

How Dartmouth-Hitchcock Is Reimagining Health

Dartmouth CFO Shares Lessons Learned From Investing in Population Health

As Chief Financial Officer of the Dartmouth-Hitchcock health system, Robin Kilfeather-Mackey has a prodigious portfolio to watch over: a \$1.8 billion academic health system that serves a patient population of 1.2 million in New England, employing more than 9,100 and that includes a 396-bed tertiary care hospital that serves as New Hampshire's only academic medical center. The Dartmouth-Hitchcock system also includes the [Norris Cotton Cancer Center](#), one of only 45 National Cancer Institute-designated Comprehensive Cancer Centers in the nation; the [Children's Hospital at Dartmouth-Hitchcock](#); affiliate hospitals in Keene and New London, NH, and Windsor, VT; and 24 Dartmouth-Hitchcock Clinics that provide ambulatory services across New Hampshire and Vermont. D-H provides access to more than 1,000 primary care doctors and specialists in almost every area of medicine, and in partnership with the Audrey and Theodor Geisel School of Medicine at Dartmouth and the White River Junction VA Medical Center in White River Junction, VT, it trains nearly 400 residents and fellows annually, and performs world-class research. And, she manages it amid a tumultuous and uncertain time in the health sector.

Despite the challenges, Kilfeather-Mackey has helped steer Dartmouth-Hitchcock toward a new era based on health care value, not volume, and one that pushes its business beyond the walls of hospitals and clinics, potentially having major implications for the institution's bottom line.

Since assuming the CFO role in 2010, she has viewed herself as a steward of both Dartmouth-Hitchcock's financial resources and the people it serves. "I want to ensure that preserving and protecting our finances will also improve the health of the population—not just the health of the patients who walk through the doors of our facilities, but people throughout our communities," Kilfeather-Mackey says. "Fortunately, I have a CEO that feels the same way."

A New Institutional Strategy

Dartmouth-Hitchcock [CEO and President Dr. James N. Weinstein](#), a surgeon who is fiercely committed to improving population health, has been working hand-in-hand with Kilfeather-Mackey to lead the way in developing a sustainable health system to improve the lives of the people and communities Dartmouth-Hitchcock serves, for generations to come. Since the Great Recession, many of the cities and towns in the region have experienced a rapid growth in poverty, unemployment, and with that, a growing number of obstacles to good health. Together, with support from their Board of Trustees, the CEO and CFO have devised three core strategies for transforming the health of their region:

1. Focus on advancing population health
2. Provide care based on value, not volume
3. Develop new payment models beyond fee-for-service that tie revenue to population health outcomes

Under the current fee-for-service reimbursement system, health care organizations and providers are paid for each visit, test, treatment, and procedure. But there is no incentive or structure in place to avoid unnecessary services, or to resolve the underlying causes of people's health care needs.

Dartmouth-Hitchcock wants to change these incentives by shifting to risk-based payment models – such as a single global payment per person along with an agreement to share some of the savings – where providers are rewarded for eliminating unnecessary services and delivering excellent care more efficiently. Four years ago, Dartmouth-Hitchcock was paid almost entirely through fee-for-service and did not have to shoulder much risk. Today, that has begun to change, and by 2020, Kilfeather-Mackey is hoping that the vast majority of their revenue stream will be in fee-for-value models and risk-based contracts.

This shift in payment also means developing new concepts of care and a new commitment to health itself. To effectively promote health – rather than just deliver health care – Dartmouth-Hitchcock is dedicated to an engagement strategy that extends beyond the walls of its hospitals, working through new kinds of partnerships, to reach people more directly and create healthier conditions in homes, schools, workplaces, and community centers. These activities will be financed in part through a novel *Population Health Innovation Fund*, currently valued at \$11 million, and managed by a new department entirely devoted to population health.

This new fund – fueled by the proceeds from Dartmouth-Hitchcock's own investments – is among the first of its kind in the United States, and represents a new era where the health care resources are being reinvested to yield greater value beyond what hospital-centric services alone can deliver.

'Investing in Yourself'

In 2013, when Kilfeather-Mackey met with Board members and senior staff to discuss company investment strategies, one comment particularly resonated with those in the room. Market analysts had observed that “investing in yourself has a more consistent rate of return than investments in the stock market.” Attendees seemed intrigued by the idea that infusing capital into their community at large could be as profitable for a healthcare system as traditional investments in stocks and bonds.

