

TRENDS OF GLOBAL HEALTH POLICY

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Outlines

- ▣ Global Healthcare Reform: the Grand Convergence
- ▣ OECD: Health Systems – Efficiency and Policy Setting
- ▣ Accountability of Healthcare Policy
- ▣ Sustainability of Patient-Centered Care Models
- ▣ Integration Platforms & Informatics
- ▣ Artificial Intelligence in Healthcare
- ▣ Concluding Remarks

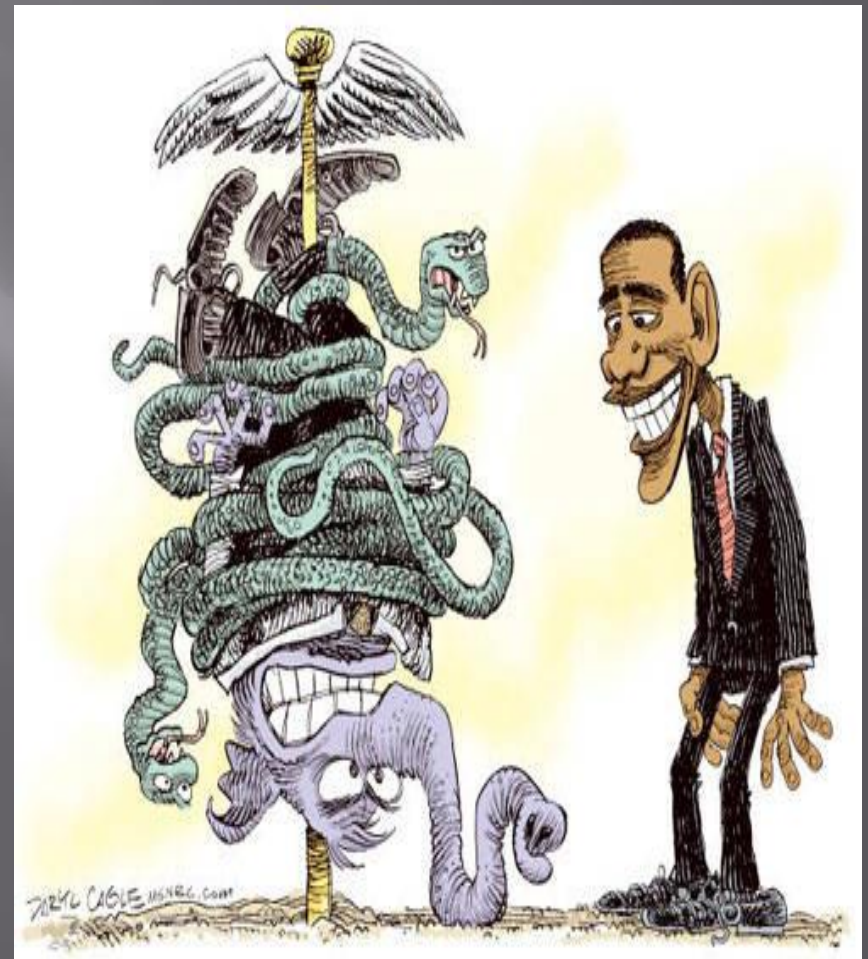
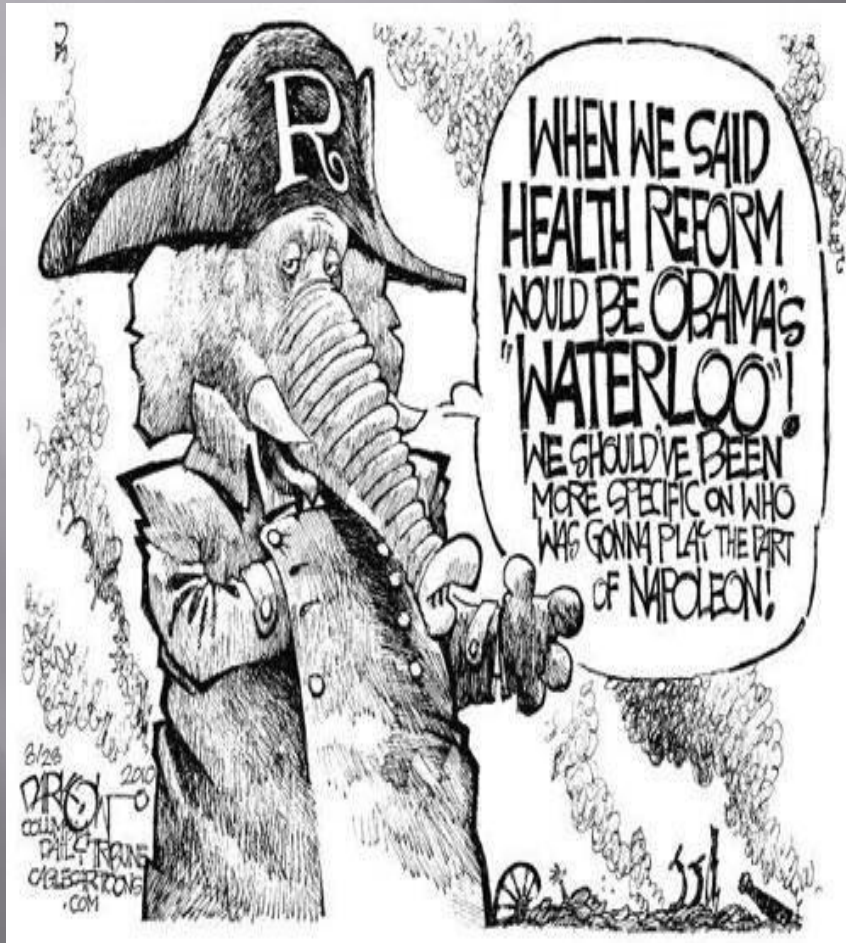
I. Global Healthcare Policy Reform: Grand Convergence

