What Is the Problem?
Changing Medical Technology, Unchanging Physician Culture, and Variation in Treatment

Thomas H. Lee, MD
Network President, Partners Healthcare System
Professor of Medicine, Harvard Medical School
Associate Editor, New England Journal of Medicine
December 15, 2006
The Sense That the Status Quo Is Unsustainable Grows Stronger Each Year

- Crisis of confidence in U.S. healthcare system epitomized by 2001 IOM report has intensified in years since
- News regular feature stories documenting problems
  - Safety (e.g., infant deaths in Indianapolis due to mix-up in heparin preparations)
  - Reliability (e.g., Americans receive just 55% of recommended care)
Affordability of Care Threatens Any Quality Agenda

Increases in Health Insurance Premiums, as Compared with Overall Inflation Rates and Workers' Earnings, 1988-2005
The Bad News Is Inextricably Intertwined With the Good News

• Tremendous scientific progress. Examples:
  – New drugs: HIV treatment
  – Devices: implantable defibrillators
  – Molecular targeting of therapy: lung cancer
• Even more dramatic progress is on the way
  – Alzheimers – immune therapy and deep brain stimulation?
  – Myocardial infarction – stem cell infusions?
  – Therapy directed against cancer stem cells
• The price of progress:
  – Rising direct costs that are *not* offset by better patient outcomes
  – Indirect costs due to the healthcare delivery system dysfunction
A Flood of Information and Options Overwhelms Physicians Trained For Medicine in Another Era

• Physician culture is dominated by the solo heroic healer
  – Usually male, working from 6 a.m. to 9 p.m. or beyond
  – All knowing
  – Distain for “cook book medicine”

• That model is increasingly non-viable, because
  – Physician demographics are changing
  – Individuals cannot know all they need to know
  – Medicine has become “team sport” for patients with:
    • Chronic diseases (e.g., diabetes, heart failure)
    • Multiple complex conditions
The Potential Result: Chaos

• No individual physician can know the safest, best, and most efficient strategies
• Physicians have to call for help from multiple colleagues, often at multiple institutions
• Physicians don’t know what other colleagues have done (tests, drugs, advice)
• Patients and physicians are confused and unhappy
• Important issues slip between the cracks
  – Lab results overlooked
  – Key clinical information missing at time of visits
The Risks of Inefficiency and Poor Coordination Are Highest for the Most Complex Patients …
One in ten patients with these six chronic conditions are admitted each year and are driving nearly half of all inpatient admissions.
Our Best Hopes Are in Systems That Improve Care
– and Organizations that Can Implement Them

• Doctors cannot work harder or get smarter

• Improvement is likely to come through the adoption of systems that reduce risk of “errors”
  – Information systems with decision support
  – “Human-ware” systems that coordinate care when patient is not in front of physicians

• To implement such systems, providers have to be organized – and those organizations have to be effective
Partners Signature Initiatives: Team Visions

1. Information Systems -- Complete and effective electronic record adoption with decision support
2. Safety -- Integrated system for medication ordering and delivery
3. Reliable population-based care (e.g., JCAHO and HEDIS measures)
4. Disease management – intense individualized care coordination highest risk patients.
5. Trend management – focusing on medications and radiology
The Real Agenda: Two Revolutions

• **Industrial Revolution** – in which clinicians adopt systems that reduce errors of over-use, under-use, and mis-use.

• **Cultural revolution**
  – Teamwork instead of MD as the lone cowboy
  – Focus on care of populations over time
    • Chronic diseases like diabetes, heart failure
    • Complex, high risk patients with multi-system disease

For readers of *The Right Stuff*: The times call for John Glenn more than Chuck Yeager.
Three Key Tactics

• Electronic medical records
  – Improve coordination among providers
  – Provide “just-in-time” decision support to reduce errors of over-use

• Human systems to provide better care to populations over time

• Cultural changes that include willingness to trade some physician autonomy to improve efficiency and quality
Will the Potential of Medical Science Be Reached?

• Systems that improve care and make it more efficient do exist
  – What will it take to get the current physicians to use them?
  – What will it take to get physicians to coordinate their efforts on high risk, high cost patients?

• Wide range of policy, market, and cultural factors will determine the rate at which progress is achieved