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# Innovating in Education and Patient Care to Reshape the Future: ***Medical Education 2030 and Beyond***

**Vineet Arora MD MAPP**

**AIAMC 2019 ANNUAL MEETING**

# Objectives

- Learn a conceptual framework for how bridging leadership can promote alignment between education and exceptional clinical care
- Learn to create educational initiatives to promote alignment;
- Learn how to create health systems innovation that aligns with needs of trainees

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# It is 2030

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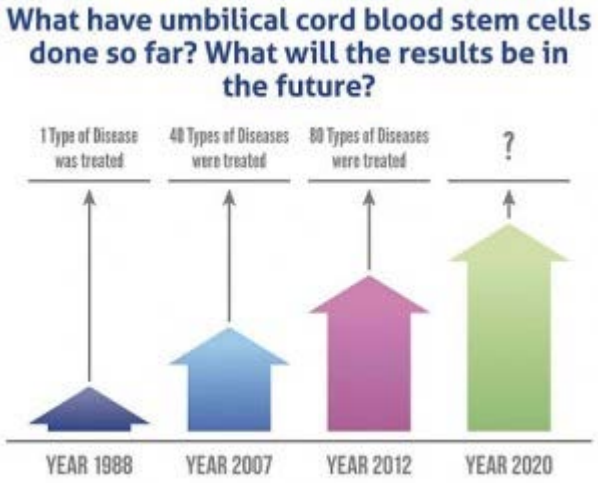
## Talking a different language

| | Maturists (pre-1945) | Baby boomers (1945-1960) | Generation X (1961-1980) | Generation Y (1981-1995) | Generation Z (Born after 1995) |
|---|---|---|---|---|---|
| **Formative experiences** | Wartime rationing<br>Rock'n'roll<br>Nuclear families<br>Defined gender roles - particularly for women | Cold War<br>'Swinging Sixties'<br>Moon landings<br>Youth culture<br>Woodstock<br>Family-orientated | Fall of Berlin Wall<br>Reagan/Gorbachev/ Thatcherism<br>Live Aid<br>Early mobile technology<br>Divorce rate rises | 9/11 terrorists attacks<br>Social media<br>Invasion of Iraq<br>Reality TV<br>Google Earth | Economic downturn<br>Global warming<br>Mobile devices<br>Cloud computing<br>Wiki-leaks |
| **Attitude toward career** | Jobs for life | Organisational - careers are defined by employees | "Portfolio" careers - loyal to profession, not to employer | Digital entrepreneurs - work "with" organisations | Multitaskers - will move seamlessly between organisations and "pop-up" businesses |
| **Signature product** | Automobile | Television | Personal computer | Tablet/smartphone | Google glass, 3-D printing |
| **Communication media** | Formal letter | Telephone | E-mail and text message | Text or social media | Hand-held communication devices |
| **Preference when making financial decisions** | Face-to-face meetings | Face-to-face ideally but increasingly will go online | Online - would prefer face-to-face if time permitting | Face-to-face | Solutions will be digitally crowd-sourced |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3:38

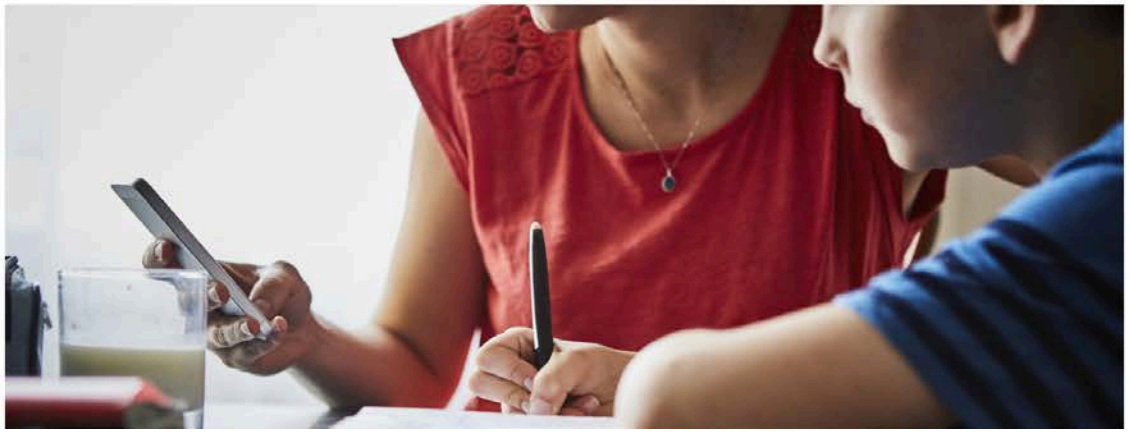


EDUCATION

# Alexa Can Help Kids With Homework, But Don't Forget Problem-Solving Skills

January 10, 2019 · 5:01 AM ET
Heard on Morning Edition

JASMINE GARSD





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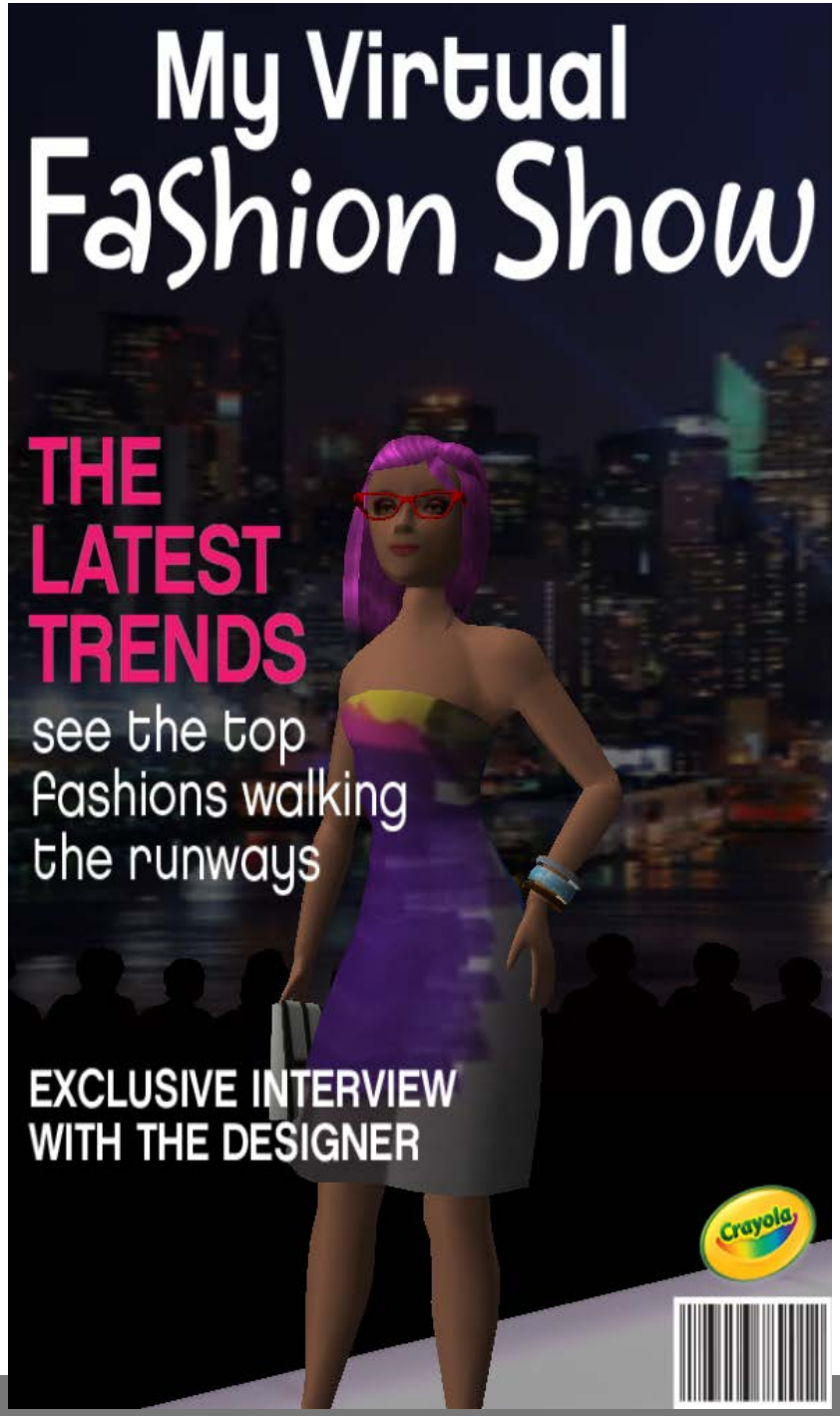


