

Statement to  
Senate Finance Committee  
Health Reform Summit

**Concurrent Session: Approaches to Bending the  
Growth Curve of Health Care Spending**

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## Summary of Major Points

- Nearly two-fold differences in Medicare spending exist across U.S. regions and across the populations cared for by major academic medical centers. Differences in patients' preferences and pricing only account for a small percentage of the variation in spending. Instead, the variation is largely due to differences in the volume and intensity of "supply-sensitive services." Patients in high spending systems have more physician visits, more diagnostic tests and imaging services, and spend more time in the hospital.
- Higher spending regions do not provide better care. On the contrary, the evidence suggests that higher spending is associated with slightly lower quality, worse patient experience with care, and poor care coordination. In addition, U.S. regions that grew fastest fell further behind in their quality and outcomes.
- This research emphasizes the magnitude of the opportunity to improve the value of Medicare services and highlights one of the key underlying causes of rising costs and poor quality: lack of local accountability for capacity, quality, coordination of care, and overall costs.
- To bend the cost curve, we need to foster the development of local organizations that can be accountable for the overall cost and quality of care of the populations they serve. We need to move toward a payment system that rewards providers for improving quality, effective care coordination, reducing costs, and avoiding further unneeded capacity growth. We must offer providers a win-win alternative to their current predicament.
- Working with colleagues at the Brookings Institution, we have developed an approach to payment and delivery system reform that can be implemented under the current fee-for-service payment system but that would offer all providers a pathway toward local integration, accountability and the opportunity to receive shared savings payments when they reduce costs and improve quality.
- We propose that Congress support the development of Accountable Care Organizations (ACOs), which are local integrated delivery systems that are large enough to support comprehensive performance measurement; can provide or effectively manage the full continuum of patient care; and, could participate in shared-savings programs as an interim step toward fundamental payment reform.
- ACOs should be a key element of payment reform for the following reasons: (1) Most physicians, whether knowingly or not, practice within a well-defined "virtual" network with other providers in their community, and incentives could prompt providers to establish formal organizations that would neither disrupt their current practice patterns or their patients' care; (2) ACOs could be given incentives to control total Medicare payments, allowing budgetary savings while preserving provider incomes; (3) Performance measurement at the level of an ACO would be much more tractable in the near term; (4) ACOs, because of their ability to pool resources, are more likely to invest in the infrastructure required to improve care, such as electronic health records.
- Congress could help by ensuring that providers have a roadmap that aligns current quality measurement and payment reform initiatives with the longer term goals of better integration, coordination, and fundamental payment reform. Providers could be encouraged to participate in reporting current quality measures at the group level (i.e. their local provider networks) in preparation for eventual participation in an ACO shared savings program.

Thank you, Senator Conrad and Senator Crapo, for inviting me to address you today.

There is broad agreement that the U.S. health care system is facing significant challenges. The quality of care is remarkably uneven. Costs are rising at rates that threaten the affordability of care and the sustainability of the Medicare program. And, there is broad agreement that our current approach to paying for medical care is part of the problem.

The Medicare Payment Advisory Commission report *Assessing Alternatives to the Sustainable Growth Rates System* provides an outstanding analysis of the key issues and challenges confronting Congress as it considers how to reform current Medicare spending during a period of serious budget constraints. Congress should make a substantial investment in Medicare's ability to implement payment systems that reward appropriate, high quality care and efficient use of resources.

In the remainder of my testimony, I will briefly summarize the key findings of our research on variations in Medicare spending, what we have learned about the likely causes of these differences, and why a focus on fostering organizational accountability should be a key part of any payment reform strategy.

