



# Best Care at Lower Cost

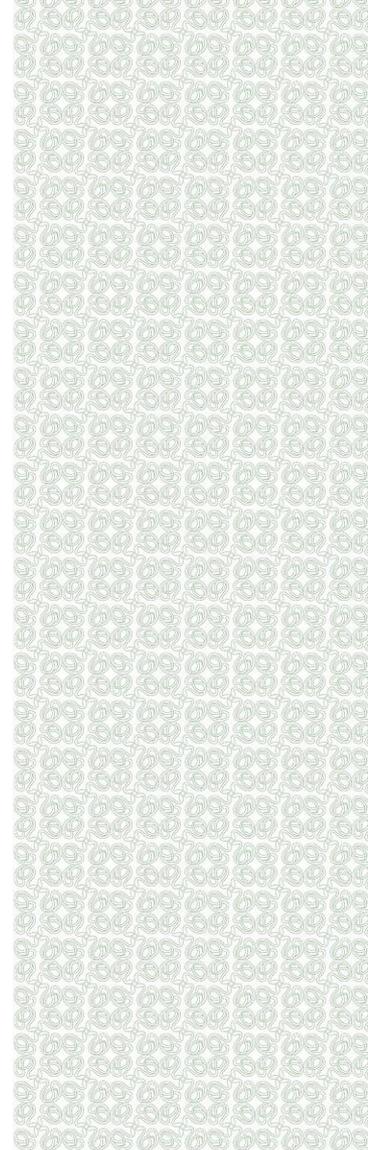
## The Path to Continuously Learning Health Care in America

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# Committee Members

**Mark D. Smith** (*Chair*)

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**Anthony Bryk**

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# Committee's Charge

- An ad hoc Committee will consider the urgent and longer-term actions necessary to foster the development of a continuously learning healthcare system
- **Effectiveness.** The Committee will define the foundational elements of a learning system for health care that is effective and continuously improving
- **Efficiency.** The Committee will define the foundational characteristics of a healthcare system that is efficient, delivers increased value, and is continuously innovating and improving in its ability to deliver high value to patients



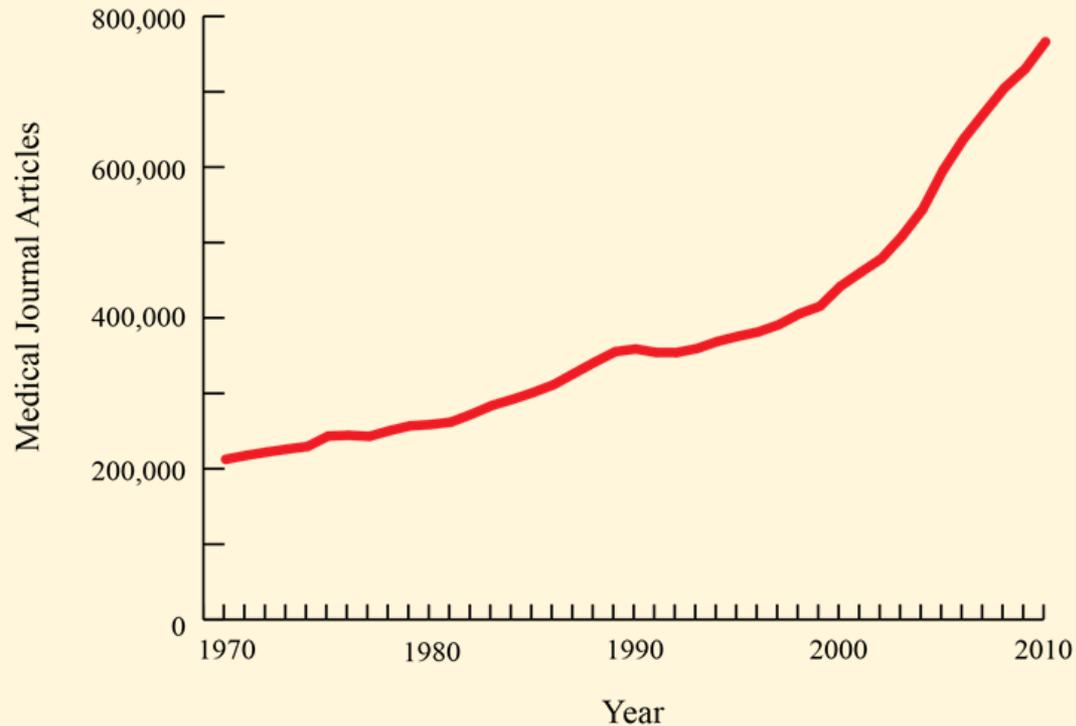
# Why now?