<http://www.globalhealth2035.org>

Historical and evolutionary changes in

- ▣ Access to insurance: coverage & equity
- ▣ Cost reduction: prospective payment & reimbursement
- ▣ Quality enhancement and accountability: pay for performance and value-based payment
- ▣ Accountability of delivery system change: from free market to universal healthcare
- ▣ Sustainability
- ▣ Learning and education

1. Is Healthcare Policy Reform Needed?

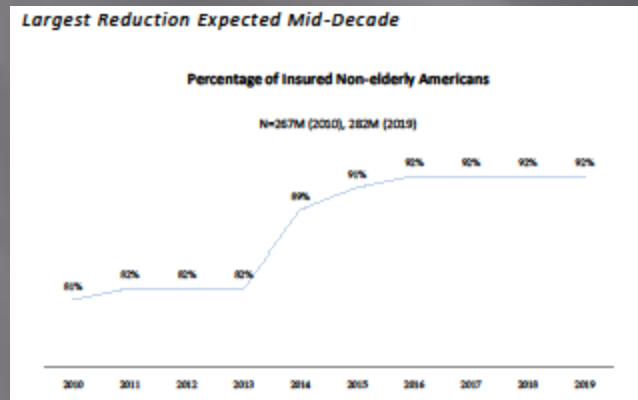


2. Current Healthcare Reform: Principles

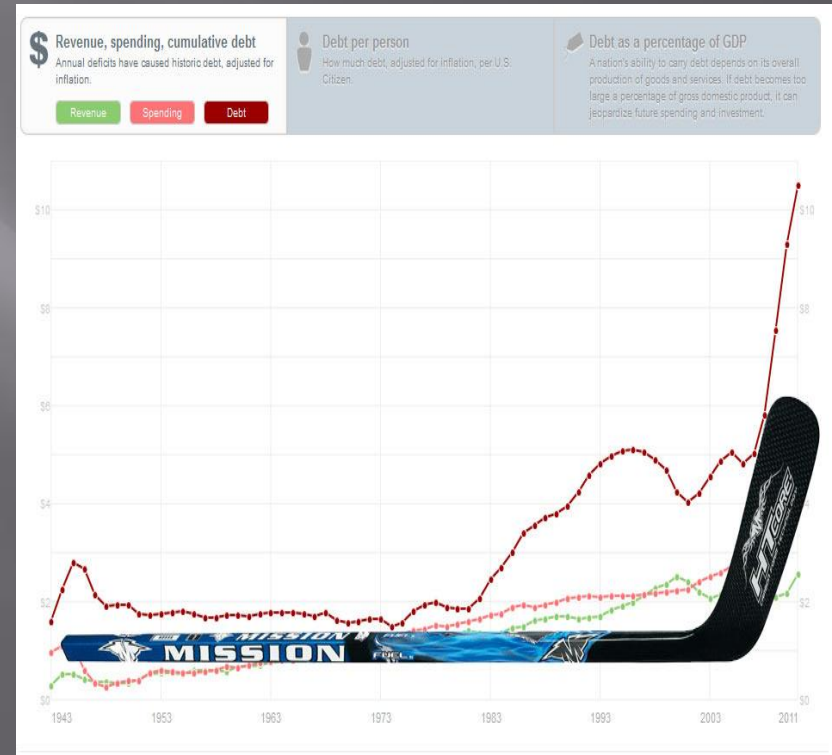
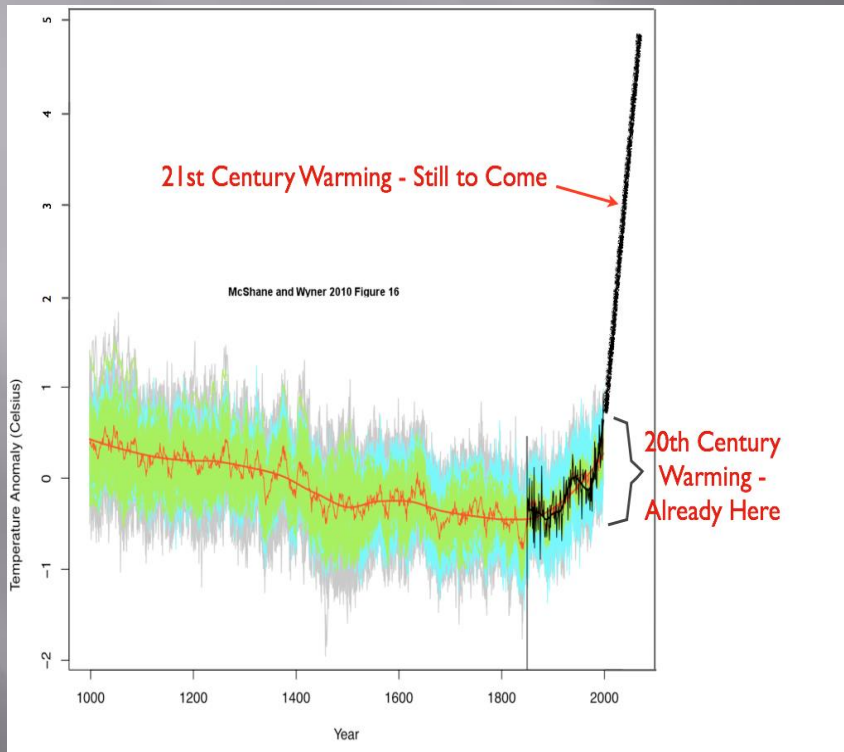
- 1) Ensure that all Americans have access to quality, affordable health care.
- 2) Create a new, regulated marketplace where consumers can purchase affordable health care.
- 3) Extend much needed relief to small business.
- 4) Improve Medicare by helping seniors and people with disabilities afford their prescription drugs.
- 5) Prohibit denials of coverage based on pre-existing conditions.
- 6) Limit out-of-pocket costs so that Americans have security and peace of mind.
- 7) Help young adults by requiring insurers to allowable dependents to remain on their parents' plan until age 26.
- 8) Expand Medicaid to millions of low-income Americans.
- 9) Provide sliding -scale subsidies to make insurance premiums affordable.
- 10) Hold insurance companies accountable for how our health care dollars are spent.
- 11) Clamp down on insurance company abuses.
- 12) Invest in preventive care.