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# Homo sapiens digitalis

Immer mehr mobile Zusatzgeräte stellen den Menschen in den Mittelpunkt des digitalisierten Alltags.


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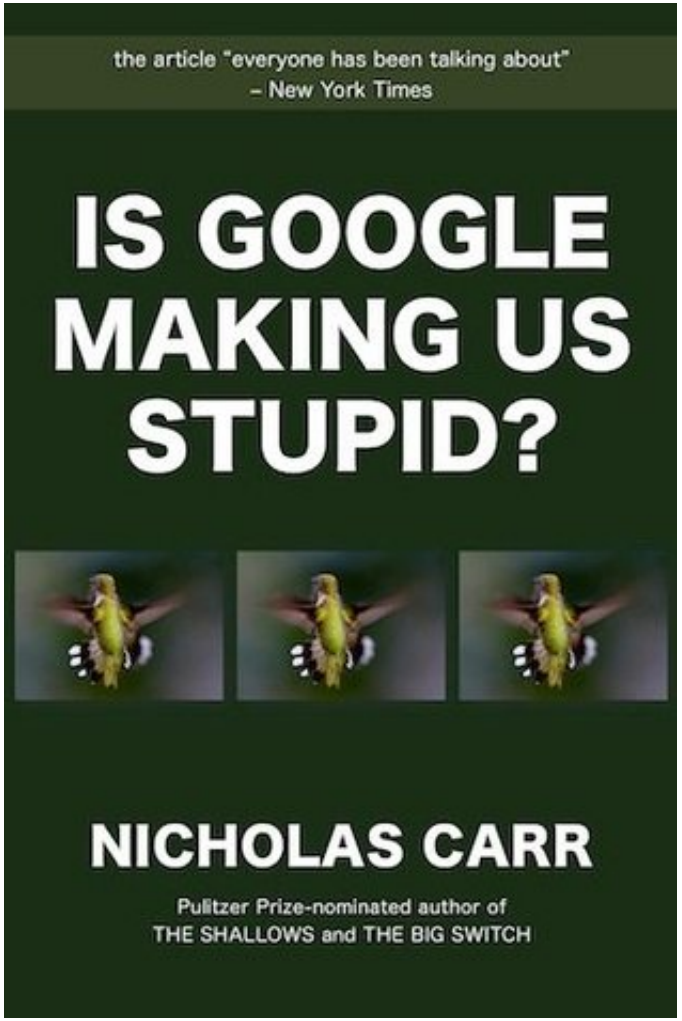
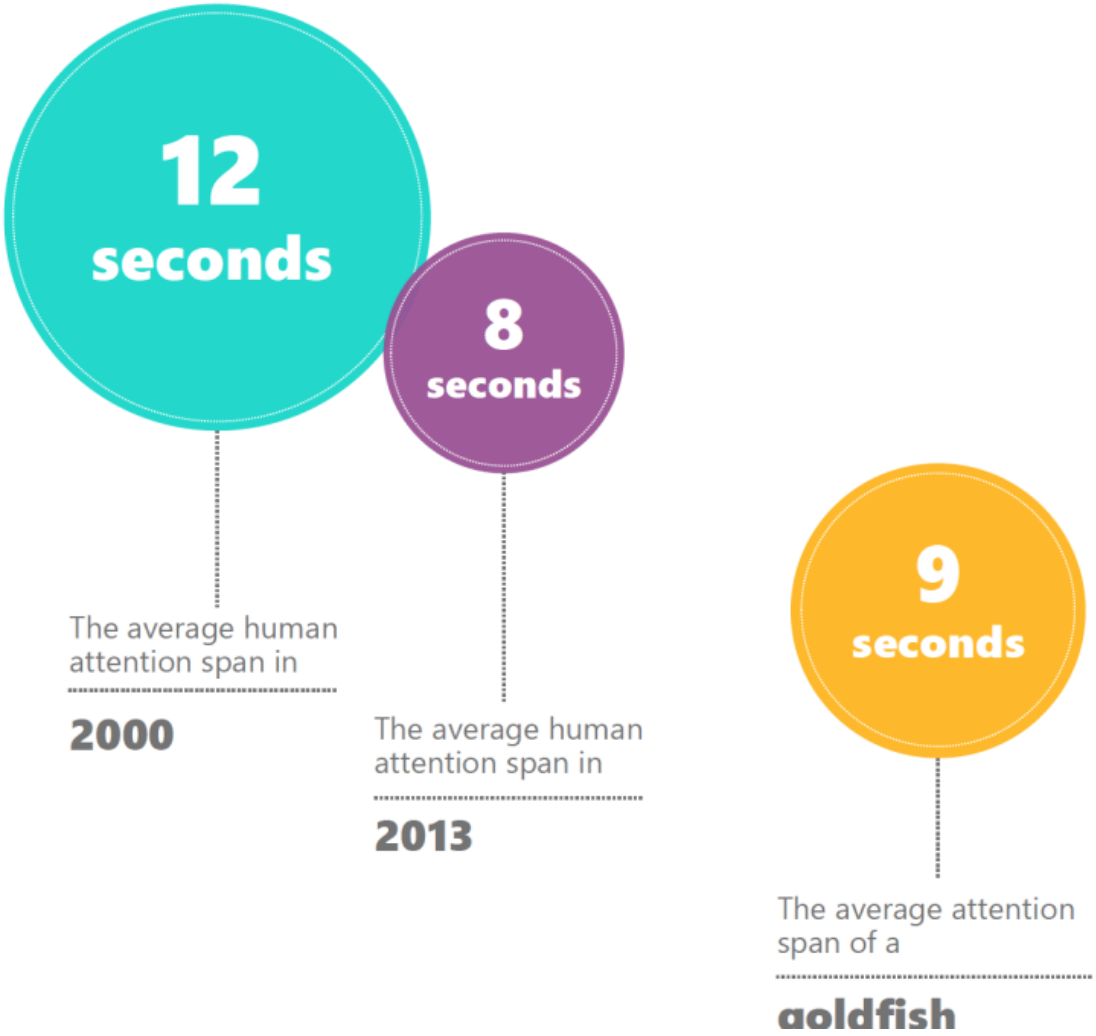
"The arrival of Gutenberg's printing press, in the 15th century, set off another round of teeth gnashing.

