

COMMENTARY

International Perspectives on Moving to Population-Based Health Care Systems

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There is a growing interest for health care delivery organizations to focus more heavily on managing the health of populations, which can be a transition for organizations that traditionally concentrate on acute and specialized care. Furthermore, many health care organizations may have limited experience in managing social drivers of health, which require critical strategies for improving community well-being. Future of Health, an international community of senior health leaders, collaborated with the Duke-Margolis Institute for Health Policy to identify priority actions for advancing population health worldwide. Key strategies were identified to embed a culture of accountability for population health within health systems, foster innovative partnerships between health care delivery and community organizations, and adopt value-based payment models that sustainably support population health strategies. This article highlights real-world examples from health systems globally, illustrating successful implementations and the challenges faced in this paradigm shift. By focusing on collaborative approaches and long-term health outcomes, this research aims to guide health systems in advancing population health.

Introduction

Population-based health, or the management of the health of entire communities, is gaining attention, but it has traditionally been seen as the domain of primary and public health sectors.^{1,2} Emphasizing the well-being of the broader community, population-based health care extends beyond the individual patient focus of acute and specialized providers to consider the broader care ecosystem. This is changing as forward-thinking health systems adopt population-based strategies

to address nonmedical drivers of health, better manage chronic diseases, and curb rising health care costs.

Investing in population-based health care systems not only serves to better meet the needs of communities, but it is also a way to build sustainable health systems that can be responsive to market trends. The need for population-based health care systems was emphasized during the Covid-19 pandemic, with outcomes of the highly contagious respiratory disease strongly dependent on community needs and the ability to address those needs.^{3,4} Moving beyond the recent pandemic, population health approaches will continue to be important to manage the underlying factors driving and exacerbating chronic disease, which are forecast to increase in prevalence with an aging population.⁵ Furthermore, population health approaches, with diverse staffing teams that can address different drivers of people's health, will be needed given the workforce challenges experienced globally.⁶

Despite the growing recognition of the importance of population-based health care, integrating population health models into hospital and health system settings remains challenging. Health systems struggle to define the population of focus, establish a culture of shared responsibility for improving population health, and transition from treating the immediate needs of patients to managing their long-term medical and nonmedical care.

In this article, we present the results of our research, both drawing consensus recommendations as well as showcasing real-world examples, to guide health leaders (including health systems, policy makers, and industry leaders) in their efforts to advance population-based health care. We present examples of how leading health systems internationally have adopted innovative approaches to become population-based health care systems.

Approach to Identifying Global Strategies for Population Health

Established in 2018 as an initiative by Sheba Medical Center in Ramat Gan, Israel, and formally incorporated in 2022 with its headquarters in Washington, DC, Future of Health (FOH) includes a membership of more than 50 leaders from across the globe.⁷ FOH is an international community of senior health leaders, including hospital executives, policy makers, academics, payers, and senior-level health sector leaders. The organization focuses on common areas of care across international health systems, with previous research exploring care models, health care technology, workforce, and other issues of international concern.⁸⁻¹⁰

In partnership with the Duke-Margolis Institute for Health Policy, the research team reviewed peer-reviewed and gray literature. The research team engaged external experts, including academic scholars, health care providers, health delivery organization executives, payers, and commercial vendors. Furthermore, FOH members were involved in virtual meetings and interviews, and attended an in-person summit in Boston, Massachusetts, in October 2023, with the group achieving consensus in its recommendations through facilitated voting with associated group discussions. The case examples and implementation issues around consensus recommendations were drawn from the arc of research.

Table 1. Strategies for Health Systems to Advance Population-Based Health Care

Population Health Strategy	International Case Example
1. Embedding a culture of population health into the design and accountability for health systems	<ul style="list-style-type: none"> • Denmark created geographic health clusters around their 21 acute care hospitals, promoting shared accountability across hospitals and regions, municipalities, and general practices across the country. • SingHealth has engaged providers across the care continuum in change management efforts to adopt a place-based, person-centered model through its flow-hold-link approach, ensuring seamless transitions across hospitals, primary care, and community services.
2. Prioritizing, implementing, and evaluating innovations to improve population health in collaboration with communities	<ul style="list-style-type: none"> • Northwestern Medicine developed an evidence-based approach to developing and sustaining community partnerships, with partnerships categorized into different levels of engagement. • North Carolina is addressing the health-related social needs of people enrolled in the state's Medicaid program through their Healthy Opportunities Pilots by contracting with local providers and community-based organizations to cover nonmedical services.
3. Ensuring the sustainability of population-based health care through new value-based payment approaches	<ul style="list-style-type: none"> • Discovery Health links population-based care measures to value-based payment incentives, with, for example, their Diabetes Shared Value Program rewarding providers whose patients with either type 1 or type 2 diabetes achieve hemoglobin A1c control. • King's College Hospital NHS Foundation Trust and the Hepatitis C Trust partnered to treat hepatitis C infections in people experiencing homelessness and in prison populations in south London. The nontraditional partnership achieved immediate improvement in treatment rates while also investing in longer-term population health improvements, such as preventing advanced fibrosis and liver cancer.