### **Variations in Medicare Spending**

Over thirty years ago, John Wennberg published his seminal article documenting the remarkable variations in practice and spending across small areas of Vermont.<sup>1</sup> With core support from the Robert Wood Johnson Foundation, and more recently from the National Institutes of Aging, we applied these methods to the Medicare population and found variations of a similar magnitude across the nation (Figure 1).<sup>2</sup> Per-capita spending on Medicare beneficiaries residing in regions such as Miami, Los Angeles and Manhattan is more than 60% greater than for those beneficiaries residing in Minneapolis, Sacramento, or Rochester. We have now repeated these studies focusing on the chronically ill populations served by hospitals and their medical staffs.<sup>3,4</sup> Even among the top 10 academic medical centers (based upon US News and World Report's rankings), we find two-fold differences in per-beneficiary spending on severely ill patients (Figure 2). Most of the variation in spending across these institutions is due to differences in the volume or intensity of services provided.

Two critical questions are raised by these studies. What are the benefits, if any, of higher spending across US regions and hospitals? And, what are the causes of the differences in spending?

### **What are the benefits of higher spending?**

Over the past ten years, we completed a series of studies examining the implications of these differences for the quality and outcomes of care (Figure 3). Overall, the technical quality of care, such as whether patients receive appropriate initial treatment for their heart attacks or timely preventive services, is somewhat worse in higher spending regions.<sup>2,5</sup>

Patients in higher spending regions do not receive more elective surgery.<sup>2</sup> Rather, the differences in spending are almost entirely due to differences in "supply-sensitive services",

which include the frequency of visits to physicians, how much time similar patients spend in the hospital, and differences in other discretionary services such as imaging, diagnostic testing and minor procedures.<sup>2,6</sup>

Beneficiary satisfaction with care was no better in high spending regions and perceptions of the accessibility of care were somewhat worse.<sup>7</sup> In terms of health outcomes, mortality rates in higher spending delivery systems were either no better or slightly worse than in lower spending delivery systems.<sup>7</sup> Perhaps most worrisome were our findings that spending growth was greatest in higher spending regions on average and survival following heart attacks did not improve as much as the survival rates for their lower spending counterparts.<sup>8</sup>

Studies comparing physicians' perceptions of their ability to provide high quality care present a similar picture. Physicians in higher spending regions are more likely to report that the continuity of their relationships with patients and their communication with other physicians is inadequate. On average, physicians in higher spending regions are more likely to report difficulty providing high quality care.<sup>9</sup>

These findings point to a troubling paradox: within the context of the U.S. health care delivery system, higher spending is associated with lower quality of care, slightly worse outcomes, and poor communication.

### **What are the causes of higher spending?**

Our more recent work has focused on trying to disentangle the underlying causes of the differences in spending and spending growth across regions. It is important to distinguish what we know, based on completed research, from what we think we know, our current best theory of what explains the findings.

#### *The evidence*

Patients' preferences for care vary slightly across regions but only explain minor variations in spending. For example, Medicare beneficiaries in high spending regions are no more likely to prefer aggressive end-of-life care than those in low spending regions<sup>10,11</sup>. Differences in the malpractice environment, while another legitimate cause of variation, explain only about 10% of state level differences in spending.<sup>12</sup>

The local capacity of the health care delivery system varies dramatically across regions of differing spending levels and does explain a significant portion of the variation (Figure 4, 5). High spending regions have 32% more hospital beds per-capita, 65% more medical specialists, and 75% more general internists.<sup>2</sup> The current payment system rewards certain services, such as invasive cardiovascular procedures, with high margins, which incents expanded capacity. The payment system ensures that any new capacity will remain fully utilized (Figure 4). Elyria, Ohio, for example, has for many years had the highest rates of angioplasty in the United States. A New York Times article described how the high financial rewards for performing this procedure led to the rapid growth of the cardiology group in Elyria.<sup>13</sup>

More recently, we have found that physicians' clinical judgment also varies across regions of differing spending levels (Figure 6). In a study using clinical vignettes, primary care physicians

in higher spending regions were more likely to recommend discretionary treatments, such as more frequent visits or imaging, than those in lower spending regions.<sup>14</sup> Where clinical evidence is strong, such as in referral to a cardiologist for chest pain and an abnormal stress test, we found no association between physicians' decisions and local spending levels. It is in the so-called "gray" areas of medicine where strong clinical evidence is not available that variations in physician judgment and spending occur.

