What Does a **Sustainable Health System** Mean?

When we talk about a “sustainable health system”, it reflects a commitment to “improving the lives of the people and communities we serve, for generations to come”. Here are some ways we think about the elements of that system:

**It’s a system …**

- that improves the health of our population overall – not just the health of the patients who walk through the doors of our facilities, but people throughout our communities
- that uses new models of care delivery to make care more accessible, less costly, and more effective
- that delivers care in the place and at the point of time or illness progression to have the most impact on the continued health of the patient
- with a workforce working in new ways, often to the top of their license or profession, using the fullest potential of our talented and committed people
- that is financially responsible, investing prudently in people, infrastructure, innovation, education, and research that will truly serve patients and population health
- that works within our communities, as part of the fabric that holds us together
- that values integration and a network of care, and partners locally, regionally, and nationally to improve health and health care
- that measures its results, far beyond the current clinical outcomes and process measures that are in place nationally, so that we know how we are doing, how our patients are doing, and that what we are doing in terms of treatments, therapies, and procedures is effective, necessary, and of value
- that treats patients and families as partners in care, knowing that patients who are fully informed about the risks and benefits of treatments and procedures often make different choices and choices they are happier with than if they had left the decision up to their physician
- that drives change and improvement, rather than just letting change happen to it
- that is transparent, internally and externally, sharing our processes and our results with each other, with our patients and their families, and with other providers, to hold ourselves accountable and ultimately to make us all better
What is Population Health?

Population health has been defined as: “the art and science of preventing disease, prolonging life, and promoting health through organized efforts and informed choices of society, public and private organizations, communities and individuals”.

This definition is a key component of the sustainable health system that Dartmouth-Hitchcock seeks to achieve. We believe the focus of organizations such as D-H should no longer be just on treating illness. We have an obligation to ensure health.

Additionally, as reimbursement systems for providers move from fee-for-service to risk-based models (something Dartmouth-Hitchcock is leading in piloting), the incentives will move to keeping defined populations healthy as a way of controlling costs. Defined populations under new reimbursement models are those “attributed” to us because we are the entity responsible for their health and health care costs.

This is particularly critical as the rates of chronic disease increase in the U.S. By 2020, it is estimated that 167 million Americans will have at least one chronic condition; 88 million will have multiple chronic conditions. Treatment of chronic disease currently accounts for 78 percent of all health care spending in the United States.

Under the current fee-for-service reimbursement system, health care organizations and providers are paid based on individual visits, tests, treatments, and procedures. In this system, a person with diabetes receives medication, treatment, and hopefully, ongoing management. But there is no incentive and no structure in place to deal with the underlying causes of the diabetes, nor to address other health conditions that might co-exist, or life challenges that may impede the process of effective management.

In a population-based approach, we take a far broader view of health and the factors that influence the health of a community – often called “the social determinants of health”. Education, economics, availability of transportation, access to exercise and healthy foods – these are some of the things that influence the health of a given population. Telling an obese person with diabetes to eat more nutritious foods is of little use if the family’s ability to travel is limited and there is no source of healthy, affordable food within close distance.

This shift to population health also means reaching out in different ways and developing new models of care. To effectively deliver health – rather than just health care – we need to be in the communities, working in new kinds of partnerships, to reach people in their homes, schools, and community centers. Tele-health and care navigators who help to coordinate resources and guide individuals through the process will become more common and valuable in this new paradigm.

Dartmouth-Hitchcock will always be here to offer the best care to those who need acute care and other medical services. But we are hopeful this broader approach to keeping the people of our region healthy will result in fewer of our neighbors needing that hospital or urgent care.
What is **Value-Based Care?**

At Dartmouth-Hitchcock, we talk about basing health care on “value, not volume”. What does that mean?

In the current fee-for-service model of reimbursing providers for health care, physicians and organizations have incentives to “do” more. The more tests you order, patients you see, procedures you do, the more money you will make.

