



University of California
San Francisco

Desperately Seeking Synergy:

The Transformational Partnership of Health Care Delivery and Health Professions Education

Catherine R Lucey MD

2/27/19

Roles and Disclosures

- Internist, Zuckerberg San Francisco General Hospital
- Executive Vice Dean and Vice Dean for Education and Professor of Medicine: UCSF School of Medicine
- The Faustino and Martha Molina Bernadett Presidential Chair in Medical Education
- Grants
 - AMA Accelerating Change in Medical Education 2013-2018
 - Kern Family Foundation National Transformation Network 2017-2023

Conclusions

- For much of the 20th and early 21st century, advances in medicine and health care delivery occurred through a ‘follow the leader’ diffusion strategy.
- Fulfilling our social contract will require a more deliberately engineered process of change, one fueled by synergistic relationships amongst all who educate, employ and regulate our professions and our professionals.

Medical Education's True North



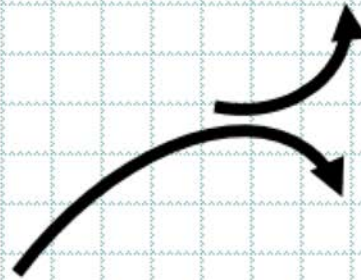
- Reduce the Burden of Suffering from Illness and Disease
- Improve the Health of Our Communities

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Health Care, and thus medical education, is at an inflection point

Recognizing Points of Strategic Inflection

“Strategic Inflection Points do not always lead to disaster...[they create] opportunities for players who are adept at operating in the new way”



“A Strategic Inflection Point is the time in the life of a business when its fundamentals are about to change.”

Andrew S. Grove, *Only the Paranoid Survive: How to Exploit the Crisis Points that Challenge Every Company*, Random House, 1996

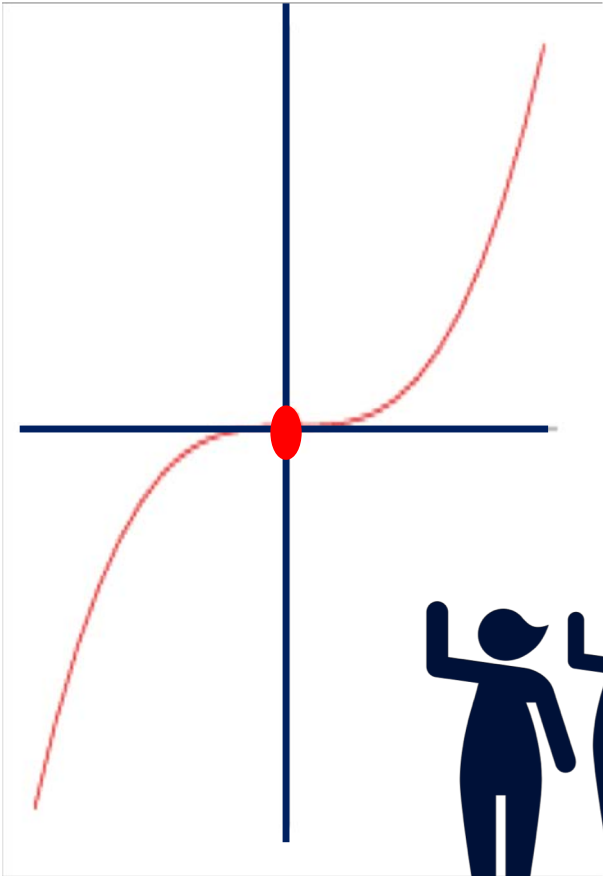
Drivers of this Inflection Point



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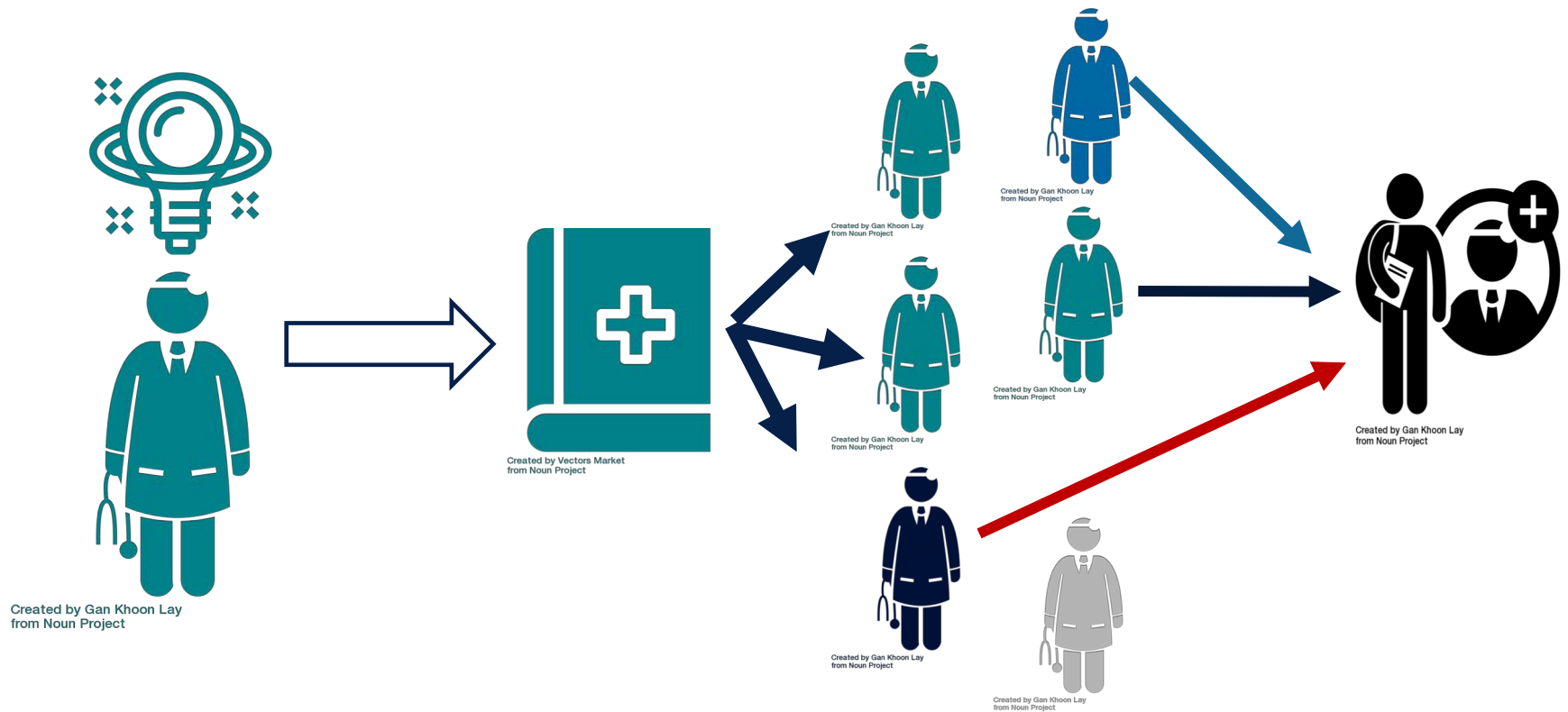
Fulfilling our Social Contract will Require Unprecedented Change and Adaptability