The Italian humanist Hieronimo Squarciafico worried that **the easy availability of books would lead to intellectual laziness, making men "less studious" and weakening their minds."**



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# Innovations in Medical Care Today

# Future physicals may add gene tests

**Genetic,** *from* **Page 1**

netic tests like 23andMe, by offering their own tests and follow-up care. NorthShore is one of at least a few health systems in the country offering genetic testing in primary care, even as concerns remain about how useful the information may be and whether it could lead to unnecessary care and costs.

Patients won't have to pay for the genome sequencing, which will be offered as part of a pilot project with genetic testing company Color. If the pilot is successful, NorthShore could offer the tests to more patients, although it's uncertain whether consumers beyond the first 10,000 would bear any costs.

Other local health systems already offer narrower genetic testing to patients with certain conditions, such as cancer. But the practice of offering broad testing as part of routine primary care is still relatively new. And while many tests marketed directly to consumers look at a number of genetic variants, the test NorthShore will use sequences a person's whole genome, or complete set of DNA.

"I think this is something that is just becoming the new way to do medicine," said Casey Frankenberger,

STACEY WESCOTT/CHICAGO TRIB

Rebecca Marsalli, of Zion, shown with her infant son, learned through genetic testing she is at a higher risk for breast cancer. She'll be tested regularly

ally, about 2 percent of patients tested have genetic variations that put them at

in medicine.

"If we can identify risk factors, then we need to

mother had breast cancer twice. But as a new mom, getting tested wasn't at the top of her to-do list. Having

program will examine, said Dr. Peter Hulick, medical director of NorthShore University HealthSystem's

tests that tell them if th at higher risk of develo conditions for which aren't any cures, suc Alzheimer's or Parkin

Medicine

CENTER FOR PERSONALIZED THERAPEUTICS
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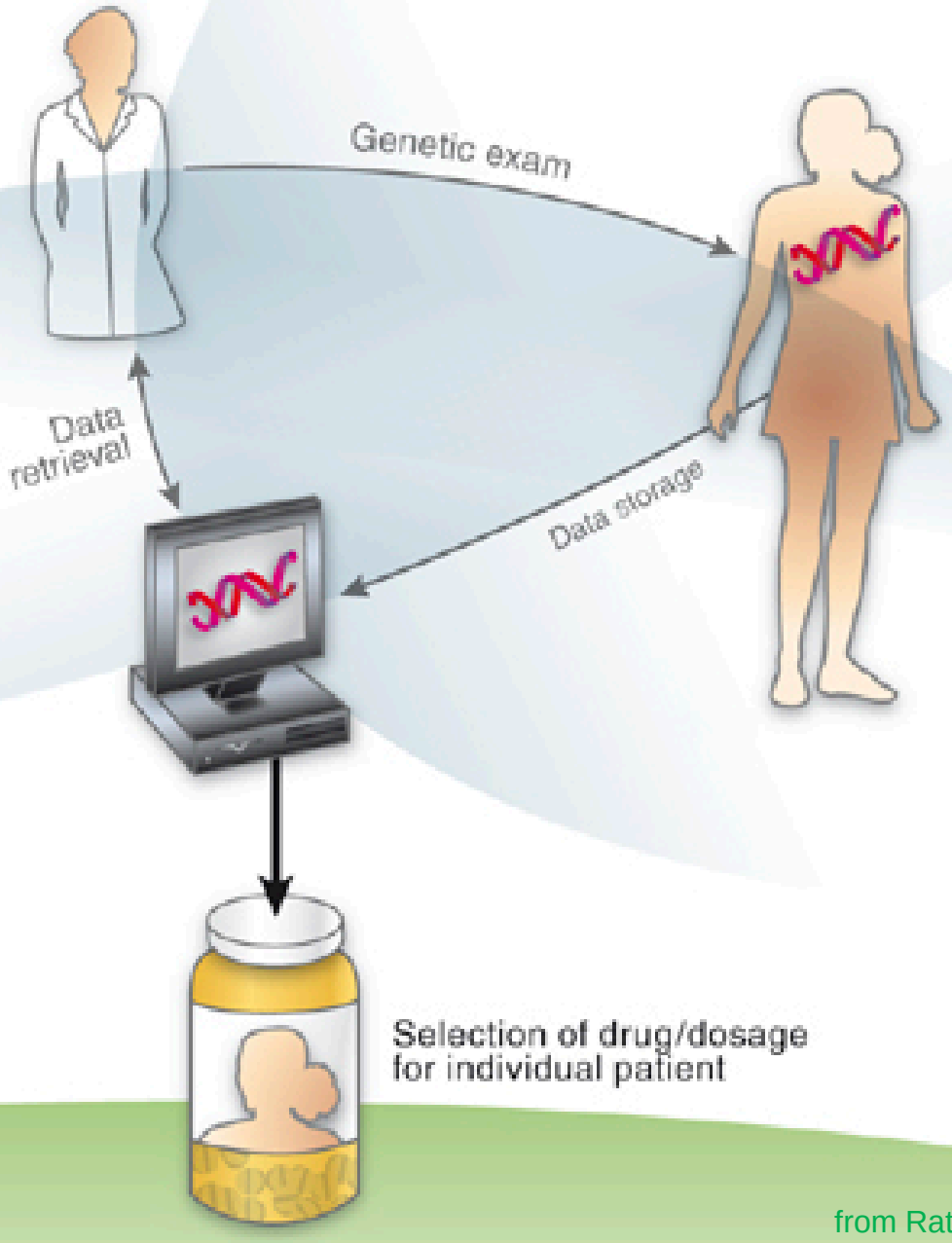
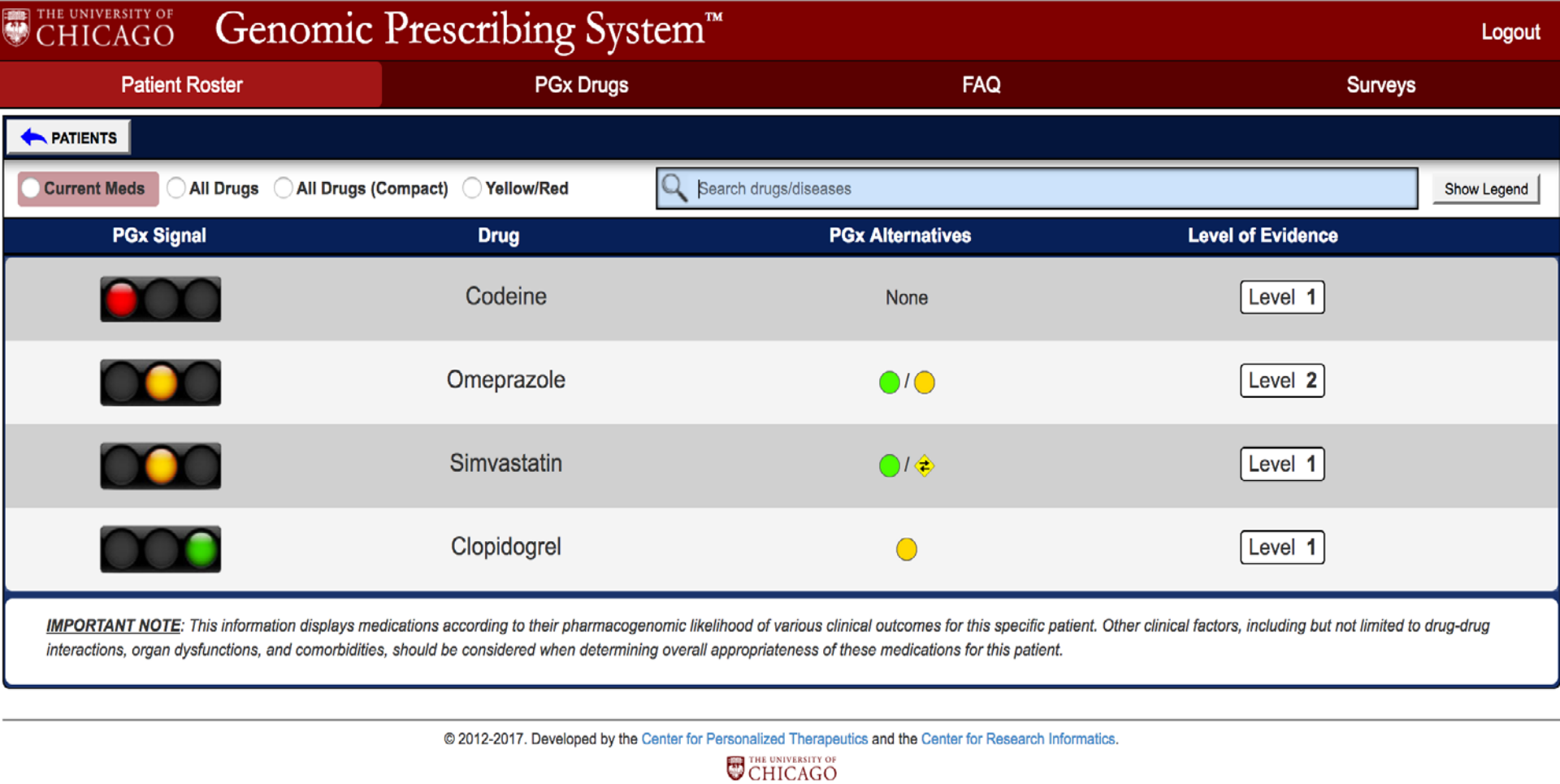
# "Genomic Prescribing System" (GPS)