3. Why Healthcare Policy Reform

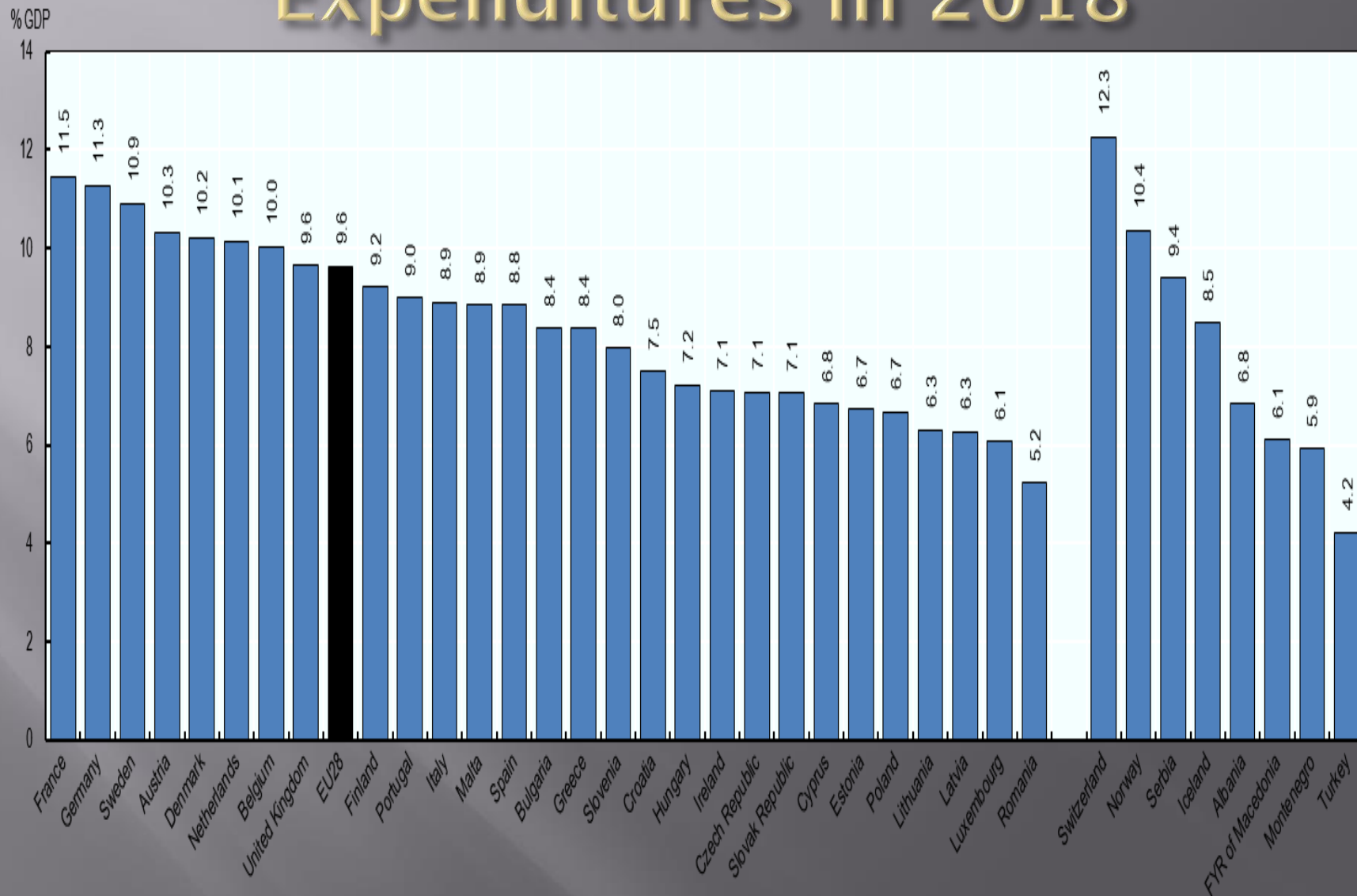
3a. Access Problems & Uninsurance



3b. Uncontrollable Healthcare Cost Increase: A Hockey Stick



EURO Countries: % GDP of Health Expenditures in 2018

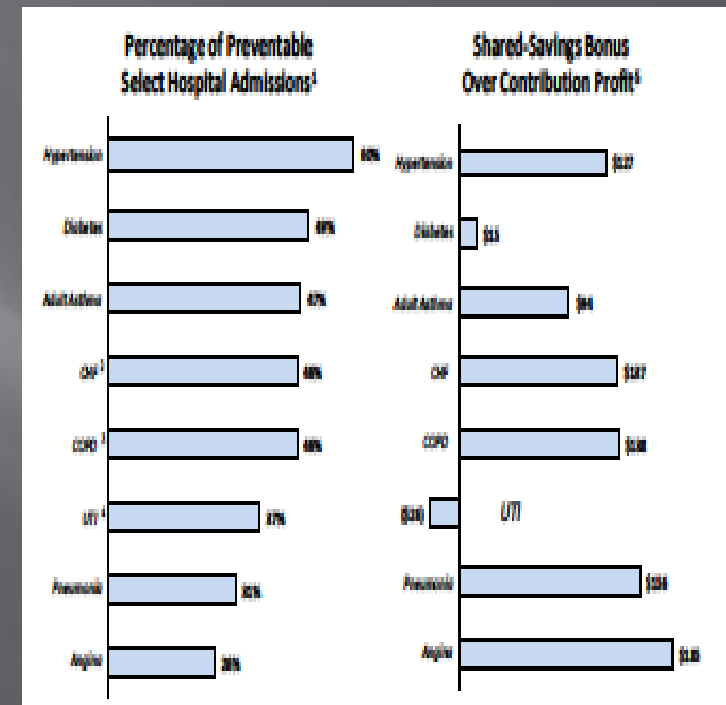


3c. Ten Cost Drivers

- ▣ Advancing Technology
- ▣ Demographics and Declining Health Status
- ▣ Lack of Productivity Growth
- ▣ Inappropriate Utilization
- ▣ Payment System Distortions
- ▣ Consumer Price Insensitivity
- ▣ Medical Errors and Inefficiency
- ▣ Medical Malpractice and Defensive Medicine
- ▣ Higher Prices
- ▣ Administrative Costs