- Ourselves
- Our Professions
- Our Organizations



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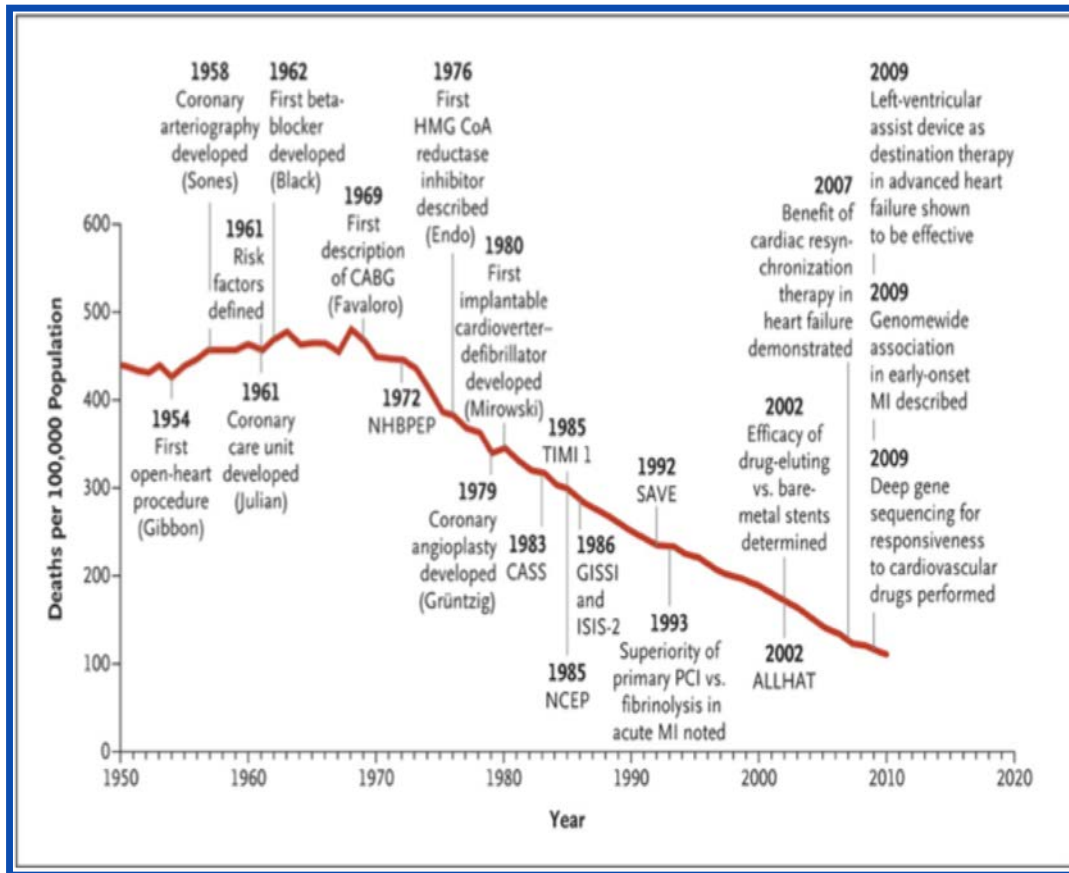
Advancing Medicine in the 20th Century: Diffusion Cascades



20th Century Health Care Systems & Medical Schools: Facilitators of & Responders to Change

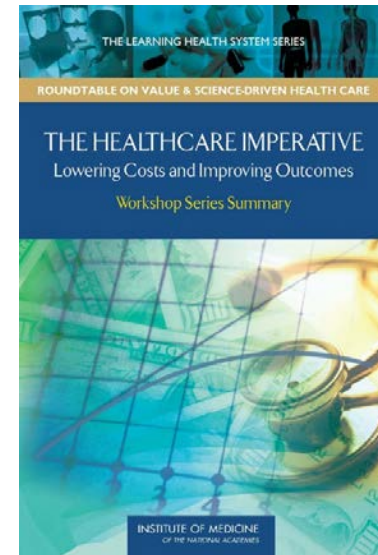
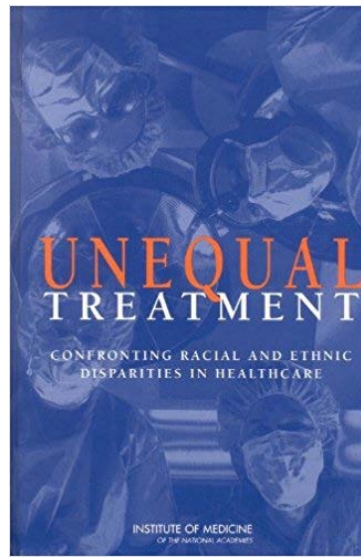
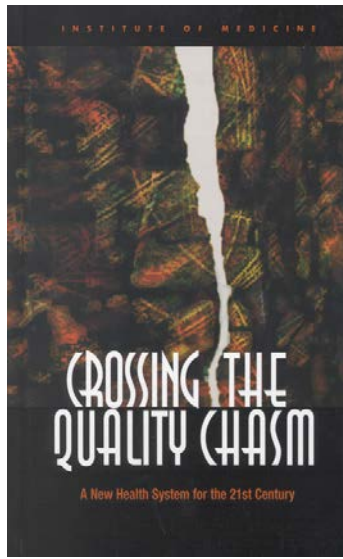
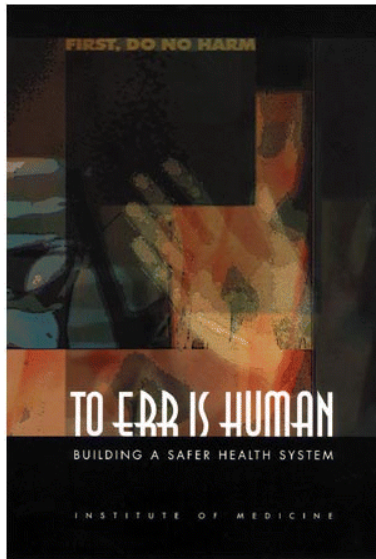
- Attracting Patients
- Providing Sites of Care and Education
- Preparing Students to Receive Instruction and Guidance