*The theory: capacity, payment and clinical judgment in the "gray" areas*

These findings suggest a likely explanation for the dramatic differences in spending across regions and the paradoxical finding that higher spending seems to lead to worse quality and worse outcomes (Figure 7). Current clinical evidence and principles of professionalism are an important, but limited, influence on clinical decision-making. Most physicians practice within a local context and policy environment that profoundly influences their decision-making, especially in discretionary settings. Hospitals and physicians each face incentives that reward expansion of capacity (especially for highly reimbursed services) and recruitment of certain procedure-oriented specialists.

When there are more physicians per capita, they will see their patients more frequently. When there are more specialists or hospital beds available, primary care physicians and other specialists will learn to rely upon those specialists and use those beds. By example, from the primary care physician's perspective, it is more efficient to refer a difficult problem to a specialist or admit the patient to the hospital than to try to manage the patient in an office visit for which payments have become relatively constrained.

The consequence is that individual clinical and policy decisions that appear to be reasonable given the current payment system, lead in aggregate to higher utilization rates, greater costs, and inadvertently, worse quality and outcomes. The key element of this theory is that because so many clinical decisions are in the "gray areas", any expansion of capacity will result in a subtle shift in clinical judgment toward greater intensity.

Increased utilization can lead to patient harm through several mechanisms.<sup>15</sup> Greater use of diagnostic testing could find more abnormalities that would never have caused the patient any problem, a condition referred to as "pseudo-disease". Because most treatments have some risk, providing unnecessary treatments to patients can cause harm. As care becomes more complex and more physicians are involved, it will be less and less clear who is responsible for each aspect of a patient's care. As a result, miscommunication and errors become more likely.

**Implications: accountable care, performance measurement, and payment reform**

Reform efforts should include a focus on fostering local organizational accountability for quality and total per beneficiary costs through comprehensive performance measurement and eventual payment reform (Figure 8). The current environment also suggests that a critical element of any successful strategy will be to control the future growth of capacity, whether within a local integrated delivery system or at the state or national levels.

An ACO would be a local delivery system that is large enough to support comprehensive performance measurement, can provide or effectively manage the continuum of care as a real or

virtually integrated delivery system, and is capable of prospective budgeting and planning their resource and workforce needs (Figure 9). These could include large multi-specialty group practices that own their own hospitals, physician-hospital organizations or other large integrated physician practice networks, and hospitals that employ their own physician groups, as well as regional collaboratives.<sup>17</sup>

Our analyses of Medicare claims data found the following.<sup>17</sup>

- Almost all physicians can be empirically assigned to a single hospital, based upon where they provide inpatient care or where their patients are admitted.
- Medicare beneficiaries cared for by these physicians tend to receive most of their care from within the virtual group, their affiliated hospital, or a single other hospital and its physicians (often an obvious referral hospital).

The advantages of a payment reform strategy that included fostering ACOs include at least the following.

*(1) Most physicians already practice within relatively coherent real or virtual networks, whether knowingly or not.* Because these networks are affiliated with one or more hospitals, incentives and removal of current legal barriers could encourage them to establish formal relationships for the purpose of performance measurement, pay-for-performance rewards, shared savings, or other gain-sharing arrangements that would require little disruption of current referral patterns.

*(2) Effective performance measurement would be more tractable.* Performance measurement efforts that focus on individual physicians have numerous difficulties, including the narrow scope of quality measures available, potential limitations of episode groupers as measures of costs, the difficulty of attributing care to a single physician, the lack of performance measures for many specialties, and the relatively small number of patients that can be specifically attributable to any single physician. At the level of an ACO, the scope of performance measures could be much broader.