3d. Cost Reduction Strategies

- ▣ Preventable cases for hospitalization:
 - Hypertension, diabetes, adult asthma,
 - CHF, COPD, UTI, pneumonia, angina
- ▣ Reduction of repeated hospitalization
- ▣ Reduction of costly devise
- ▣ Standardization of practices
- ▣ Cost-profit sharing

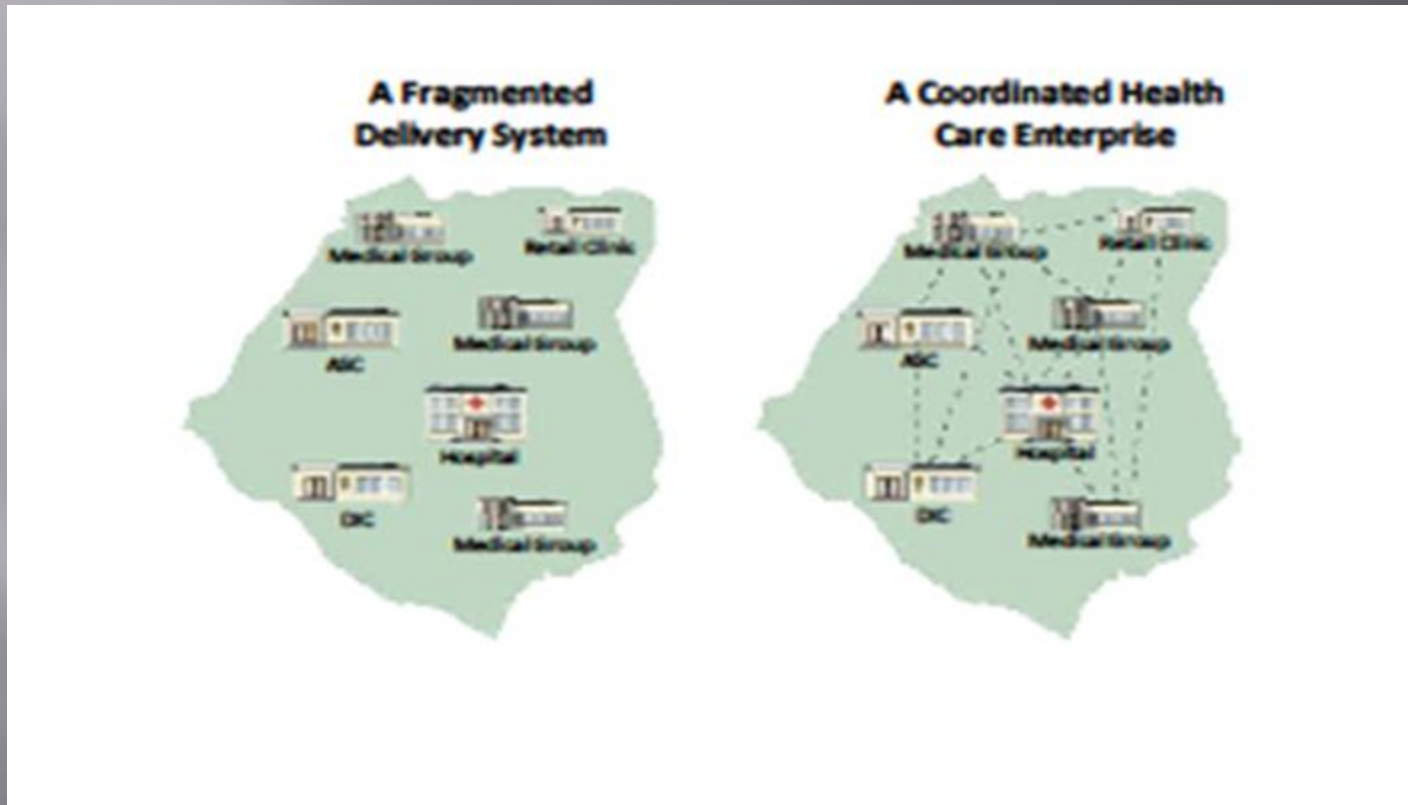


American College of Physicians

CONTROLLING HEALTH CARE COSTS WHILE PROMOTING THE BEST POSSIBLE HEALTH OUTCOMES

- A. Reduce avoidable, ineffective, and duplicate use of services, including technology, and encourage clinically effective care based on comparative effectiveness research and implementation of information technology.
- B. Pay appropriately for health care services, and encourage adoption of innovative models of health care delivery, such as the Patient-Centered Medical Home.
- C. Ensure accurate pricing of services.
- D. Ensure an appropriate physician workforce specialty mix.
- E. Reduce administrative costs.
- F. Reduce costs from medical malpractice and defensive medicine.
- G. Promote wellness, prevention, chronic care management, changes in unhealthy behaviors, and encourage patient responsibility for health and cost-consciousness.