Initially Successful, Ultimately Unreliable



Current Time to:
Knowledge Doubling
2 years
Diffusion into Practice
20 years

The Systems Thinking Inflection Point



Safety

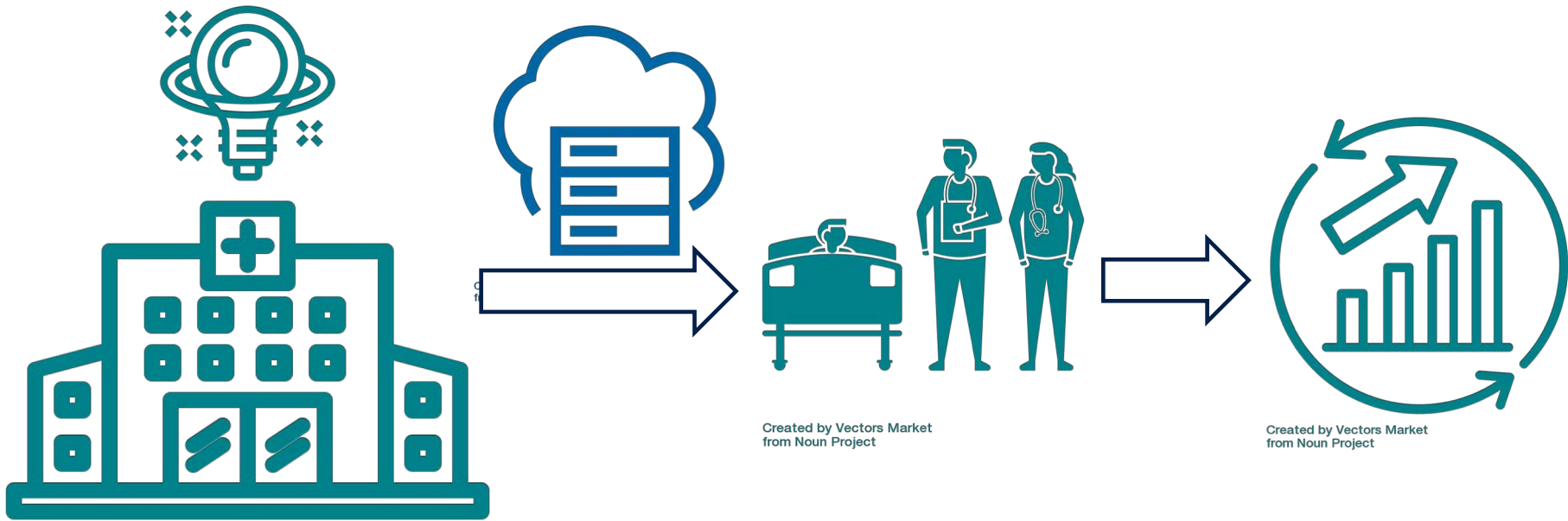
Quality

Equity

Accuracy

Value

21st Century: Health Systems and HS Leaders Driving Change w/Structure, Process &Data



Physician Role in 21st Century Change: Variable Uptake, Diffusion Cascade



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Leaders



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Bystanders



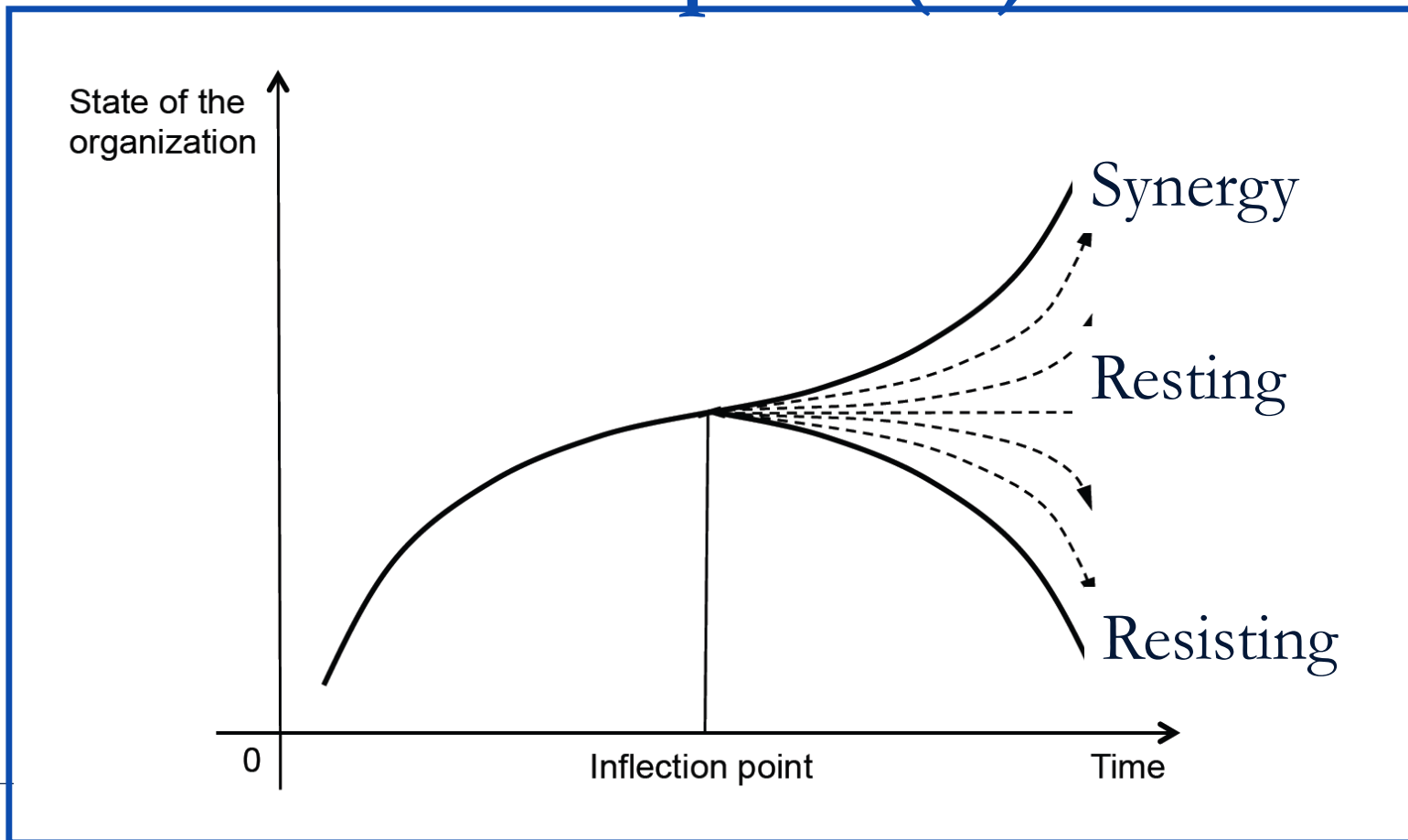
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**Avoiders/
Obstructors**