from Ratain CPT 2007




Slide courtesy Peter Odonnell MD

THE UNIVERSITY OF CHICAGO **Genomic Prescribing System™** Logout

Patient Roster | PGx Drugs | FAQ | Surveys

PATIENTS

Current Meds | All Drugs | All Drugs (Compact) | Yellow/Red | Search drugs/diseases | Collapse All | Show Legend

| PGx Signal | Drug | PGx Alternatives | Level of Evidence |
|---|---|---|---|
|  | Codeine | None | Level 1 |

EVIDENCE LEVEL 1

**Your patient's genotype in the *cytochrome P450 2D6* (*CYP2D6*) gene is strongly associated with an increased risk of toxicity including CNS depression and potentially death when taking codeine. Codeine use should be avoided. The related drug tramadol, which also depends on CYP2D6, is also *not* recommended because of the same potential risk. Alternative analgesic(s) should be used. Note that mothers with this same genotype can confer the same risk to breastfeeding infants, and codeine should *not* be used.**

Codeine is a prodrug that becomes metabolized by the CYP2D6 enzyme to active metabolites morphine and morphine-6-glucuronide. Individuals with a genotype like your patient have dramatically increased levels of these active metabolites when taking codeine due to hyperactivity of the CYP2D6 enzyme.

In a study of 26 healthy Caucasian males, plasma morphine concentrations after 30 mg of codeine were 50% higher in individuals having the same genotype as your patient compared to those with normal genotypes (16 vs. 11 µg h/l, p=0.02). Ten of the 11 patients with the same genotype as your patient displayed sedation, compared to 6 out of 12 with normal genotypes (p=0.03). Multiple additional case reports have described severe or life-threatening adverse effects following use of standard doses of codeine in patients with the same genotype as your patient.

The FDA drug label warns about use of codeine in patients with your patient's genotype, warns about use in nursing mothers, and contains a **black box warning** regarding use in children after tonsillectomy and/or adenoidectomy because of cases of death and respiratory depression related to this genotype. This recommendation is also consistent with published guidelines from the Clinical Pharmacogenetics Implementation Consortium (CPIC) and the Dutch Pharmacogenetics Working Group (DPWG) which recommend against using codeine in patients with the same genotype as your patient.

References: Clin Pharmacol Ther (2014) Clin Pharmacol Ther (2011) Clin Pharmacol Ther (2012) Pharmacogenomics J (2007) N Engl J Med (2004) Lancet (2006)

| | | | |
|---|---|---|---|
|  | Omeprazole | ● / ● | Level 2 |
|  | Simvastatin | ● / ⇄ | Level 1 |



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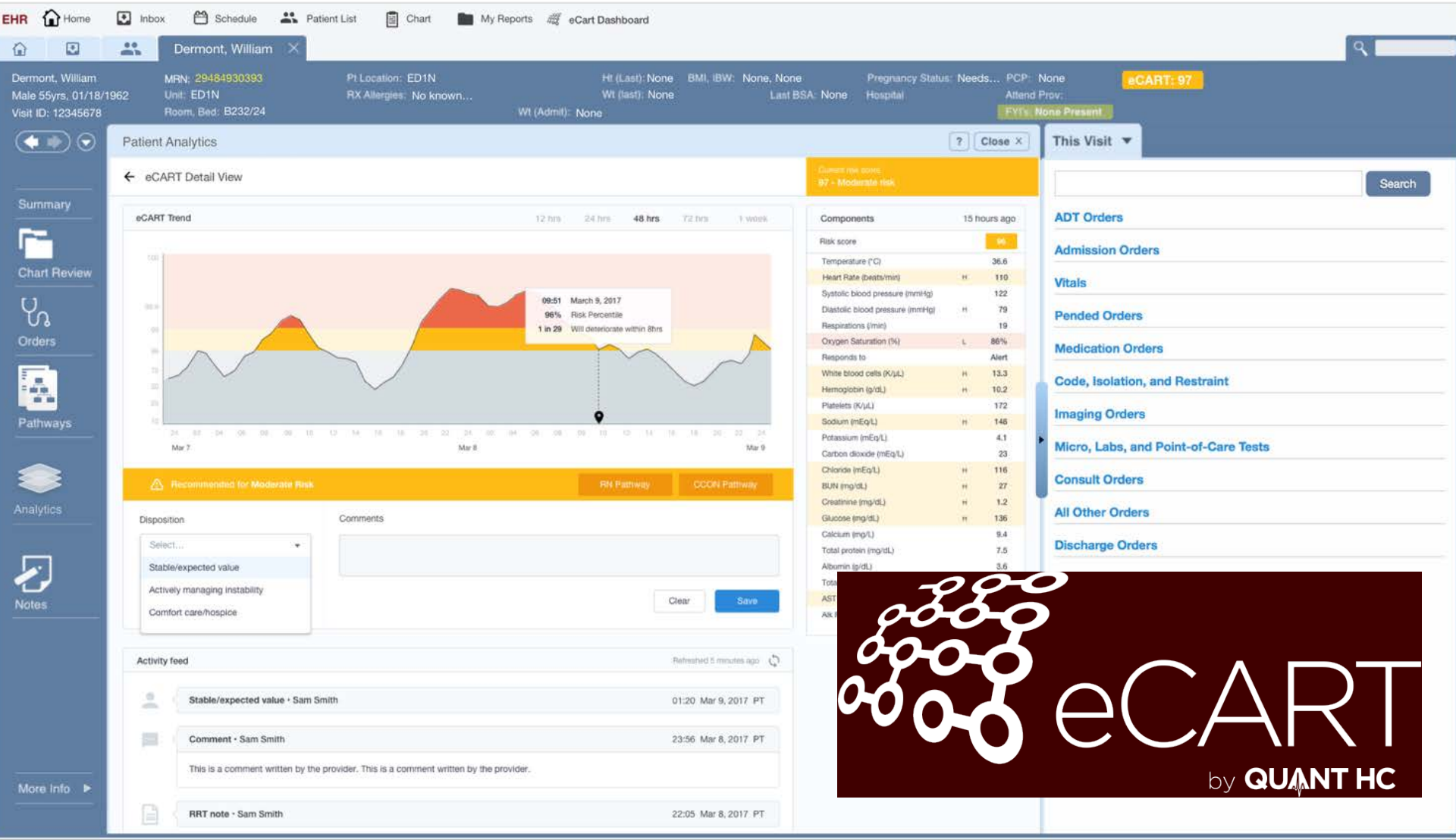
Slide courtesy Peter Odonnell MD

