policy, capitalizing on technology, and establishing best practices in population health improvement. New education and training may be needed to augment the workforce and support early adopters in accelerating the diffusion of successful interventions. Working with professional schools in business, divinity, engineering, environment, law, and public policy, academic health systems will contribute significantly to the understanding of effective practices.

Conclusions

The potential of this new third curve for academic health systems is inspiring, and the leadership and tasks required are well within reach. As the nation recognizes the benefits of these expanded efforts, academic health systems will have added a new and compelling facet to the role of academia. Closer to home, by improving the health of the communities in which they provide care, academic health systems will also find the benefits of their efforts manifest in the enhanced health of the patients they serve.

ARTICLE INFORMATION

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