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A Change Strategy of Diffusion Cascades will not allow us to successfully manage our current or future inflection point(s.)



Synergy

- When collaborative endeavors among organizations, entities and individuals results in a greater benefit than the sum of their individual efforts



Tools to achieve Synergy

- Shared Mission, Vision and Mental Models
- Explicit and Clear Reciprocal Benefit
- Commitment to Data Driven Learning
- Multileveled intervention strategy:
 - Redesign of relationships
 - Alignment of education, resources, incentives
 - Ultimately regulations, reimbursement

UCSF Experiment with Synergy: Redesigning the Educational Relationship between the Health System and the Medical School

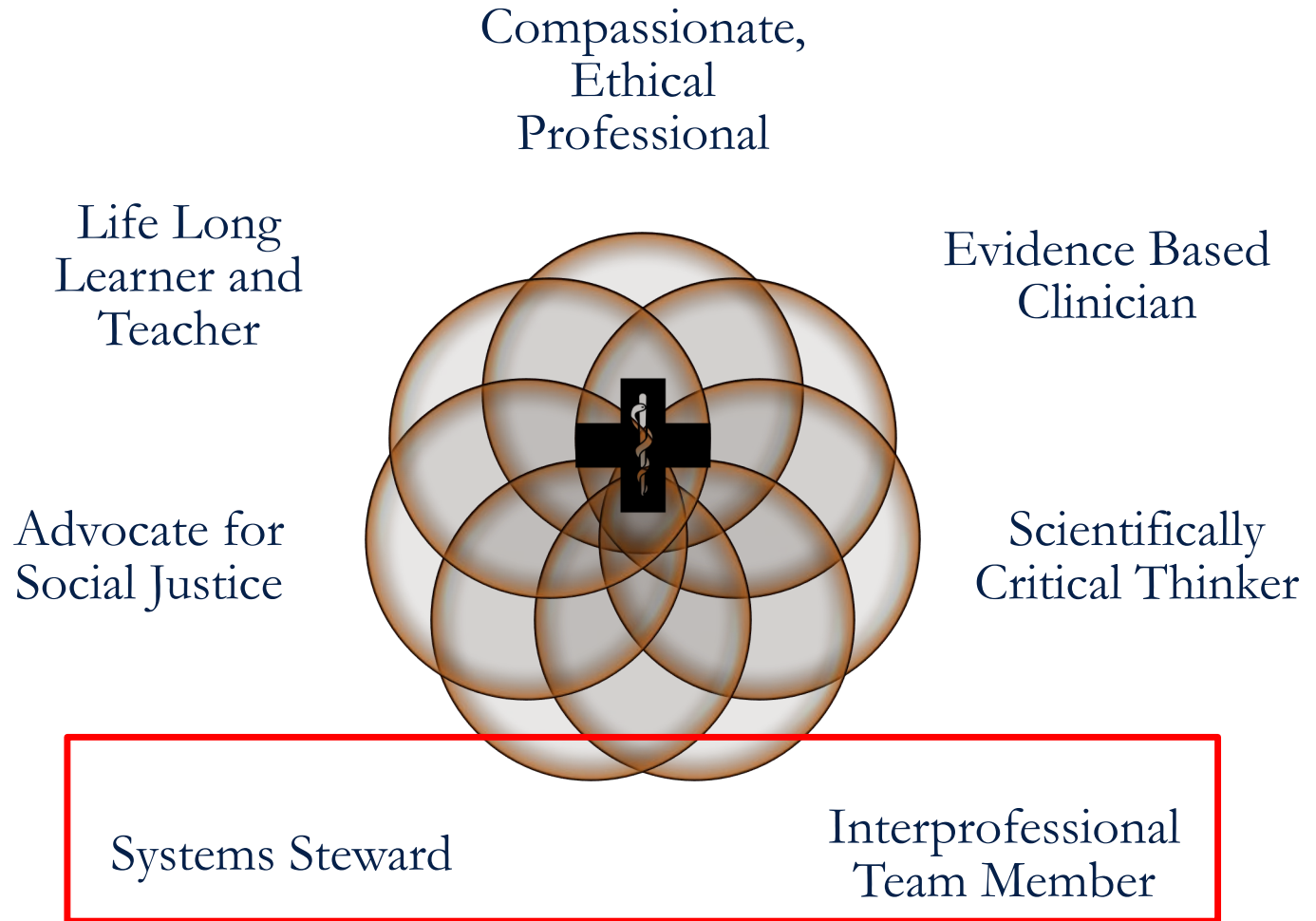


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Shared Mental Model: 21st Century Physician