- **Complexity**
- **Cost**



# Complexity

Increasing amounts of information



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# Complexity

## Clinical Complexity

- Physicians in private practice interact with as many as 229 other physicians in 117 different practices just for their Medicare patient population
- ICU clinicians have 180 activities per patient per day
- Chronic disease: a 79 year old patient with osteoporosis, osteoarthritis, type 2 diabetes, hypertension, and chronic obstructive pulmonary disease: 19 medications per day



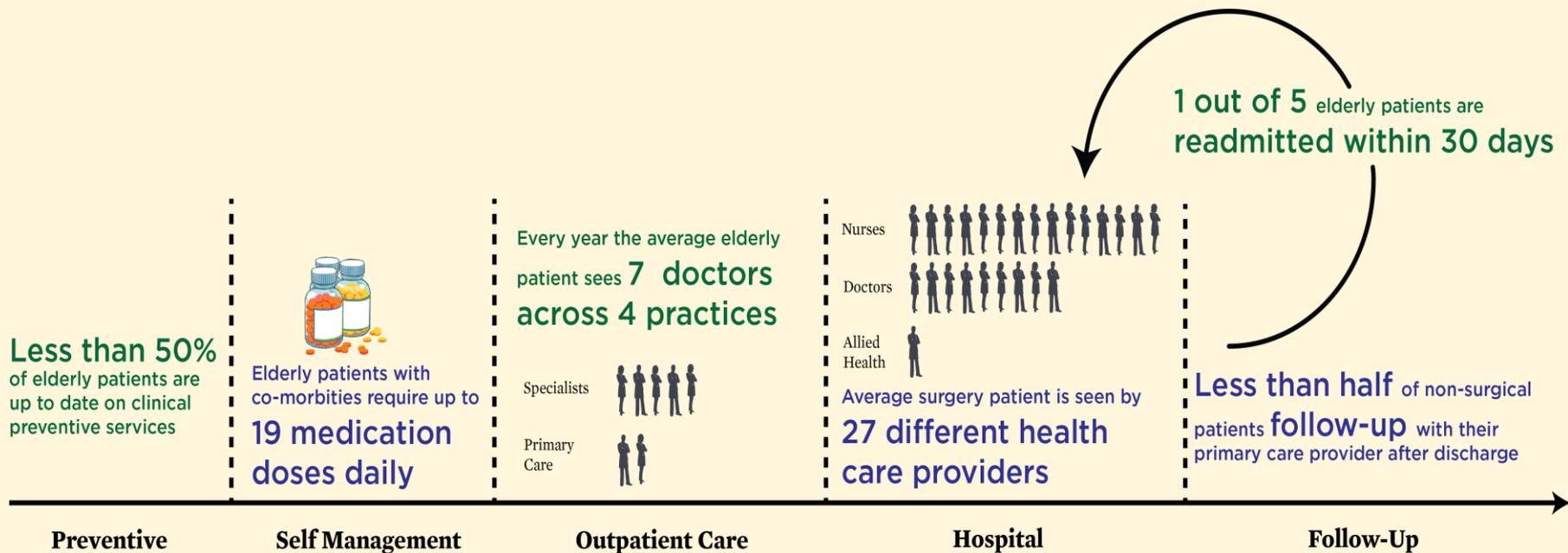
# Cost

- For 31 of the past 40 years, health care costs have increased at a greater rate than the economy as a whole
- Health care costs constitute 18% of U.S. GDP
- 30% increase in personal income over the past decade effectively eliminated by a 76% increase in health care costs
- \$750B in waste



# The Result?

Representative timeline of a patient's experiences in the U.S. health care system



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# The Result?