3e. Ineffective Coordination & Fragmented Care



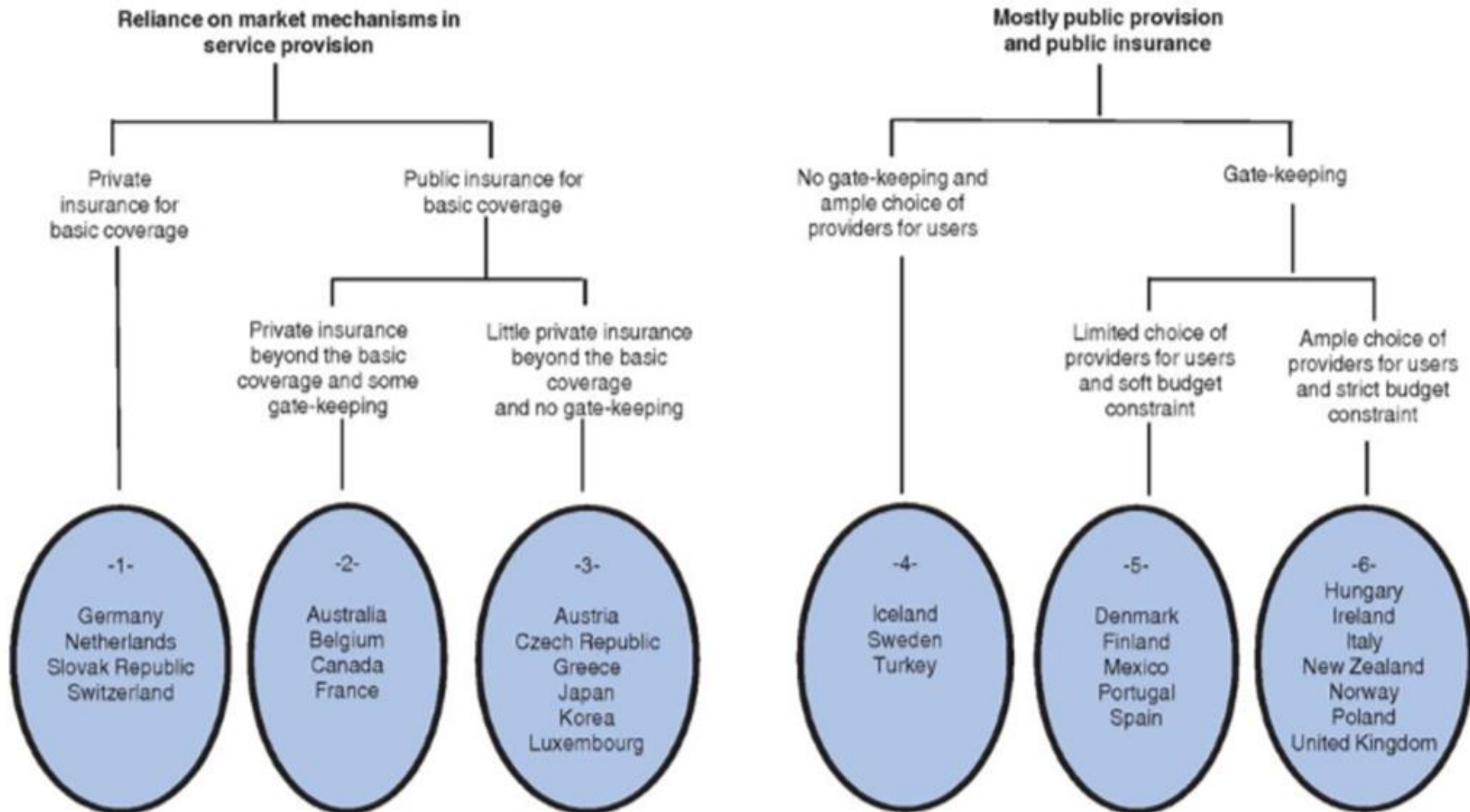
Focus on unit cost

Focus on total cost

II. OECD: Health Systems— Efficiency and Policy Setting via Market–Policy Integration

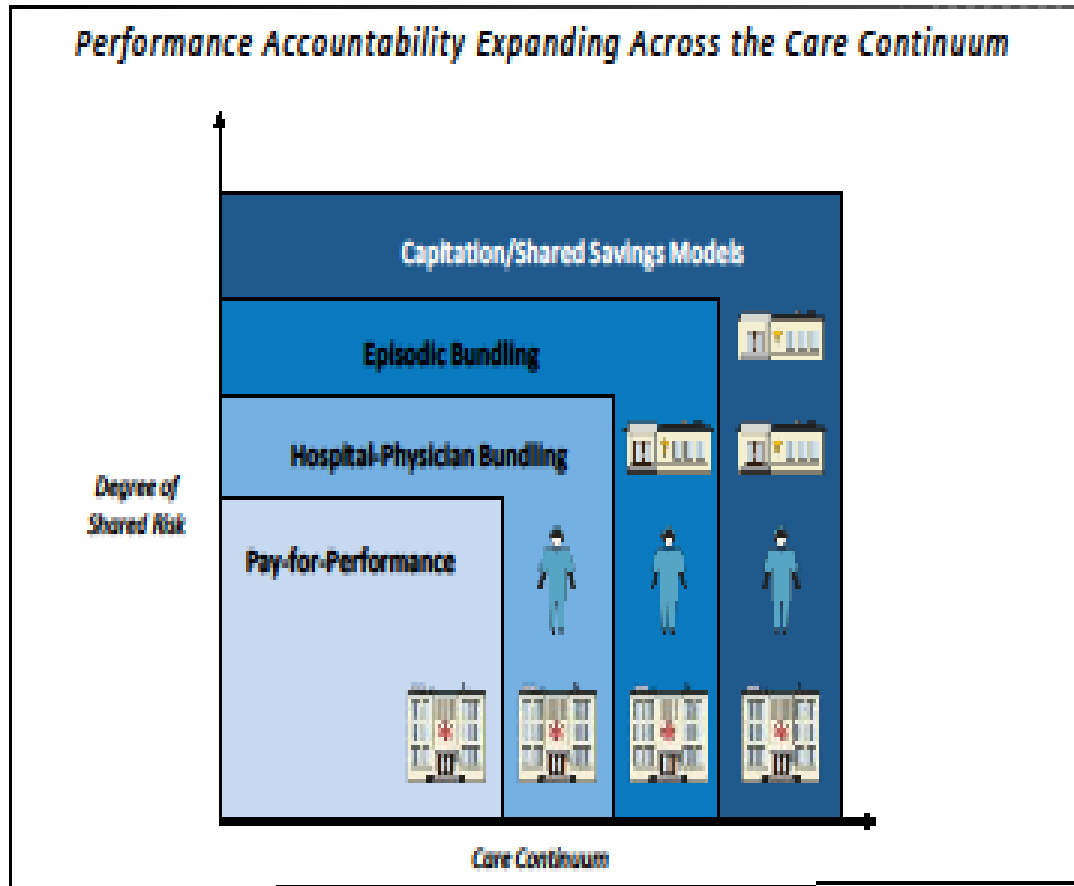
- ▣ Best practice evidence in health policy
- ▣ Intra- and inter-system variations in health insurance coverage and market impacts
 - Free market system
 - Socialized system
 - Universal health care system