Redesigning our Relationship Model

	From	To
Health System	Benefactors	Customer
Contribution of Education	Future Excellent Grads	Current Contributors to Quality
Measures of Quality	Parallel, mission based measures	Shared outcomes: optimal patient care and student learning
Students	Burdens	Benefits
Microsystems	Places to visit	Communities to Join

Multilayered interventions: augment workforce, amplify signal, facilitate change




- Education: UME, GME
- Faculty
- Clinical Microsystems
- Interprofessional Teams
- Departmental Leadership
- Health System Leadership
- National Organizations



Graduate Medical Education

- Resident and Fellow Incentive Program
- Resident Certificate program in Quality and Safety
- Quality and Safety CR in many Depts

2016-2017 Resident and Clinical Fellow Quality Improvement Incentive Program FINAL RESULTS

Neurology Residency	Order the adult delirium order set in 50% of patients on the neurology ward service who screen positive on the Nu-DESC (Nursing Delirium Screening Scale) for the cumulative 2016-2017 academic year between July 1 2016 and June 30 2017.	
OB/GYN Residency / GynOnc Fellowship	Document and confirm code status and medical proxy with 85% of patients at the time of admission. Within the department of benign GYN, OB/GYN residents will document and confirm medical proxy for 85% of patients at time of admission or on day of surgery for benign gynecology. We aim to demonstrate these improvements for 3 out of 4 best performing quarters between July 1 2016 and June 30 2017.	
Ophthalmology residency, retina fellowship	Increase the number of patients with proliferative diabetic retinopathy referred to the diabetes teaching center to 20% for 3 out of 4 best performing quarters between July 1 2015 and June 30 2016.	

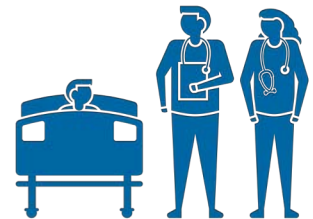
Undergraduate Medical Education

Clinical Microsystem Clerkship

- Longitudinal Assignment
- Boot camp to minimize disruption of care provider work
- Initial focus: interprofessional teamwork
- Quality Process: LEAN, in alignment with health systems



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Faculty Engagement and Support

- Departments supported Coaching Model: designed to help students and unburden care providers
- UME and GME faculty development used AAMC Te4Q strategies to train up coaches and core faculty in mechanisms of quality and safety
- Coaches became Quality/Safety Champions for their Microsystems

Leadership Support

- Institutional Leaders: Space, Welcoming Activities, Recognition
- Microsystems Leaders: Nursing and Physician leaders worked with staff to identify appropriate projects, create community
- Quality and Safety Experts: provided instruction, process support and data

Results

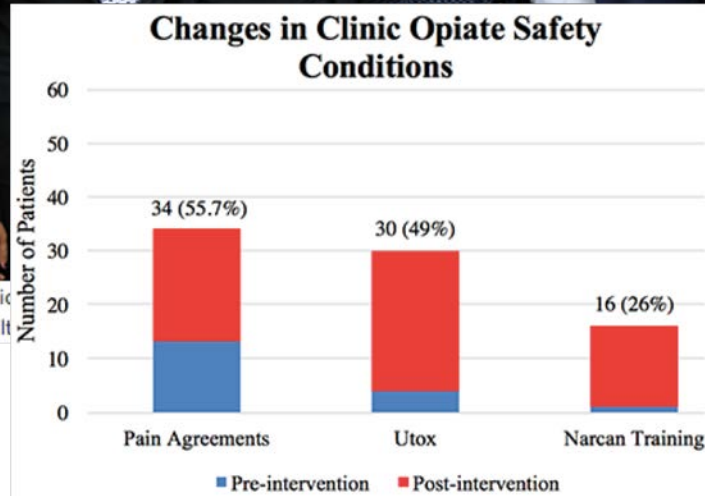
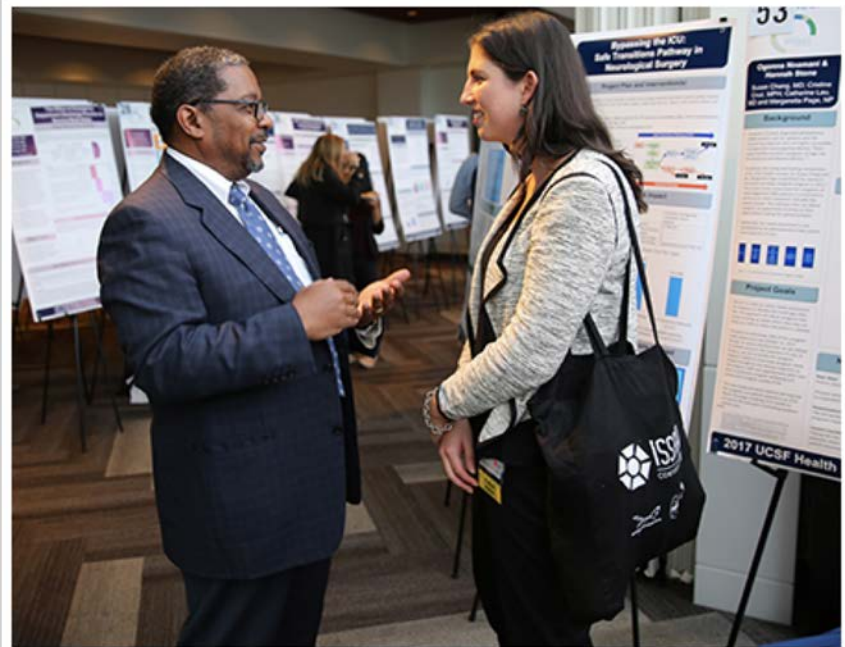


Figure 1. After intervention, the percent of patients with opioid pain agreements increased from 21% to 55.7%, urine toxicity screenings increased from 6.6% to 49% and Narcan training increased from 1.6% to 26% (360 wellness clinic, Finn, Margolis, Reddy, Coach Bryn Boslett MD)