Source: The authors

The consensus recommendations from the research fall into three areas where health systems are demonstrating a paradigm shift to population health (see [Table 1](#)). Below, we explore each strategy in more detail, highlighting international case examples for each strategy.

Embedding a Culture of Population Health Into Design and Accountability for Health Systems

Strategies for fostering a culture of population-based health care (where providers across the continuum and community coordinate and are accountable for advancing whole-person care) vary across countries due to differences in health system structures. In more centralized systems, like the United Kingdom's National Health Service, there is clear accountability for addressing the full spectrum of community needs, which facilitates the integration of health and social services.¹¹ Conversely, in decentralized health systems like that of the United States, there is greater fragmentation between clinical and social service providers. Despite these structural differences, successful health systems share common strategies for advancing population health goals.

First, health systems have explicitly defined and integrated accountability for population health improvements into their organizational missions. For example, Denmark assigns accountability for its residents to its five geographic regions. Denmark also created health clusters around their 21 acute care hospitals — comprising hospitalists, general practitioners, and municipality representatives — that are accountable for the population in their catchment area.¹² Denmark embarked on this organizational restructuring in 2022 in response to earlier reforms that strengthened national regulation but decentralized care accountability to regions and municipalities, with regions responsible for primary care, hospitals, and specialized care, and municipalities responsible for disease prevention, health promotion, and other community services, such as rehabilitation and nursing home care. The health clusters serve to enhance collaboration across regions and municipalities to ultimately improve prevention and avoid the need for hospitalization and specialty care, which is of increasing importance given the aging

population and limited hospital capacity. The health clusters also provide a pathway for shared accountability of patients with, for example, hospitals responsible for patients up to 72 hours after a hospital discharge to account for condition exacerbations that may occur after a change in the site of care. However, it has been a challenge to integrate care across levels and further reforms may be needed to better align economic incentives between regions and municipalities and ensure coordination efforts are implemented systematically across regions for all populations.¹³

Second, population health initiatives are now increasingly adopted by traditionally acute-focused health care systems as part of their transformation efforts, often through partnerships with community-based organizations. This approach engages specialists and acute care providers, secures their commitment to change management, and leverages the expertise and resources of community-based providers. For instance, Singapore Health Service, or SingHealth (a public health care system comprising acute and community hospitals, specialty centers, and polyclinics), developed a specialist-involved population health approach through the SingHealth Duke-NUS Disease Centers (SDDCs). As of June 2025, 16 SDDCs have been set up in partnership with Duke-NUS to focus on disease-based outcomes that will benefit from multidisciplinary coordination for training, research, and clinical service.¹⁴ For example, the SingHealth Duke-NUS Breast Centre is leading the integration of initiatives and working as one to support breast cancer patients through their journey, from outreach and screening to treatment and recovery and survivorship.

SingHealth also adopted a place-based, person-centered model, moving away from an institution- or program-centered approach. This shift is exemplified through its flow-hold-link model, which is designed to support the continuum of care by flowing patients from the hospital setting, to holding them in integrated community care teams, and then linking them with community partners to empower patients to take charge of their health.¹⁵ This approach emphasizes a seamless patient experience as they flow through the health system supported by interdisciplinary teams called Healthier SG Teams.¹⁵ These teams consist of primary care providers, community nurses, well-being coordinators, and community partners to integrate both health and social services. Implementing such a model requires investment and capacity building to ensure that community health providers are equipped with the necessary resources. Health systems operating under capitated payment arrangements may have more flexibility to design care delivery teams, but there may be challenges with budget allocations between acute care providers and those in the community.¹⁶

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Although SingHealth’s model shares similarities with other health systems, such as assigning regional accountability for populations, it stands out by creating a more integrated ecosystem of care. Unlike systems that are more fragmented or decentralized, SingHealth fosters collaboration between hospitals, specialists, primary care, and community providers at both strategic and operational levels. SingHealth’s approach aims to address the broader factors influencing health

— medical needs and social drivers of health — ultimately reducing patient populations. This represents a major step forward in shaping population health. Similar initiatives, like accountable care organizations in the United States, share the goal of improving health outcomes through coordinated care and accountability for patient populations. Like SingHealth, these efforts aim to integrate various health care services to provide seamless, patient-centered care, manage costs, and improve overall health outcomes.