System Classification



- ▣ Based on supply and demand models, a free market system has decreased access to care, good quality of care, and is economically inefficient resulting in 2.7 years of life expectancy lost per capita and wasted expenditures of \$3474 per capita (savings of \$1.12 trillion per year).
- ▣ A socialized system is the most economically efficient system but has decreased access to care compared to a universal system, increased access to care compared to a free market system and has the lowest quality of care of all three systems resulting in 3 months of life expectancy lost per capita and a saving of \$335 per capita.
- ▣ A universal system performs better than either of the other 2 systems based on quality and access to care. The model, further proves that the demand for health insurance functions as a Giffen Good which defies the law of demand, an economic theory that until now has been unproven.

III. Accountability



Payment Models

Three Levers for Increasing Provider Accountability			
	Enhanced P4P ¹	Bundled Payments	Shared Savings
Description	Financial bonuses, penalties, or withholds assessed based on outcome or process performance	Payer disburses single payment to cover hospital, physician, or other services performed during an inpatient stay or episode of care	Total expense (to payer) for a given patient population compared to risk-adjusted benchmark; portion of any savings below benchmark returned to provider
Reform Law Elements	<ul style="list-style-type: none"> • Hospital VBP² • Readmissions Penalties • HAC³ penalties 	<ul style="list-style-type: none"> • Integrated Care Demonstration • National Episodic Bundling Pilot 	<ul style="list-style-type: none"> • Shared Savings Voluntary Program • Pediatric Accountable Care Organization
Underlying Assumption	Adherence to best demonstrated practice can improve outcomes and reduce long-term utilization	Better care coordination can reduce expenses associated with care episodes	Better care coordination can minimize inappropriate or duplicative utilization

III. Accountability of Patient-Centered Care

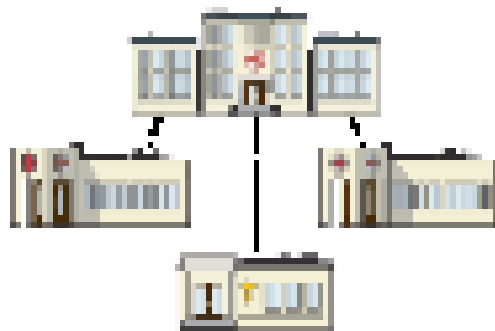
Definition: The Patient-Centered Care is an approach to providing comprehensive primary care for children, youth and adults in a health care setting that facilitates partnerships between individual patients, and their personal physicians, and, when appropriate, the patient's family.

Principles:

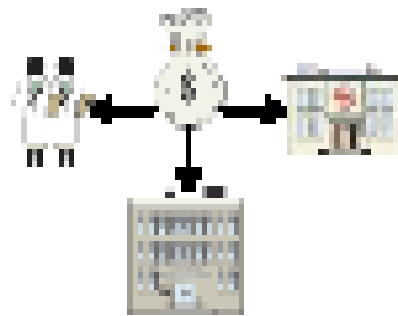
- ▣ Personal physician
- ▣ Physician directed practice
- ▣ Wholistic orientation & team care
- ▣ Care coordination & integration
- ▣ Quality & safety
- ▣ Enhanced access
- ▣ Value-based payment
- ▣ Care management technology use

Care Coordination

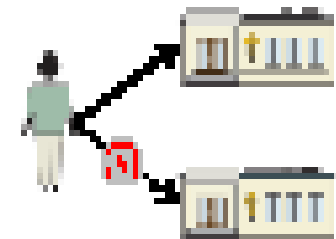
Create the Network



Manage the Network



Ensure Patient "Lock-In"



A Serious Barrier

"While we are interested in the idea of a bundled payment, the truth is we don't even know who we would work with to do this. Right now we are just spinning our wheels."

Regional Medical Director
Large National Payer

Nullifying Benefit

"The problem becomes, once every provider has taken his pound of flesh to cover any liabilities, the basket of services no longer does what it was made for—reduce costs."

VP of Network Management
Regional Payer

December 22, 2018

Essential Element

"There has to be some mechanism for keeping the patient in the system. If you can't do that, there is no advantage to creating a basket of care—everything falls apart."