The Institute of Medicine's reports on performance measurement and pay-for-performance both call for the development of measures that focus on the longitudinal experience of Medicare beneficiaries, including measures of total costs and health outcomes, as well as measures that directly address the current fragmentation of patient care. Measurement at the ACO level increases the number of physicians whose care can be assessed and the number of patients who contribute to measures making a greater breadth of measures feasible. With appropriate risk adjustment, measures of health outcomes such as surgical mortality rates or outcomes following acute myocardial infarction would also be possible.<sup>19</sup> Finally, there are important practical advantages to the ACO model: the administrative complexity of data collection methods and auditing procedures for 5000 hospitals would be much less daunting than those required to collect and audit data on the more than 500,000 individual physicians practicing in the United States.

*(3) Measures and incentives could encompass total Medicare program payments.* A focus on Accountable Care Organizations could include a broader array of spending measures beyond physician services (Figure 11). Many conditions are treated using resources paid for by Medicare Parts A, B, and D. An ACO would allow Medicare to combine different pools of

resources to incent providers to work together to improve care efficiencies instead of working within their current payment silos.

*(4) ACOs would have the capacity to invest in system improvement.* Evidence is growing that health plans and hospitals are responding to current public reporting and pay-for-performance initiatives. To be successful in these programs, electronic data collection systems must be in place. We know that large-multispecialty medical groups are more likely to invest in electronic health records and care management systems than their smaller counterparts. The ACO model would allow for a greater pooling of resources and subsequent system improvements, such as EHR adoption, for smaller provider groups.

Finally, the most important reason to focus on ACOs is to establish accountability for local decisions about capacity and costs. Local decisions that influence capacity, including capital investments, physician recruitment, and individual physicians' choices about practice location, are likely to be the first step in the causal chain leading to more intensive practice patterns and overuse of supply-sensitive services.

### **Challenges facing the development of ACOs**

While the potential advantages of fostering the development of ACOs are substantial, serious barriers to moving in this direction must be acknowledged.

*The current market.* Under a payment system that now largely focuses on controlling the prices of individual services, physician entrepreneurial activity has increased dramatically as has the competition between hospitals and physicians. This occurs because the system disproportionately rewards technically advanced procedures and those providers who own their facilities or increase their volume of services.

*Cultural barriers.* Physician practice and professional identity in the United States has long been characterized by a high degree of professional autonomy and a culture of individual responsibility. Both characteristics are reinforced by current medical training, professional malpractice liability programs, and payment systems. Although there are numerous examples of physicians deeply engaged in collaborating with hospital administrators and nurses to improve the delivery of care, these remain relatively isolated examples. The notion of accepting a degree of responsibility for the care of all patients within their local delivery system will be resisted by many physicians.

*Legal obstacles.* Legal obstacles to physician-hospital collaboration are substantial, especially with regard to sharing the potential financial gains of more efficient care.

*Variability in the degree of alignment.* Our data reveal substantial variability across hospitals in the degree to which physicians and patients are already aligned with a single hospital and a relatively coherent medical staff.

## **Moving forward**

It is these practical barriers, however, that make pursuing the notion of the ACO model worthy of further discussion and cautious efforts to test the ideas more fully. The alternative -- a narrow focus on provider performance assessment and pay-for-performance incentives aimed at individual physicians and institutional providers -- will require overcoming many of the same political and practical challenges with less benefit to the system. This path could reinforce the fragmentation and lack of coordination that characterizes the current delivery system. Any effort that fails to foster accountability for future capacity growth will be unlikely to rein in the growth of Medicare spending.

The remarkable differences in spending growth observed across existing virtual networks reveals that some are already growing at a sustainable rate that will not imperil the future health of the Medicare Trust Funds. Payment reform should include efforts to provide support and incentives that would allow all Medicare beneficiaries to receive care from local integrated delivery systems that achieve both high quality and a truly sustainable rate of growth.

We are encouraged by the success of some participants in the Center for Medicare and Medicaid Services Physician Group Practice Demonstration. Many of the groups have been successful in reducing expenditures below their comparison group, and a few have received substantial shared savings payments. In addition, states such as Oregon and Vermont have expressed interest in developing an ACO-based payment system for their states.