Dean Talmadge King and Medical Student Gabriela Weigel

Bypassing the ICU: Streamlining Care for Low Acuity Neurological Surgery

Medical Students: Ezekiel Adigun, Gabriela Weigel

Coach: Catherine Lau MD

Added Benefits

- For Students:
 - Powerful lessons in interprofessional collaborative care
 - Improvement in MA satisfaction in involved units
- For Faculty:
 - Accelerated the uptake of LEAN by faculty; new relationships with sites and experts
 - Greater diffusion of new clinical skills competencies and other emerging issues
 - Increased faculty satisfaction with roles and relationships

Expanding Synergy: National Organizations



Challenges Seeking Synergy

Dramatic Changes in Standard of Care
Opioid Epidemic



Unmet Quality and Safety Goals
Health Care Disparities

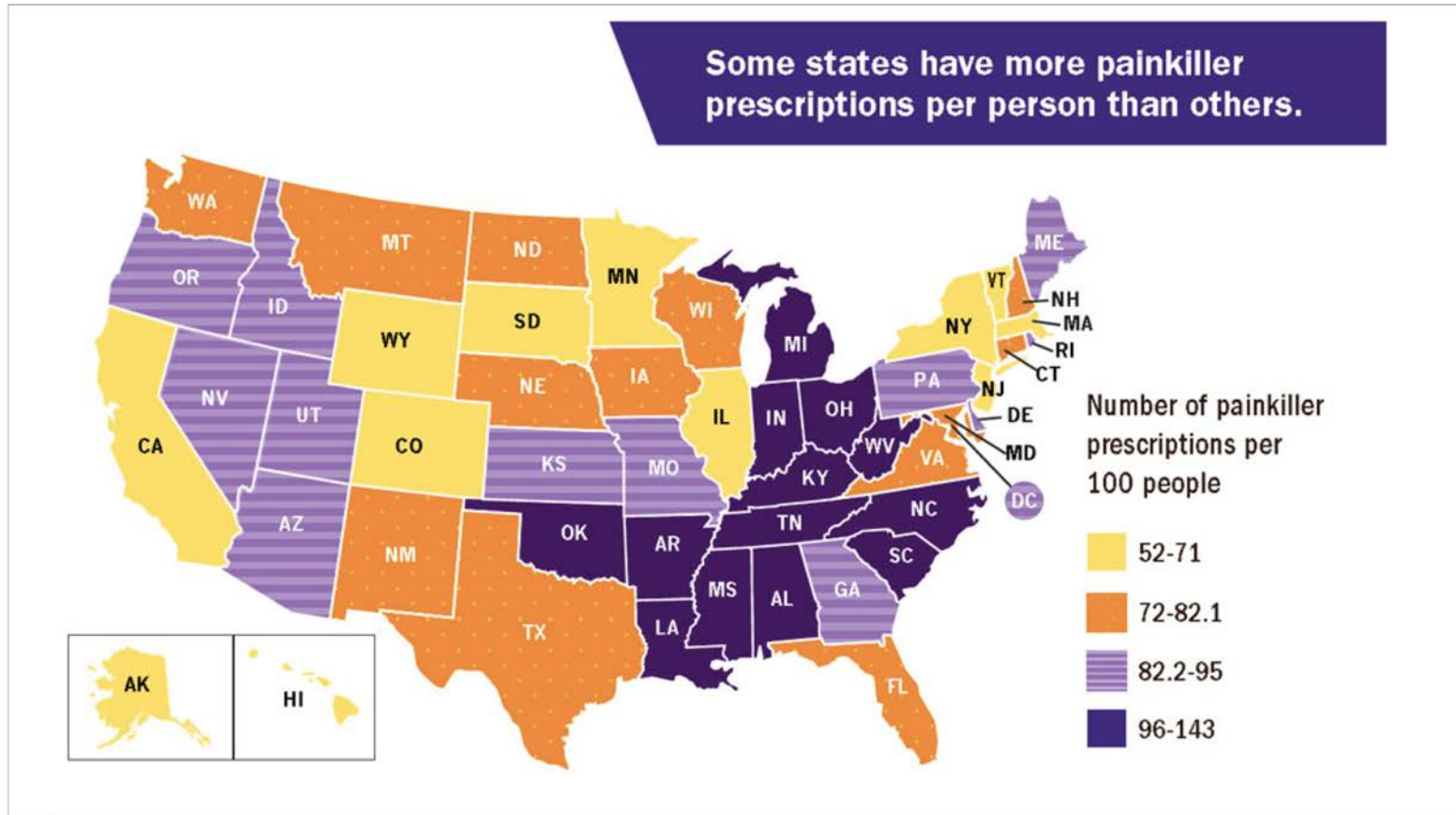


Existential Threats
Workforce Mistreatment



And More

Standard of Care Changes: Opioids



<https://www.cdc.gov/vitalsigns/opioid-prescribing/infographic.html>

Exemplar Initiative: Massachusetts Medical Schools

UMMS working with other Mass. medical schools, governor on opioid prescribing practices

By Megan Bard
UMass Medical School Communications

September 04, 2015

Terence R. Flotte, MD, and Dennis M. Dimitri, MD, met with Massachusetts Gov. Charlie Baker on Sept. 2 to talk about the future of medical education related to pain management and opioid prescribing practices.

Dr. Flotte, the *Celia and Isaac Haidak Professor of Medical Education*, executive deputy chancellor, provost and dean of the School of Medicine, applauded the governor and Department of Public Health Commissioner Monica Bharel, MD, MPH, for pulling together representatives from the four medical



(L-R) Terence Flotte, MD, Monica Bharel, MD, MPH, and Gov. Baker listen as Dennis Dimitri, MD, speaks at the Sept. 2 press conference on opioid prescribing practices and training.