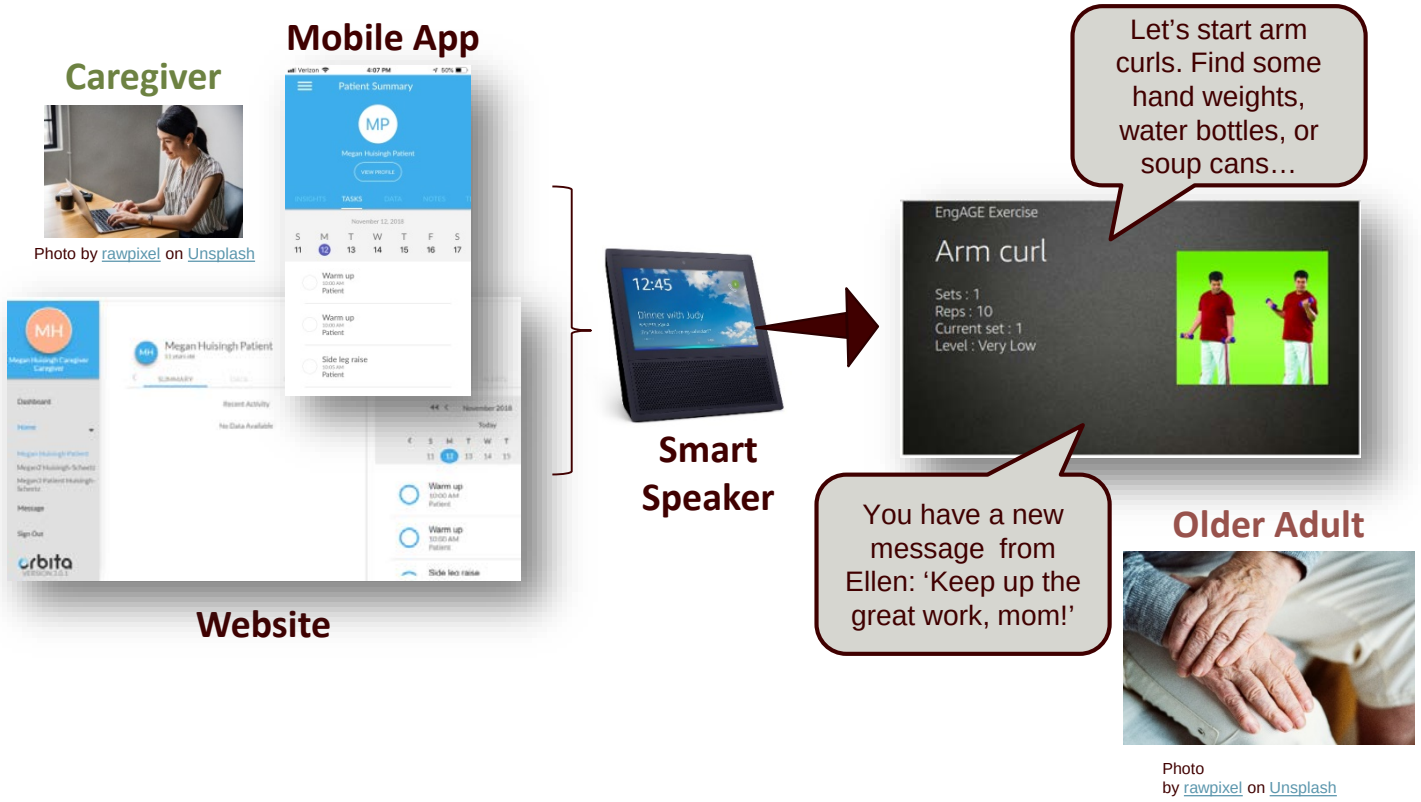
# AI to Warn Clinical Team about a Patient Risk




Slide courtesy Dana Edelson MD

# Post-Discharge Physical Therapy

- **EngAGE©**: A Program That Delivers Audio and Visual Exercise Instructions & Socially Motivating Messages to Older Adults Through A Smart Speaker

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Authors: Huisingh-Scheetz M & Hawkley L;
Programmers: Orbita, Inc.

# Healthcare Teams Today

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# Medical Training Now

# Current State of Medical Training

- Apprenticeship model
- Uniform timeline
- Standardized testing
- Service vs. learning
- Duty hours debates