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Figure 1:

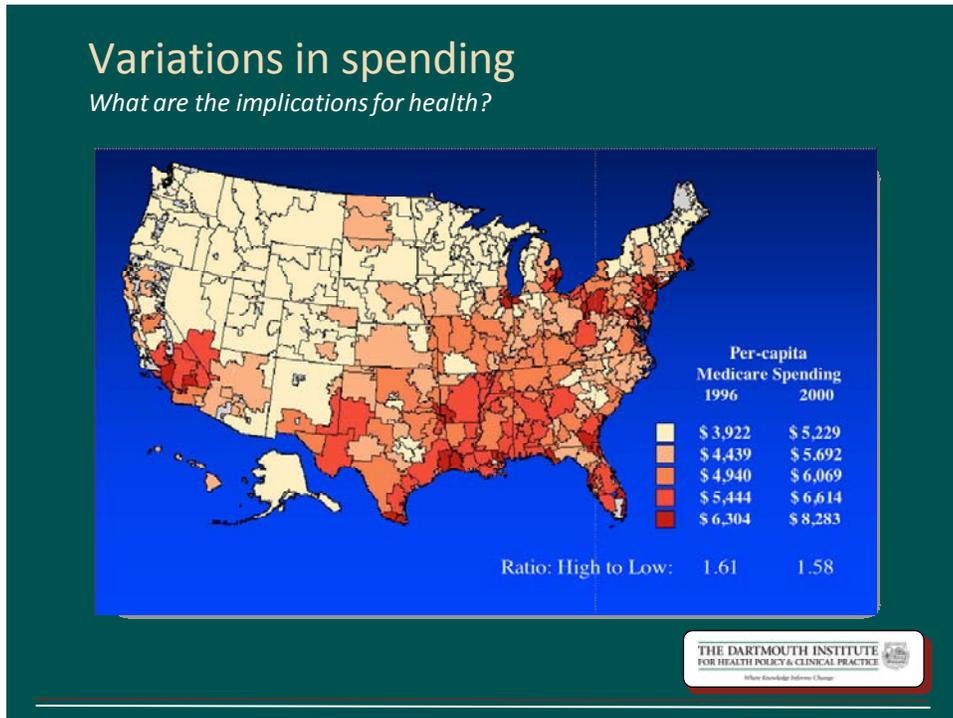


Figure 2

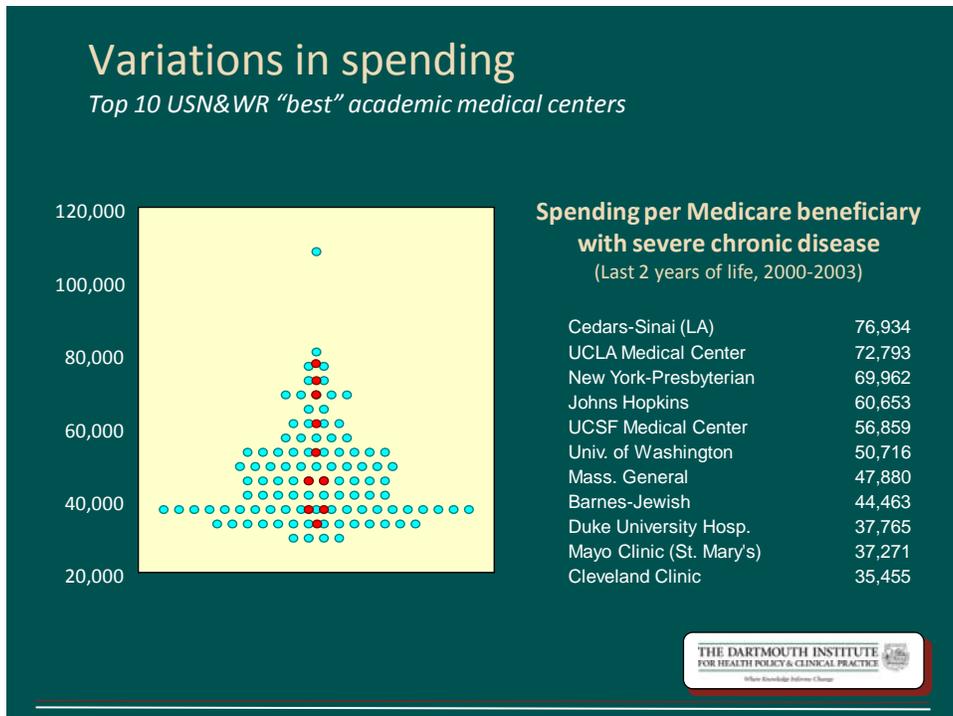


Figure 3

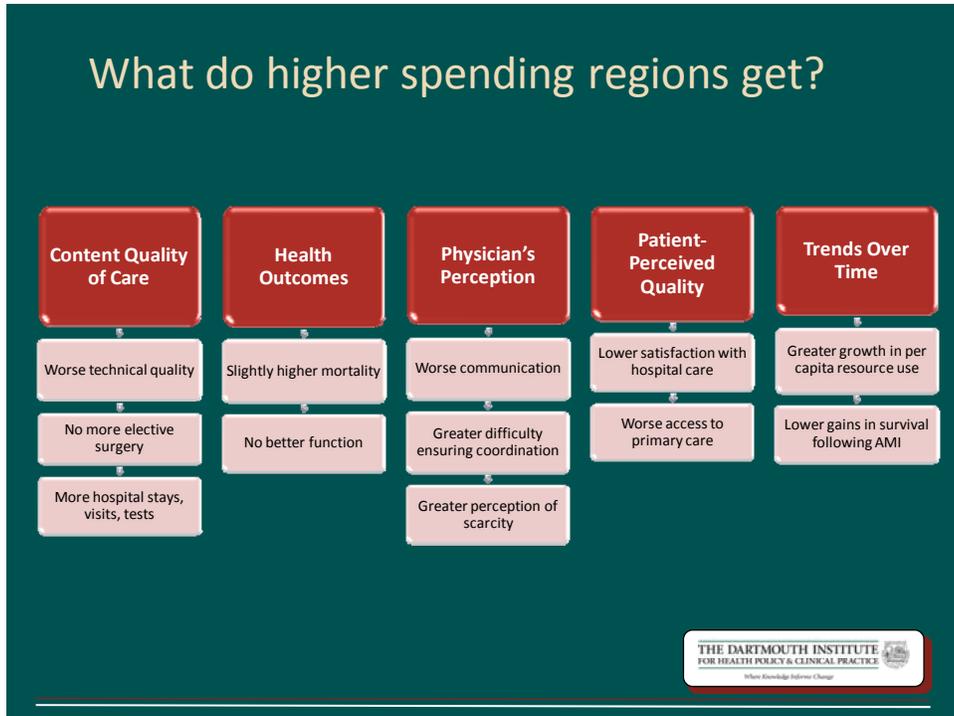


Figure 4

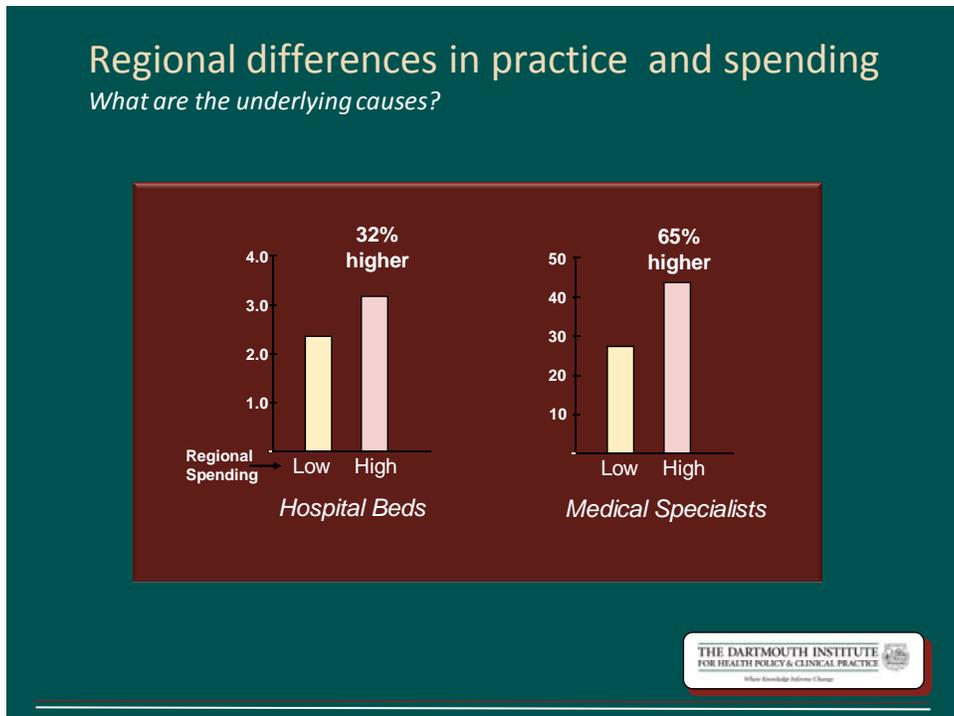


Figure 5

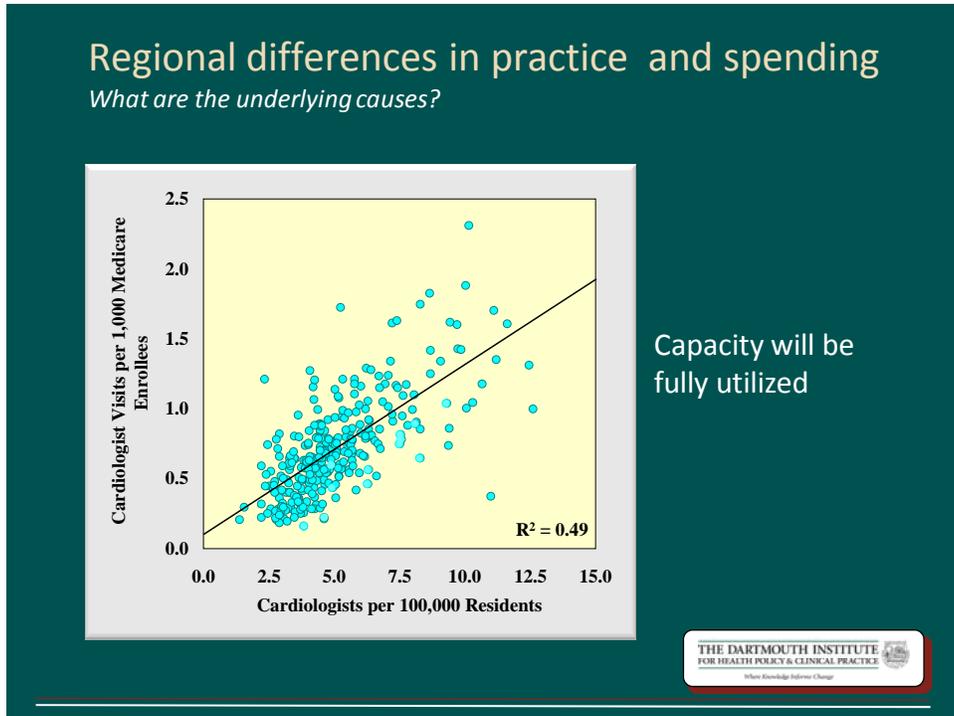


Figure 6

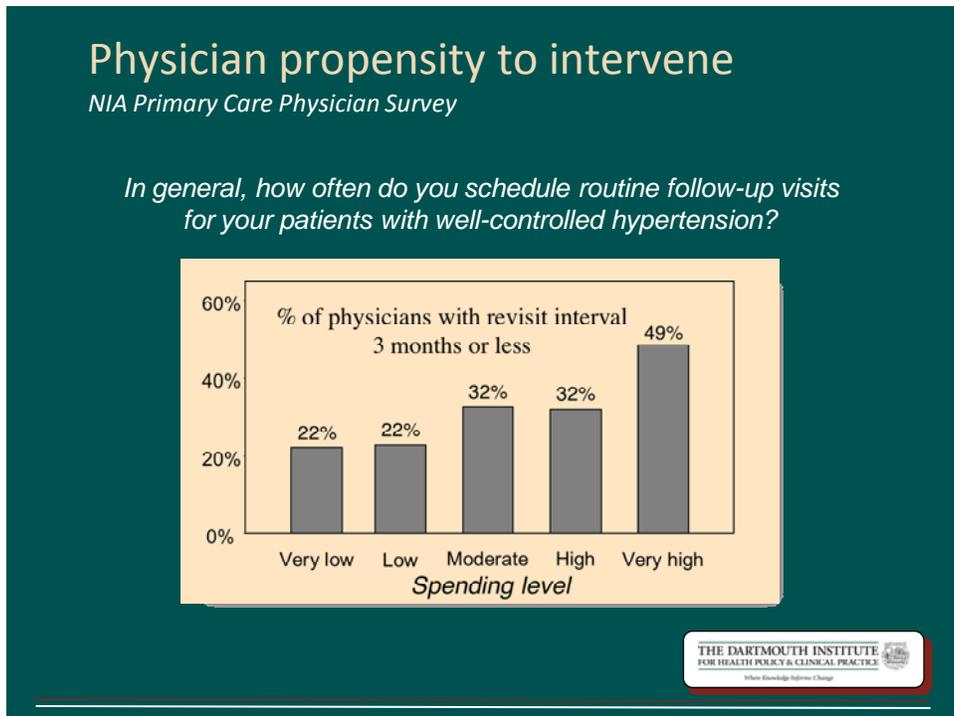


Figure 7

Payment system rewards increased utilization and greater intensity in the “gray areas” of medicine

- Clinical evidence (e.g. RCTs, guidelines) and principles of professionalism are a critically important -- but limited -- influence on clinical decision-making.