Prioritizing, Implementing, and Evaluating Innovations to Improve Population Health in Collaboration with Communities

Leveraging the expertise and resources of community-based organizations is a common strategy in population-based health approaches. Traditional hospital-focused systems may not be best positioned to lead population-based health initiatives due to their primary focus on acute and specialty care.¹⁷ Health systems often struggle to balance these priorities while being responsive to the dynamic and heterogeneous health and social needs of their patient populations. In addition, they face challenges in determining the best ways to partner with community-based organizations and ensuring that community voices are central to the shift toward population-based initiatives. Given the extensive scope of population health — which spans physical, mental, and social care needs — health systems often partner with community organizations to enhance impact and prioritize interventions based on community needs.

Northwestern Medicine's evidence-based approach to community partnership illustrates how health systems can amplify community efforts while continuing to innovate in patient care. Northwestern Medicine developed a community partnership model aimed at advancing health equity and population health through collaboration with community-based organizations and providers, such as Federally Qualified Health Centers (FQHCs) and free clinics.¹⁸ It identifies partners using a mix of data-driven analysis (assessing the organization's ability to impact care) and assessing mission alignment and the longevity of the organization, according to David Derman, MD, the Senior Vice President of Innovation at Northwestern Memorial Hospital. This model facilitates collaboration with organizations in areas where the hospital lacks expertise and capacity — such as providing housing support to individuals experiencing homelessness — to scale its impact on community health.

Partnerships are categorized into three levels of increasing engagement, with measures developed to assess the partnerships, including scalability, organizational leadership, and infrastructure. Northwestern Medicine's partnerships range from informal engagements like volunteer or financial support to organizations with shared goals (e.g., a community-based organization offering trauma counseling and mental health services for those affected by gun violence¹⁹) to formal partnerships with community-based organizations, including joint research or supporting educational opportunities for medical students within the community (e.g., leveraging the expertise of FQHCs for primary care medical training). However, these partnerships were not established immediately and necessitated building relationships across a community. Developing a similar model requires significant time, investment, and trust building to establish impactful community partnerships. Another key lesson of Northwestern Medicine's partnership model was that successful initiatives are community led but supported by health systems.

Another approach to implementing population health initiatives is to direct health care financing toward upstream interventions, implementing them at the community level. In the United States, the Centers for Medicare & Medicaid Services approved regional (state) pilots testing innovations through Medicaid programs to reallocate medical dollars to address health-related social needs, with the goal of increasing health outcomes and reducing health care costs. For instance, the state of North Carolina is testing the impact of providing nonmedical interventions to people enrolled in the state's Medicaid program through their Healthy Opportunities Pilots. The pilot operates in geographic regions across the state, with each region being responsible for contracting with local providers and community-based organizations to cover 29 nonmedical services across housing, interpersonal violence, food, and transport needs. The program serves to lower health care costs by addressing unmet health-related social needs that contribute to poor health outcomes. Within the first couple of years of implementation, more than 13,000 individuals were enrolled in the program, with nearly 200,000 services delivered from 147 community-based organizations.²⁰

However, a key consideration when implementing innovations that address health-related social needs is that every community has different needs and requires different investments and supports. For example, the specific housing supports needed across North Carolina through the Healthy Opportunity Pilots differed across geographies.²¹ In addition, it has taken time to build the necessary relationships with health service providers and community-based organizations to ensure that people are connected with the services they need. Closing the loop on referrals for health-related social needs requires sustained infrastructure and funding to support community organizations providing services.²² Although the North Carolina Healthy Opportunities Pilots experienced implementation challenges initially, the program demonstrates the value of an initiative that allows for flexibility in responding to need and leverages regional entities and community-based organizations to improve population health. Their understanding of local needs and resources enables these organizations to drive more effective and tailored health interventions, ultimately fostering healthier communities.

Ensuring the Sustainability of Population Health Strategies Within Health Care Delivery Systems

Integrating population health into health care systems requires a foundational shift in payment approaches. Traditionally, health care delivery organizations are paid or funded to provide services that treat illness, not to prevent disease. The short-term, volume-based payment models make it challenging to incentivize providers and health systems to operate under a population-based health care model. To develop and foster population-based health, leaders must strategically allocate resources and implement financial mechanisms that support meaningful improvements over a longer time frame. A challenge facing population health improvements is that current payment and delivery models assess and reward care outcomes over short periods of time, which does not encourage investment in transformation that will have a delayed impact. By designating funding toward population-based goals, health systems can promote proactive and holistic approaches to health care delivery that support long-term improvements in population health outcomes.