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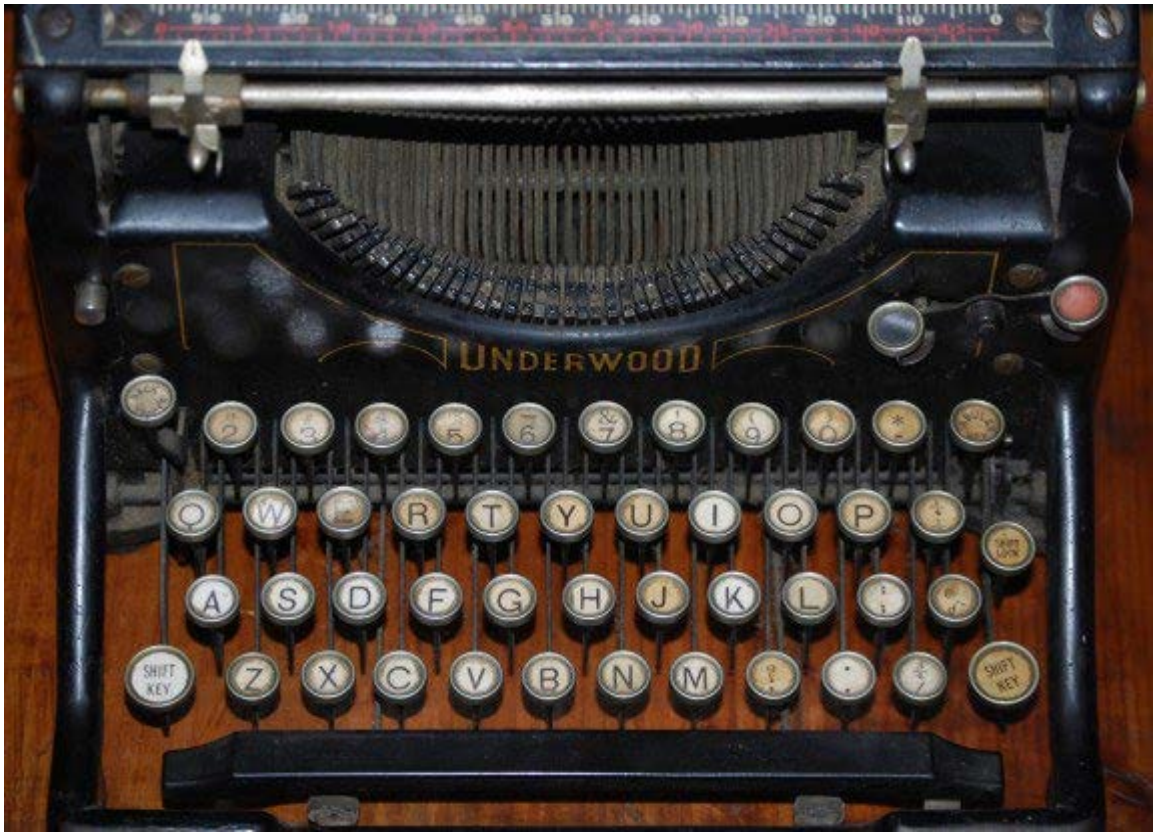
# Are we stuck with a QWERTY keyboard?

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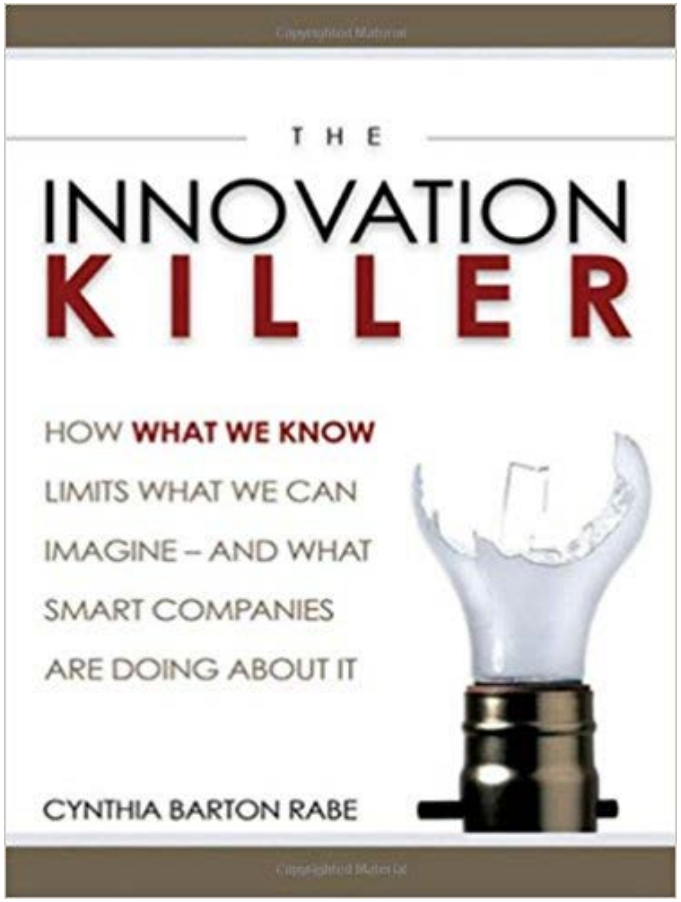
# How Do We Innovate?

# What kills innovation?

- Innovation is hampered by:
  - Expertthink
  - Grouptthink
- Surrounding yourself with like-minded individuals

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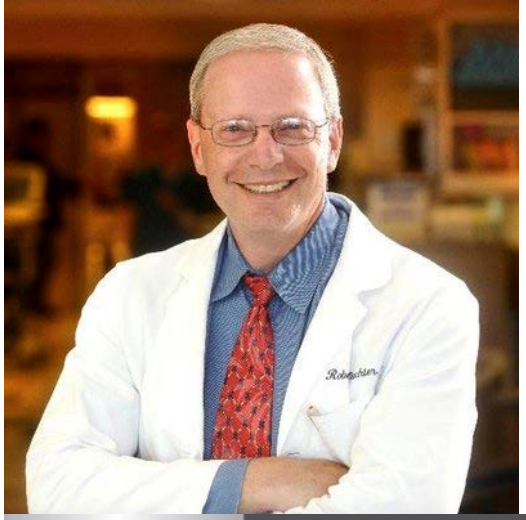
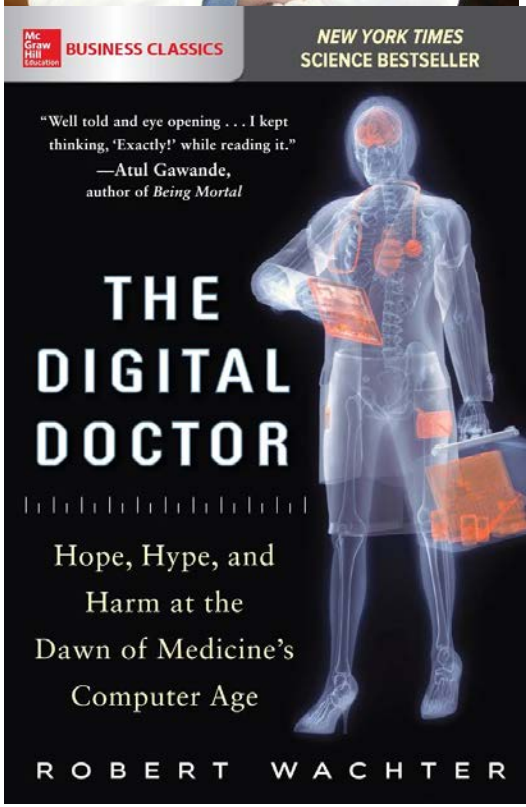
# Key to Innovation: Zero Gravity Thinkers

- **Psychological distance:** maintain an open mind.
- **Diverse interests:** a wide range of interests, experiences, and influences
- **Expertise in intersectoral areas:** strength in a relevant area may lead to "intersection points" at which solutions are often found