- Physicians practice within a local context and policy environment that profoundly influences their decision-making.
- Payment system ensures that existing (and new capacity) is fully utilized. Physicians adapt to available resources: more referrals, more admissions, more ICU stays.

**Consequence:** reasonable individual clinical and local decisions lead, in aggregate, to higher utilization rates, greater costs -- and inadvertently -- worse outcomes



Figure 8

### Implications for policy makers

*Focus on the underlying causes of rising costs*

Underlying cause		General Approach
Lack of accountability for key <i>local</i> determinants of quality, costs and health outcomes	➔	Foster ACO development with incentives to limit future growth
Assumption that more care is better care	➔	Balanced information on risks / benefit, and strategic performance measures
Payment system that rewards more care, increased capacity, high margin treatments, and entrepreneurial behavior	➔	Reform of payment system (long term), shared savings as interim approach



Figure 9

## Key attributes of an ACO

- **Essential attributes of an Accountable Care Organization**
  - Provides (or can effectively manage) continuum of care as a real or virtually integrated local delivery system
  - Sufficient size to support comprehensive performance measurement
  - Capable of prospectively planning budgets and resource needs
- **Potential Accountable Care Organizations**
  - Integrated delivery systems and hospitals
    - (Mayo, Virginia Mason, Group Health)
  - Physician-Hospital Organizations / Practice Networks
    - (Middlesex Health System)
  - Regional Collaboratives
    - (Rochester, NY)