The U.S. health care system today



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# The Vision

## New Tools

- **Computing Power**
- **Connectivity**
- **Improvements in organizational capabilities**
- **Collaboration between teams of clinicians and with patients**

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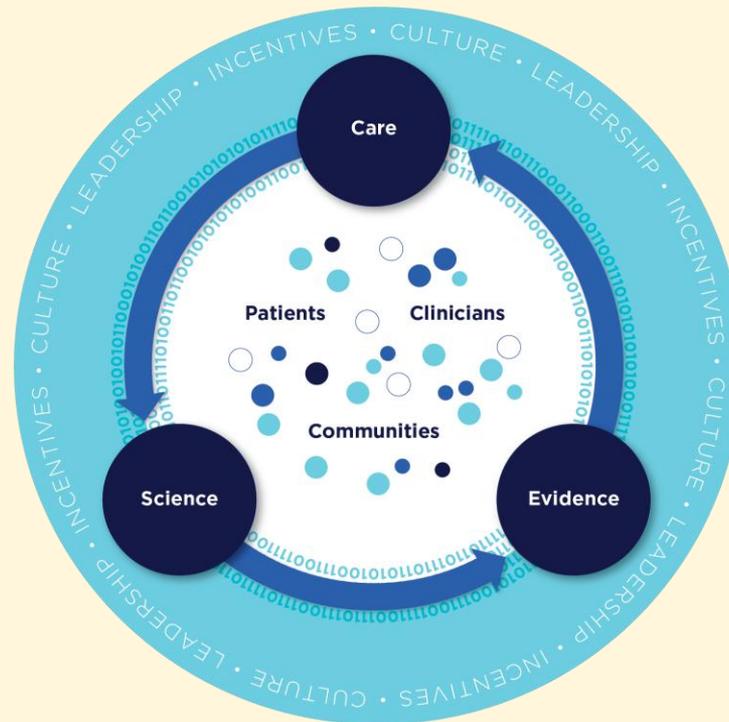
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# The Vision

Continuous Learning, Best Care, Lower Cost



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# The Vision

## Characteristics of a Learning Health Care System

- **Science and informatics**  
Real-time access to knowledge, digital capture of the care experience
- **Patient-clinician partnerships**  
Engaged, empowered patients
- **Incentives**  
Incentives aligned for value, full transparency
- **Culture**  
Leadership-instilled culture of learning, supportive system competencies



# The Vision

## Characteristics of a Learning Health Care System

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### Science and Informatics

*Real-time access to knowledge*—A learning health care system continuously and reliably captures, curates, and delivers the best available evidence to guide, support, tailor, and improve clinical decision making and care safety and quality.

*Digital capture of the care experience*—A learning health care system captures the care experience on digital platforms for real-time generation and application of knowledge for care improvement.

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### Patient-Clinician Partnerships

*Engaged, empowered patients*—A learning health care system is anchored on patient needs and perspectives and promotes the inclusion of patients, families, and other caregivers as vital members of the continuously learning care team.

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### Incentives

*Incentives aligned for value*—In a learning health care system, incentives are actively aligned to encourage continuous improvement, identify and reduce waste, and reward high-value care.

*Full transparency*—A learning health care system systematically monitors the safety, quality, processes, prices, costs, and outcomes of care, and makes information available for care improvement and informed choices and decision making by clinicians, patients and their families.

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### Culture

*Leadership-instilled culture of learning*—A learning health care system is stewarded by leadership committed to a culture of teamwork, collaboration, and adaptability in support of continuous learning as a core aim.