By this time, Kilfeather-Mackey and Weinstein had been talking about population health with their Board of Trustees for more than a year. Both were focused on turning Dartmouth-Hitchcock into a true *health* system that no longer just treated illness, but rather ensured health throughout the region, which in turn could yield significant gains under new payment schemes. While the Board recognized the potential promise of this opportunity, its members were still wary of investing their own assets in non-traditional, community-based activities for the purposes of health improvement.

A decisive moment occurred when Board members and staff gathered to study specific scenarios using the [ReThink Health Dynamics model](#). After hearing from economic experts, investment managers, and faculty at the Dartmouth Institute, these Dartmouth-Hitchcock leaders had begun to surface a set of thorny questions about what a population health strategy could achieve. But their perspective shifted significantly after they saw through a simulation exercise what these upstream investments could likely yield when combined with the downstream delivery system and payment reforms. The experience led



Board members to realize the benefits to both patients and the local economy of diverting a portion of Dartmouth-Hitchcock's earnings and reinvesting it in the community.

Soon after, Kilfeather-Mackey and staff devised an ingenious mechanism to consistently reinvest gains from their endowment portfolio into their Population Health Innovation Fund. To begin, they decided that whenever company investments exceed their goal of 4.5 percent growth, 30 percent of the windfall will go into a newly formed Innovation fund. In its first two years, the Fund accumulated just over \$11 million dollars, which is even more than had been allocated through Dartmouth-Hitchcock's conventional Community Benefit obligations.

Kilfeather-Mackey appreciates that stock market earnings aren't necessarily predictable, therefore she intends to supplement the Innovation Fund with other permanent sources of revenue, including some portion of annual earnings from positive performance under gain-sharing contracts.

For the moment, however, the Population Health Innovation Fund plays a pivotal role in Dartmouth-Hitchcock's grand endeavor to redesign payment models, care delivery systems, community-oriented policies and programs, and other activities that together will systematically advance health.

Kilfeather-Mackey sees this as a multi-step process that will take time to fully roll out. Because few others have taken this sort of enterprise-wide approach to reposition the assets of a major regional health care organization, they are now creating the necessary infrastructure and operational procedures that are needed to implement, iterate, and eventually measure return-on-investment over time.

Overcoming Barriers

As a pragmatist charged with steering a steady financial course, Kilfeather-Mackey acknowledges that there are real barriers in moving away from the familiar zone of fee-for-service. Across New England, Dartmouth-Hitchcock's affiliates are often the largest employers in their community and worried about their bottom line. "We have to be mindful of the economic impact in the environment in which we work and not seem destructive to the current system, but rethinking the current system," she says.

At the same time, maintaining the status quo is not an option. Because of their deep-seated commitment to patient-centered and well-coordinated care, Dartmouth-Hitchcock does not fare well under the current fee-for-service system. They are already in the bottom 20% of Medicare costs, and will continue to experience greater economic pressure until they can reposition the overall business model to reward better health.

Kilfeather-Mackey understands that structural change of this sort is expensive. Dartmouth-Hitchcock spends almost \$6 million a year just managing risk contracts, and plans to redirect funds to more fragile affiliates to keep them economically viable during this transition. But she believes the benefits are worth it. "Our inherent DNA is telling us we should move to payment models that reward for value not volume," she says.





Looking Ahead

Today, hospitals and clinics are increasingly under pressure to reduce costs and improve health outcomes. Kilfeather-Mackey sees this new environment as an opportunity to change the wider health care landscape, and reposition population health as a more critical element of the business operations at her organization. She believes that scaling value-based care models coupled with a serious commitment to invest in population health will be key to changing the system, and sees Dartmouth-Hitchcock's geography and broad network of affiliates as an advantage for rolling out a far-reaching system that advances population health guided by the values and priorities in each community.

For some organizations, investing in population health may conflict with their business objectives. But Kilfeather-Mackey affirms that the entire sector is moving beyond profits and filling hospital beds. And while she acknowledges that the use of windfall profits to invest in population health is still new and unfamiliar, it has the potential to become a widely accepted financing strategy. Kilfeather-Mackey views her organization's economic commitment to population health as a harbinger for new models of health care delivery to come, and hopes that other regional health systems will follow suit.