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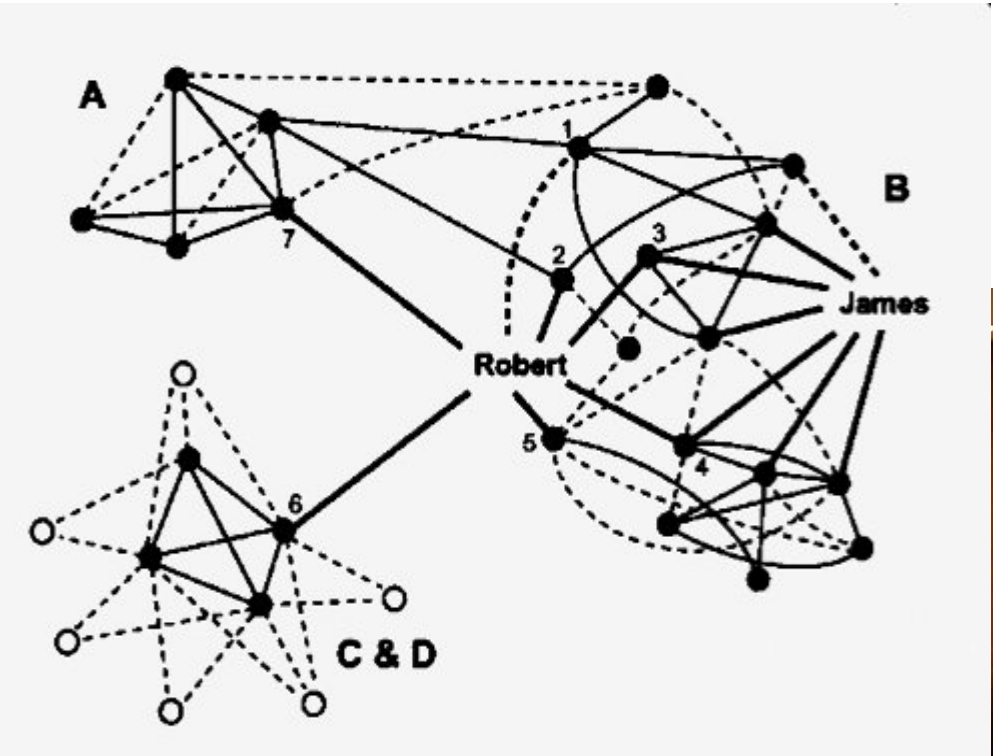
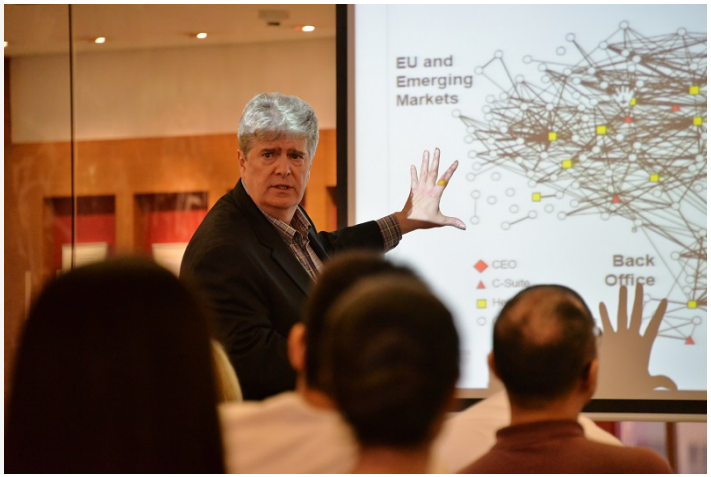
# Role of Brokers in Innovation




- Brokers
  - Member in multiple groups—powerful transmitter of information




*People connected to groups beyond their own can expect to find themselves delivering valuable ideas, seeming to be gifted with creativity. This is not creativity born of genius, but as an import-export business. An idea mundane in one group can be valuable insight in another.*

Ron Burt, PhD

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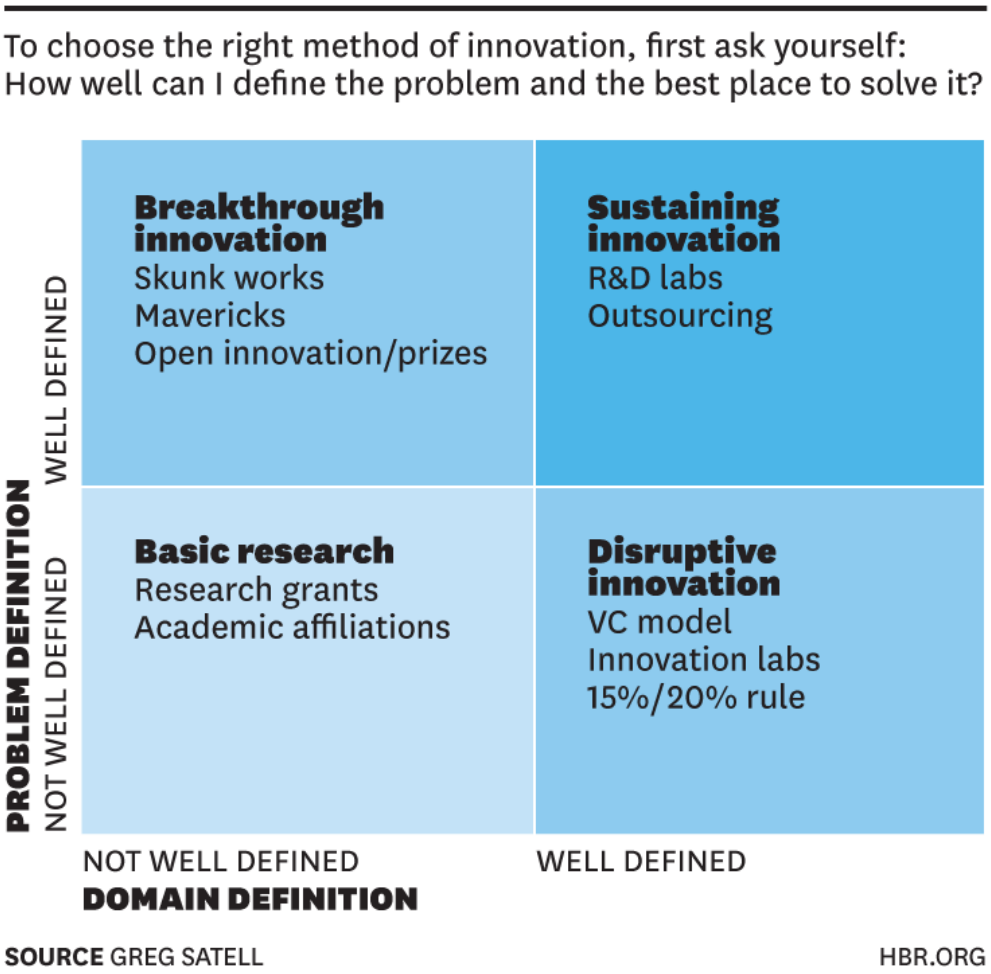
CHICAGO BOOTH
The University of Chicago Booth School of Business

# Diverse Types of Innovation

Primary Care Delivery Innovations

Personalized Medicine Initiatives




Scribes

Minute Clinic

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Harvard Business Review

# Marketing Innovation is Necessary

| The 5Ms of Advertising<br>Checklist for planning of a Marketing or Advertising campaign… | |
|---|---|
| *Mission* | ▪ What are the objectives?<br>▪ What is the key objective? |
| *Money* | ▪ How much is it worth to reach my objectives?<br>▪ How much can be spent? |
| *Message* | ▪ What message should be sent?<br>▪ Is the message clear and easily understood? |
| *Media* | ▪ What media vehicles are available?<br>▪ What media vehicles should be used? |
| Measurement | ▪ How should the results be measured?<br>▪ How should the results be evaluated and followed up? |