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Many health systems are adopting alternative payment arrangements that reward quality and care improvements that support population health improvements. In South Africa, there has been a sharp rise in cases of diabetes and its precursors in recent years.²³ Discovery Health, a private insurer in South Africa, has sought to improve glycemic control, hemoglobin A1c (HbA1c) testing, and disease stability through a Diabetes Shared Value Program.²⁴ In this program, providers receive payments for each patient who meets a designated HbA1c threshold (at least 70% of enrolled patients have at least one A1C test per year and a glycemic control target) and additional payments for patients whose condition remained stable or improved over the year.²⁴ The Diabetes Shared Value Program resulted in a nearly 12% increase in the annual HbA1c testing rate, with one-quarter of participating primary care providers becoming eligible for the value-based payment.²⁵ This has been supported by data feedback to providers, such as recent testing, results, and disease stage, and a population dashboard in the electronic health record that provides alerts, such as if a patient has not had an A1C test in the recommended time frame.²⁴ Furthermore, Discovery Health has launched complementary initiatives aimed at personalized prediction models, such as identifying members at risk using a diabetes and cardiovascular prediction model, as well as a member-focused app, Personal Health Pathways, which recommends the next best clinical action and physical activity.

Sustainability in population health also requires addressing the time horizon challenge — while current measurement frameworks often focus on short-term outcomes, the significant impacts of population health initiatives unfold over longer periods. To assess the effectiveness of these initiatives, it's crucial to set clear and measurable short-term targets for immediate implementation and longer-term goals that capture the full scope of their benefits to health systems. This can be challenging for payers focused on immediate ROI. One way to enhance financial sustainability is through nontraditional partnerships leveraging different business models across organizations with aligned goals. A joint initiative between King's College Hospital NHS Foundation Trust and the Hepatitis C Trust, a charity dedicated to eradicating hepatitis C in the United Kingdom by 2030, exemplifies how to evaluate the short-term impact of a population health initiative that also leads to long-term impact. A multidisciplinary team, which included specialists from King's College Hospital NHS Foundation Trust and peer support and harm reduction centers from the Hepatitis C Trust, conducted a prospective study to evaluate a 3-year project to treat hepatitis C in people experiencing homelessness in south London using mobile units in community hot spots. Though excluded from the study analysis, the initiative supported care continuity for individuals who moved to other areas, including prisons. The initiative succeeded in treating hepatitis C infections, achieving a 70% treatment rate and a 72% sustained virologic response rate.²⁶ In addition, it made broader population health investments by preventing advanced fibrosis and liver cancer through community-based screening efforts. Making broader

population health improvements will require health systems and policy makers to rethink how they measure the success of prevention and health promotion efforts and see them as a tool for achieving health system sustainability.

Shared Lessons Across Health Systems

Health systems around the world have encountered common issues as they have transitioned to population-based health care. First, advancing population health required establishing clear accountability for improving population outcomes, recognizing that different settings and aspects of health care influence overall health (e.g., acute care, specialty outpatient care, primary or preventive care). To improve population health, organizations oftentimes need to align incentives across the care continuum and make additional investments in primary care and community-based resources, which requires buy-in and commitment from health system leaders.

Value-based care models have been a mechanism to incentivize population health outcomes. However, value-based payment models to date have rewarded savings and quality improvements over a 1-year (sometimes as long as a 5-year) time horizon, given that health care payers typically operate on annual budgets or premiums. This could create tension with the true return from prevention, which may take 10–20 years to show measurable results. To manage this tension, population-focused value-based payment models have focused on higher-risk patient populations or targeted interventions that can show short-term results, such as reductions in ED usage from uncontrolled asthma, while recognizing that quality measures may be needed to encourage greater uptake of high-impact prevention activities that may not show measurable health or health care changes during a 1- to 5-year time frame.

Finally, population health initiatives have navigated the tension between encouraging health care organizations to focus on whole-person outcomes while acknowledging the limitations of health care delivery organizations in addressing broader population health needs. For example, while hospitals have expertise in treating acute conditions, they have not been equipped to address social drivers of health, and community-based organizations have deeper expertise in providing services for social needs. Advancing population health requires health systems to partner with and invest in community-based organizations that understand the needs of the communities they serve.

Looking Ahead

Transitioning to population-based health care systems represents a fundamental shift in health care delivery, focusing on the long-term well-being of entire communities rather than solely on individual acute care. This paradigm shift, while challenging, is imperative as health care demands continue to outpace supply, and health systems globally focus on the broader upstream factors that affect individual and community health. Innovative approaches across countries, contexts, and settings demonstrate how health systems have overcome barriers to implementing population health strategies. Key strategies include shaping a culture of accountability for population health, fostering innovative partnerships, and ensuring the sustainability of these

approaches through alternative payment models. These strategies emphasize the importance of integrating health care delivery with community resources, prioritizing upstream interventions, and leveraging technology to engage and support patients. By adopting these approaches, health systems globally can improve health outcomes, reduce costs, and promote the overall well-being of the populations they serve. The ongoing commitment to measuring and evaluating the impact of these innovations will be crucial in achieving sustainable and meaningful health improvements over time.

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