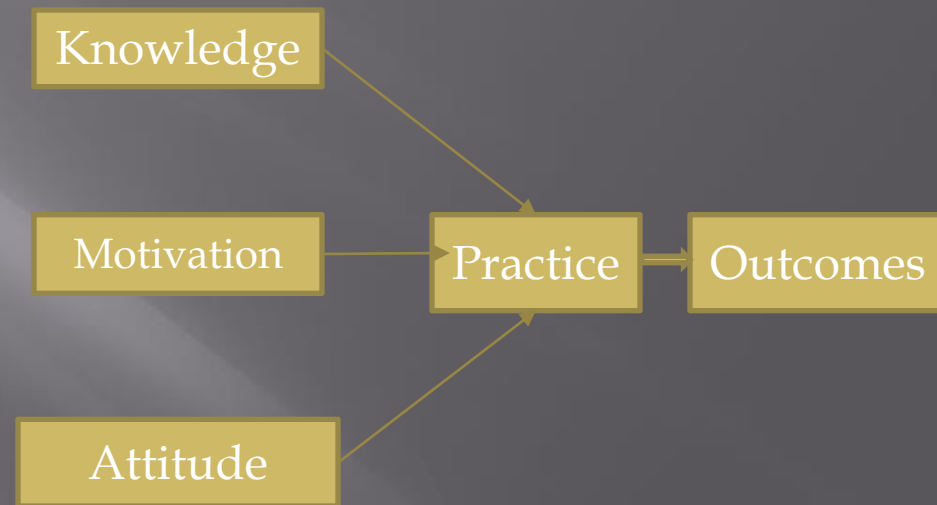
Chief Executive Officer
Minnesota Health System*

IV. Integration Platform

- ▣ Structural Innovations
 - Redesign care across the continuum via integration of acute, subacute and long-term care
 - Medical homes
 - Chronic care management
 - Tradeoff between efficiency and quality
- ▣ Profit sharing and incentives
 - Performance-based reimbursement
 - Hospital payment bundling
 - Episode bundling
 - Shared savings

IV. Sustainability of Patient-Centered Care Models

KMAP-O MODEL
INTEGRATION WITH
POPULATION
HEALTHYH
MANAGEMENT
IN DESIGN OF
HEALTH EDUCATION



Mechanisms for Integrated Care

- ▣ Health Information Technology & Infrastructure
- ▣ Meaningful Use of HIT
- ▣ Analytics & Predictive Modeling of Factors Influencing More Efficient and Better Outcomes for Patient Care

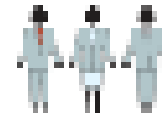
Requisite Post-acute Monitoring Infrastructure



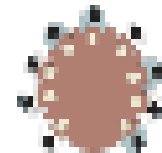
Information sharing protocols



Interoperable information systems



Post-acute care performance analysis

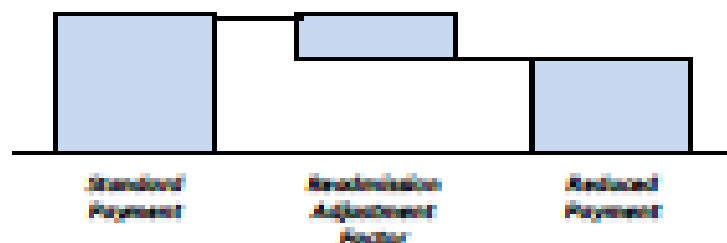


Post-acute care standardization teams

Strategies to Forging Coordinated Care

Starts with Targeting Readmissions...

Hospital Readmissions Reduction Program



- Begins on or after October 2012
- Hospitals will have all DRGs reduced by an adjustment factor calculated based on their "excessive" readmissions
- Adjustment factor is calculated as percentage of revenue paid for excessive readmissions divided by total revenue
- Projected \$7.1B in reduced Medicare payments, 2013-2019

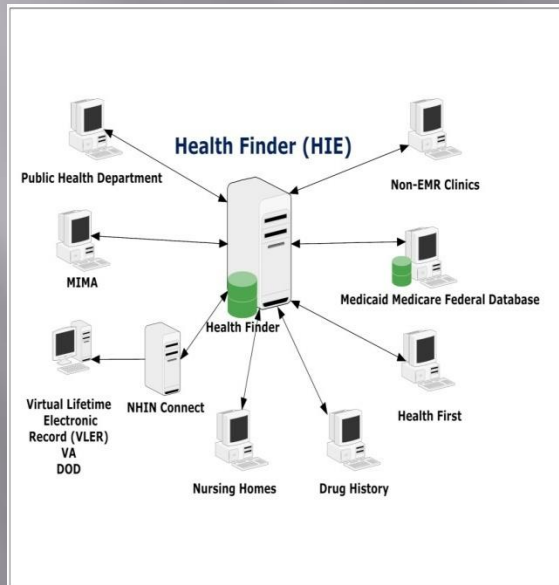
...Transitions to Bundled Payment National Pilot Program on Payment Bundling



- Includes all physician, inpatient, ambulatory and post-acute care services provided during episode period
- Target up to 10 conditions that are high-volume, high variation in readmission rates, high post-acute care costs
- HHS Secretary must begin pilot by January 2013 and may expand at will after 2015