Rapid Response Teams to Deploy
Systems Interventions



Shared treatment and monitoring
strategies for Clinicians and Learners
with SUD



Cross Institutional Design of Effective
Education **Pushed** to All



Public- Private Partnership
w/Reinforcing strategies in CME,
MOC, Licensing



Unmet Quality & Safety Issues: HC Disparities

Black women face significantly higher maternal mortality risk

Maternal deaths per 100,000 live births (2011-2013)



Source: Centers for Disease Control and Prevention

Credit: Alyson Hurt/NPR



Exemplar Initiative: The Children's Hospitals Solutions for Patient Safety Network

The Joint Commission Journal on Quality and Patient Safety 2018; 000:1-12

INNOVATION IN PATIENT SAFETY AND QUALITY AT THE NATIONAL LEVEL

We Will Not Compete on Safety: How Children's Hospitals Have Come Together to Hasten Harm Reduction

*Anne Lyren, MD, MSc; Maitreya Coffey, MD; Melissa Shepherd, BA; Nicholas Lashutka, BA; Stephen Muething, MD,
the SPS Leadership Group*



Educate on Systemic and Individual Causes of Disparities



Commit to Measure and Analyze Data by Population



Design Systems to Support the Most Vulnerable



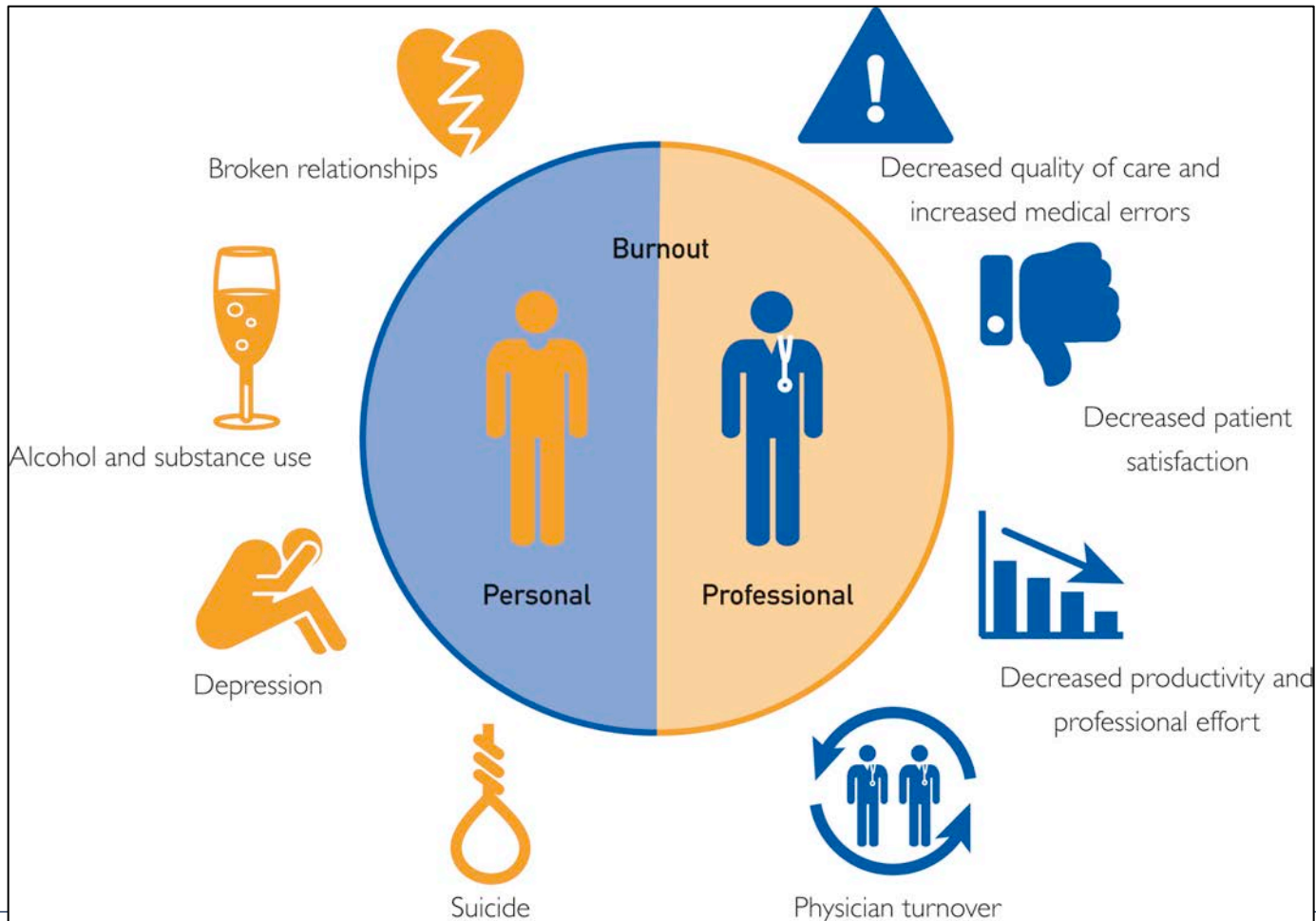
Monitor, Share Data Across Education and HC Institutions



Shared Advocacy to Address External Factors Impacting Health



Existential Threats: Workforce Mistreatment

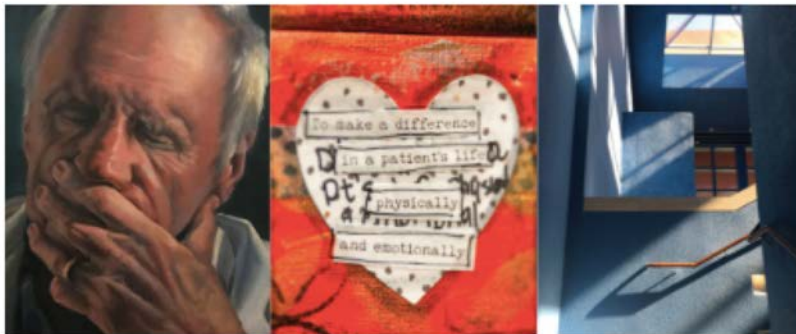


Exemplar Initiatives



National Academy of Medicine
Action Collaborative on
Clinician Well-Being and Resilience

[Explore the Knowledge Hub](#)



[Visit the Expressions of Clinician Well-Being Digital Art Gallery>>](#)