*Supportive system competencies*—In a learning health care system, complex care operations and processes are constantly refined through ongoing team training and skill building, systems analysis and information development, and creation of the feedback loops for continuous learning and system improvement.

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# The Vision → Recommendations

- Science and informatics
- Patient-clinician partnerships
- Incentives
- Culture



- Foundational Elements
- Care Improvement Targets
- Supportive Policy Environment



# Recommendations

## Foundational Elements

- **The digital infrastructure**

Improve the capacity to capture clinical, delivery process, and financial data for better care, system improvement, and creating new knowledge.

- **The data utility**

Streamline and revise research regulations to improve care, promote the capture of clinical data, and generate knowledge.



# Recommendations

## Care Improvement Targets

- **Clinical decision support**  
Accelerate integration of the best clinical knowledge into care decisions.
- **Patient-centered care**  
Involve patients and families in decisions regarding health and health care, tailored to fit individual preference.
- **Community links**  
Promote community-clinical partnerships and services aimed at managing and improving health at the community level.



# Recommendations

## Care Improvement Targets

- **Care continuity**  
Improve coordination and communication within and across organizations.
- **Optimized operations**  
Continuously improve health care operations to reduce waste, streamline care delivery, and focus on activities that improve patient health.



# Recommendations

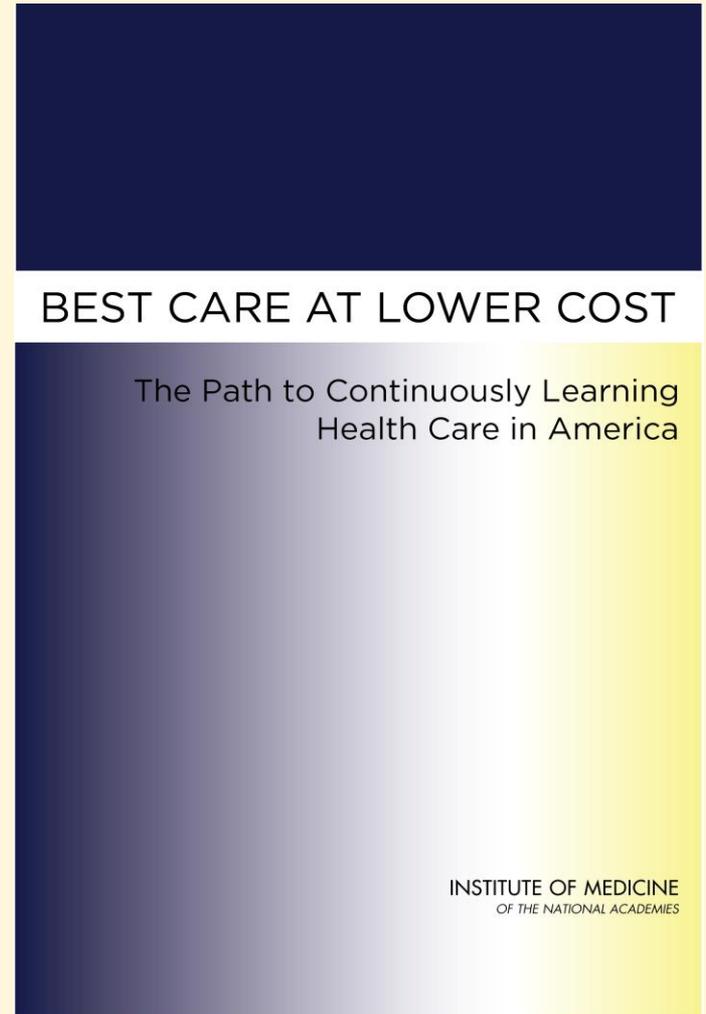
## Supportive Policy Environment

- **Financial incentives**  
Structure payment to reward continuous learning and improvement in the provision of better care at lower cost.
- **Performance transparency**  
Increase transparency on health system performance.
- **Broad leadership**  
Expand commitment to the goals of a continuously learning health care system.



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