V. Health Informatics Integration & Applications

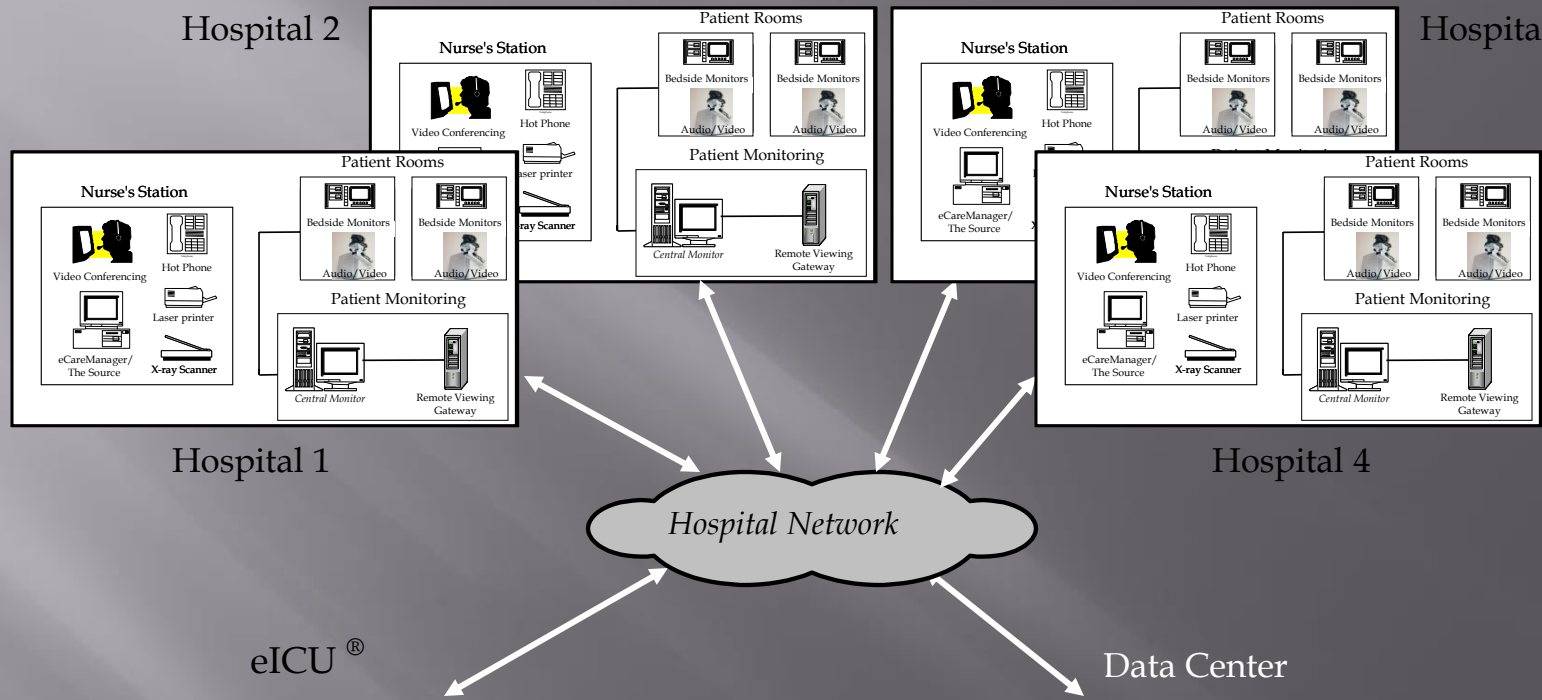
▣ TAM



▣ Meaningful Use:

http://www.ihs.gov/recovery/index.cfm?module=dsp_arra_meaningful_use

Information Technology Use: the eICU



Clinical Workstation

eCareManager HIS/PACS

HCA Workstation

Hospital
HIS System
ADT System
Lab System
PACS System

VI. ARTIFICIAL INTELLIGENCE IN HEALTHCARE

- ▣ Global market for A.I.: 17 trillions
- ▣ Little attention is to focus on personal health decision making factors in software design and application. The need is for shared decision making guidance
- ▣ Example for reducing heart failure readmissions, using a shared-decision model

“AI Superpowers: China, Silicon Valley, and the New World Order,” *by Kai-Fu Lee, 2018*

Wave 1	Wave 2	Wave 3	Wave 4
INTERNET A.I. (IoT solutions)	BUSINESS A.I.	PERCEPTION A.I.	AUTONOMOUS A.I.

Prospects of Future Development & Design

Patient Centric Care Concepts



REDESIGN OF
CARE
MANAGEMENT
TOOLS

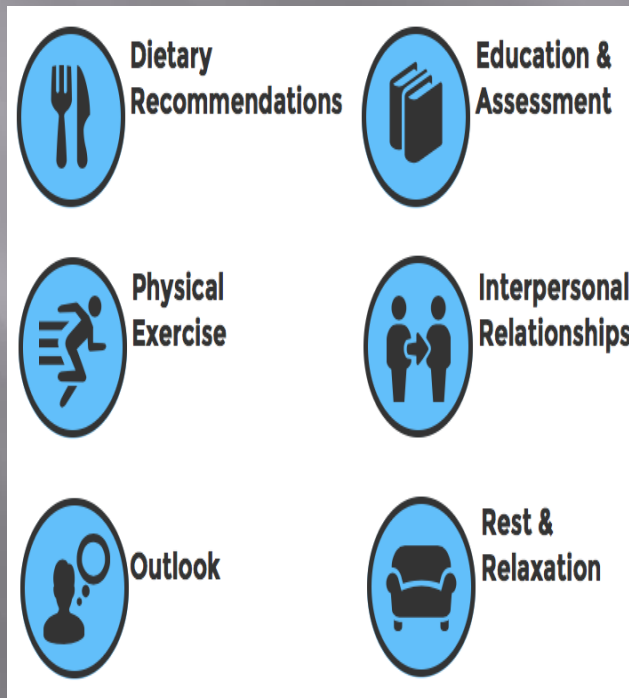


REDUCTION OF COSTS
AND
IMPROVEMENT OF
BETTER OUTCOMES AT
PATIENT AND
POPULATION LEVELS

HUMAN FACTORS VS. ROBOTICS IN USING ARTIFICIAL INTELLIGENCE

HUMAN
FACTORS: SELF
EFFICACY

DECISION SUPPORT
SYSTEM: Reducing heart
failure readmission



Three Attributes of Future Digital Health

- ▣ Velocity
- ▣ Uncertainty
- ▣ Complexity
- ▣ Pervasiveness in applications

VII. Concluding Remarks

- ▣ The utility of integrating micro- and macro-determinants of healthcare outcomes as noted in Population Health Management for Poly Chronic Conditions has been illustrated. The **design and evaluation of the patient-centric decision support network for enhancing self care** have been **suggested**. Statistical models for targeting high-risk patient population with poly chronic conditions will generate systematic knowledge about important **determinants of health differentials** in self care strategies to improve the quality and reduce costs of chronic care.

Uncertainty in Global Health Policy Formulation

*"Would you tell me, please,
which way I ought
to go from here?"*

*"That depends a good
deal on where you
want to get to,
said the Cat."*

*Lewis Carroll
Alice in Wonderland*



December 22, 2018

Thank you

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Q & A