ALLIANCE
for ACADEMIC INTERNAL MEDICINE

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Keeping Healthcare Human

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Viewpoint

April 17, 2018

Charter on Physician Well-being

Larissa R. Thomas, MD, MPH¹; Jonathan A. Ripp, MD, MPH²; Colin P. West, MD, PhD^{3,4}

[> Author Affiliations](#) | [Article Information](#)

JAMA. 2018;319(15):1541-1542. doi:10.1001/jama.2018.1331

Establish Learner and Clinician Wellbeing as True North Metrics



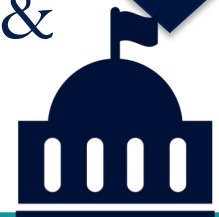
Address resolvable causes of stress in education



Redesign Workflow to Support Relationships, Learning, Renewal



Shared Advocacy to Address Process & Regulatory Concerns in HC and in Education



Many More Challenges & Opportunities Await



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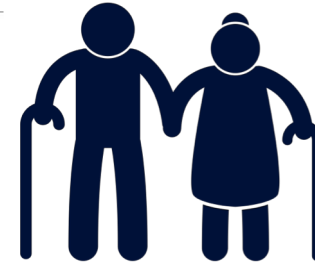
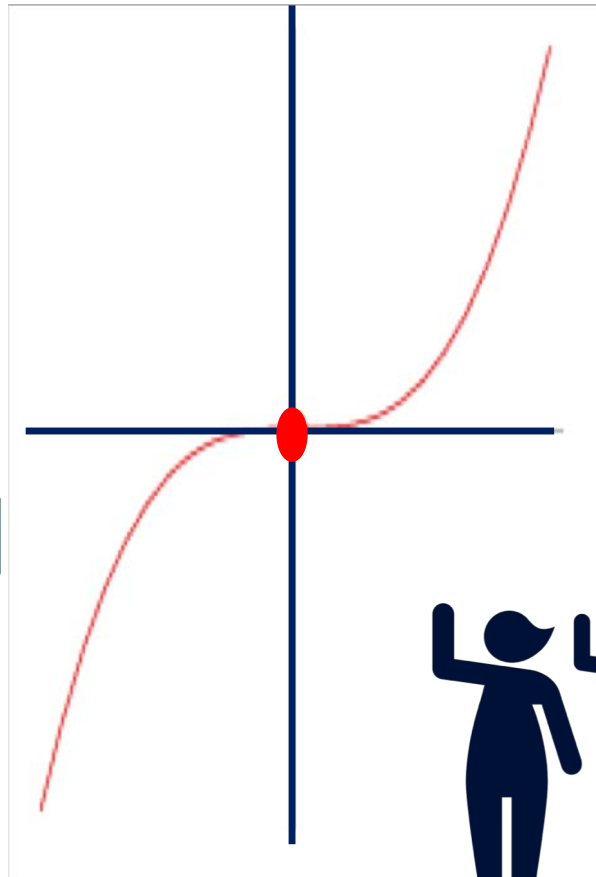
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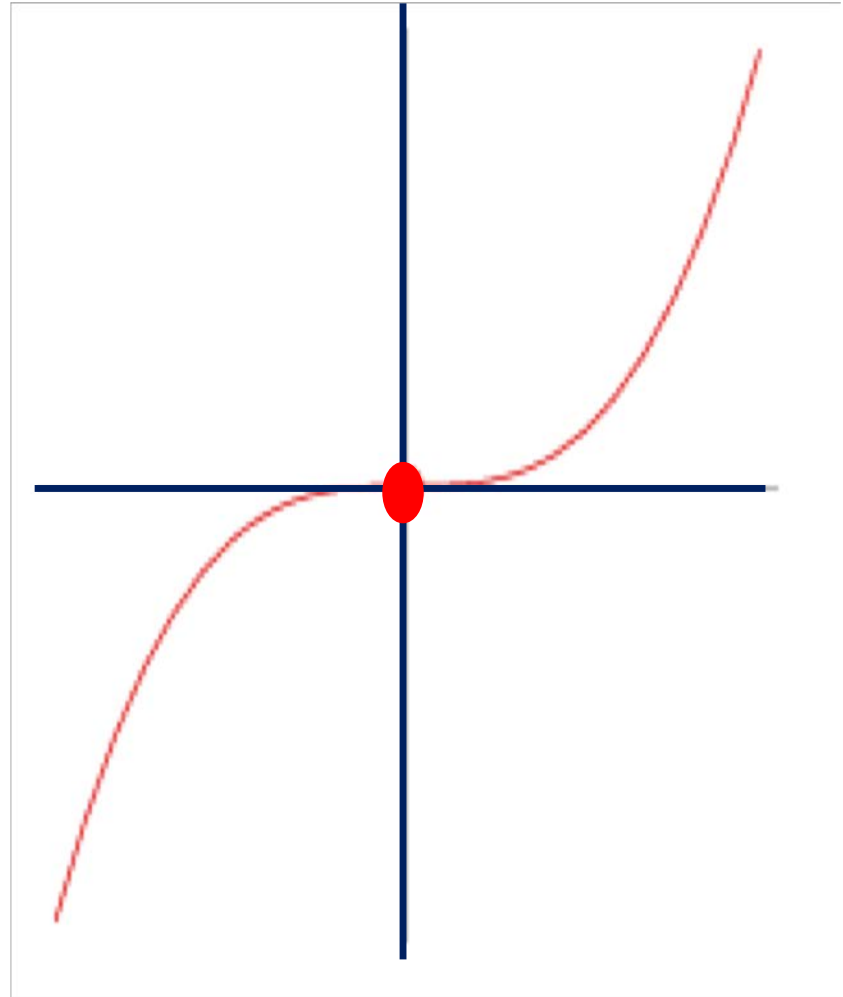


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**Navigating
the Inflection
Point
Requires
Exponential,
not Linear
Change**



Conclusions

- For much of the 20th and early 21st century, advances in medicine and health care delivery occurred through a ‘follow the leader’ diffusion strategy.
- Fulfilling our social contract will require a more deliberately engineered process of change, one fueled by synergistic relationships amongst all who educate, employ and regulate our professions and our professionals.

Thank You For All You Do To Educate the Next Generation of Physicians