One result of this payment based on volume model is enormous variation in rates of procedures and tests such as imaging and screening. As documented by The Dartmouth Atlas of Health Care, there is a 2.5-fold variation in Medicare spending nationally, even after adjusting for differences in local prices, age, race and underlying health of the population. This geographic variation in spending is unwarranted; patients who live in areas where Medicare spends more per capita are neither sicker than those who live in regions where Medicare spends less, nor do they prefer more care. Perhaps most surprising, they show no evidence of better health outcomes.

One way of addressing this variation — and giving patients the care they want and need — is to move to a reimbursement system that is value-based. We speak of it as “the value equation”: Quality over Cost over Time.

For patients, this means safe, appropriate, and effective care with enduring results, at reasonable cost. For us, it means employing evidence-based medicine and proven treatments and techniques that take into account the patients’ wishes and preferences.

A critical component of understanding value is measurement. How can we know what works unless we measure our results and track them over time? Any patient considering a procedure should be able to know from their physician what it will cost and what his or her results will be, with firm data, from performing that procedure?

Without that data, patients lack the tools to make informed choices. We would not accept this absence of information when we buy a car or dishwasher or any other kind of product or service; why should it be acceptable in health care?

A focus of health reform has been to more closely track value measures such as complications, hospital-acquired infections, and readmissions. Hospitals now face financial penalties if their rates of readmission are too high, for example.

Through our Value Institute and quality and safety efforts, we are determined to be a leader in delivering value. Our readmission rates are in the lowest 1 percent in the nation for chronic heart failure, and at the top 5 percent for effectiveness and efficiency.
What do we mean by **New Payment Models**?

As part of health reform and confronting a health care system with costs that are unsustainable, policymakers and others have been looking at – and testing – new payment models. These would move away from fee-for-service and payment based on volume to systems that encourage more coordinated care, focusing on the overall health of the population.

The graph below shows the incentives under the current payment model and the evolution of the incentives as we shift from fee-for-service to population health.

### Confronting a Changing Paradigm: The Evolution of Incentives for Providers

<table>
<thead>
<tr>
<th></th>
<th>Fee for Service</th>
<th>DRG/Quality Cost Incentives</th>
<th>Accountable Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Volume</td>
<td>▲</td>
<td>▲</td>
<td>▼</td>
</tr>
<tr>
<td>Length of Stay</td>
<td>▲</td>
<td>▼</td>
<td>▼</td>
</tr>
<tr>
<td>Ancillary Testing</td>
<td>▲</td>
<td>▼</td>
<td>▼</td>
</tr>
</tbody>
</table>

- Health Care Environmental Paradigm
  - System formation and expansion, market consolidation
  - Volume driven primary and specialty care
  - Continued expansion
  - Emergence of quality and safety processes and metrics
  - Increased transparency on pricing and outcomes
  - The “Triple Aim” (Value)
    - Improve the experience of care
    - Improve the health of populations
    - Reduce the per capita costs of health care
    - Accept “integrator” role
    - Two-way risk sharing
    - Appropriate utilization

Dartmouth-Hitchcock has been a leader in promoting this change. The concept of the “Accountable Care Organization” was developed by Dr. Elliott Fisher and others at The Dartmouth Institute for Health Policy and Clinical Practice (TDI) and is now being tested across the country. D-H was one of the first 32 organizations to be selected to participate in the Pioneer ACO project, funded by the Centers for Medicare and Medicaid Services.

Other payment models being discussed are “bundled” payments, where instead of paying for each step in a procedure, providers would be paid one sum for an episode of care. For example, an episode involving total knee replacement would cover everything that happens 60 days before and 90 days after the procedure under the bundled payment system. Providers who are efficient and with low complication and readmission rates would likely benefit from this payment equation over those who experience more complications, readmissions, or repeats of the procedure who would lose money.

Another model is “capitation”, in which providers would receive a set payment for each person or “covered life”, instead of being paid based on the number of services provided. Thus, the incentives are to keep people healthy rather than waiting until disease presents itself.

Dartmouth-Hitchcock is working with the federal government, the states of Vermont and New Hampshire, and providers across our region to test these models and work to improve health and contain costs.