Desperately Seeking Synergy:
The Transformational Partnership of Health Care Delivery and Health Professions Education

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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 20\textsuperscript{th} and early 21\textsuperscript{st} 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
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
Fulfilling our Social Contract will Require Unprecedented Change and Adaptability

• Ourselves
• Our Professions
• Our Organizations
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

- Leaders
- Bystanders
- Avoiders/Obstructers
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
Shared Mental Model: 21st Century Physician

- Compassionate, Ethical Professional
- Evidence Based Clinician
- Scientifically Critical Thinker
- Advocate for Social Justice
- Life Long Learner and Teacher
- Interprofessional Team Member
- Systems Steward
## Redesigning our Relationship Model

<table>
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<th>From</th>
<th>To</th>
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<tbody>
<tr>
<td>Health System</td>
<td>Customer</td>
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<tr>
<td>Contribution of Education</td>
<td>Current Contributors to Quality</td>
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<td>Measures of Quality</td>
<td>Shared outcomes: optimal patient care and student learning</td>
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<td>Students</td>
<td>Benefits</td>
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<tr>
<td>Microsystems</td>
<td>Communities to Join</td>
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**From**
- Health System
- Contribution of Education
- Measures of Quality
- Students
- Microsystems

**To**
- Benefactors
- Future Excellent Grads
- Parallel, mission based measures
- Burdens
- Places to visit
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

<table>
<thead>
<tr>
<th>Residency/Program</th>
<th>Description</th>
<th>Result</th>
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<tbody>
<tr>
<td>Neurology Residency</td>
<td>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.</td>
<td><img src="https://example.com/green.png" alt="Green" /></td>
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<tr>
<td>OB/GYN Residency / GynOnc Fellowship</td>
<td>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.</td>
<td><img src="https://example.com/red.png" alt="Red" /></td>
</tr>
<tr>
<td>Ophthalmology residency, retina fellowship</td>
<td>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.</td>
<td><img src="https://example.com/green.png" alt="Green" /></td>
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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
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)
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

Some states have more painkiller prescriptions per person than others.

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 schools.
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)

- Black women: 44 deaths per 100,000 live births
- White women: 13 deaths per 100,000 live births
- Women of other races: 14 deaths per 100,000 live births

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; Maitreyia Coffey, MD; Melissa Shepherd, BA; Nicholas Lashutka, BA; Stephen Muething, MD, the SPS Leadership Group

UCSF
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

- Burnout
  - Personal
    - Broken relationships
    - Alcohol and substance use
    - Depression
    - Suicide
  - Professional
    - Decreased quality of care and increased medical errors
    - Decreased patient satisfaction
    - Decreased productivity and professional effort
    - Physician turnover
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

GOLD FOUNDATION
Keeping Healthcare Human

This Issue
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Viewpoint
April 17, 2018

Charter on Physician Well-being

Larissa R. Thomas, MD, MPH; Jonathan A. Ripp, MD, MPH; Colin P. West, MD, PhD

Author Affiliations | Article Information
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
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