Figure adapted from Satpathy R

STRIVES

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IMPROVE Generic Prescribing

# Overcome the Status Quo

- **Status quo bias**
  - an emotional preference for the current state of affairs
  - Any change from baseline is perceived as A LOSS
- "nudges" needed to promote better decisions about personal health
- Adapt nudges to clinician behavior

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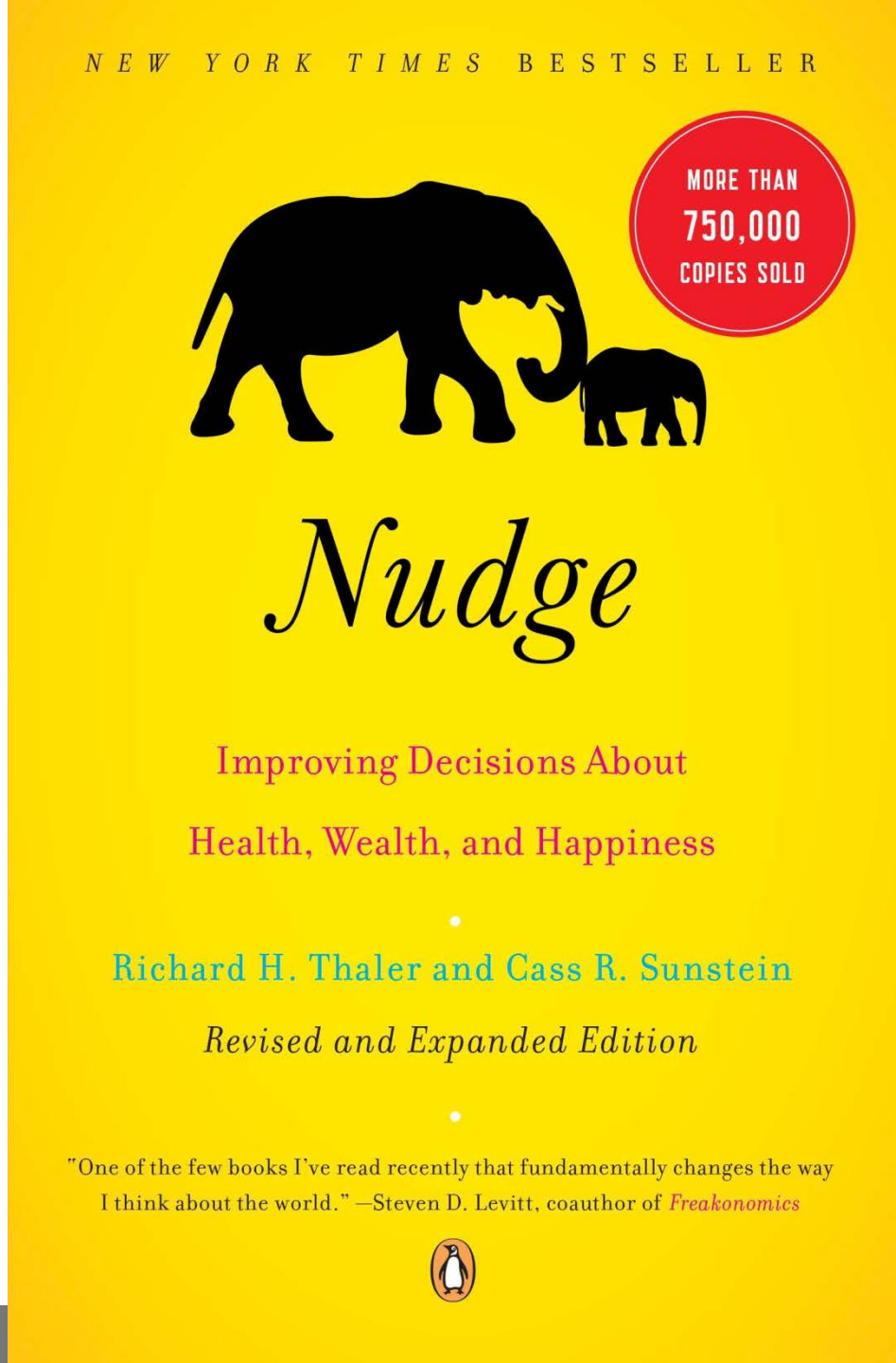

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# Aligning Innovation in Training & Care

# Bridging Leaders as "Brokers"

VIEWPOINT

## Merging the Health System and Education Silos to Better Educate Future Physicians

**Reshma Gupta, MD, MSHPM**
VA Los Angeles Healthcare System, Los Angeles, California; and Department of Medicine, David Geffen School of Medicine, University of California-Los Angeles.

**Vineet M. Arora, MD, MAPP**
Department of Medicine, University of Chicago, Chicago, Illinois.

**The Affordable Care Act** (ACA) is shifting physician reimbursement from volume to value. Academic medical centers (AMCs) are responsible for educating future physicians so that they will acquire the skills to practice value-based care. However, the linkages between the leaders of health systems and leaders of residency education may be tenuous, primarily because these leaders exist in separate silos in AMCs.

Even though the American College of Physicians, Institute for Healthcare Improvement, Veteran Affairs Centers of Excellence, and others have created curricula to teach residents principles of value-based care and population health, the practice models that residents are immersed in result in powerful imprinting on future decision making and practice.[1] If residents observe attending physicians frequently order unnecessary computed tomography scans due to perverse financial incentives, residents may be more likely to adopt this practice. Similarly, regional spending patterns in which physicians train are associated with their future spending patterns in practice.[1] In this Viewpoint, we outline 3 steps AMCs can use to accomplish their dual missions of delivering high-quality care and preparing the next generation of physicians for new models of value-based care and population health.

However, the linkages between the leaders of health systems and leaders of residency education may be tenuous, primarily because these leaders exist in separate silos in AMCs.

### Supporting Leaders Who Bridge the Health Care Delivery and Education Silos

based care and population health by incorporating relative costs and quality of relevant therapeutic options, care coordination, and strategies to promote health of specific patient populations.

Bridging leaders can also take responsibility for ensuring that the clinical learning environment creates an "imprinting" of these principles. This is critical because many institutions are at the crossroads of adopting new models of care while receiving a high proportion of fee-for-service payments, which incentivize doing more rather than providing high-value care. Therefore, exposing residents to new alternative care models is important. Currently, the internal medicine and family medicine residency programs at the University of Washington, Virginia Mason, Swedish Medical Center, and Group Health are jointly developing an elective that integrates residents into high-performing practice teams to achieve high-value care outcomes; it will use population health innovations like health coaches, LEAN (Lean Education Academic Network), and alternative payment models.

Ideally, bridging leaders will not only have a working knowledge of the health system's goals but also can access institutional support in health information technology (IT) and quality to facilitate aligning resident practice with institutional goals. These leaders also can interface with the entire health care team, including nurses and other health professionals, so residents receive consistent messages and role modeling in interprofessional teams.

Academic medical centers can also invest in cultivating medical student and residency trainees who may ultimately fill these bridging leadership roles. The Dell Medical School at the University of Texas at Austin and Duke University residency programs have developed leadership and management education pathways for trainees to obtain extra skills in value-based medicine.

Healthcare xxx (xxxx) xxx–xxx

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journal homepage: www.elsevier.com/locate/healthcare

Opinion paper

## Achieving alignment in graduate medical education to train the next generation of healthcare professionals to improve healthcare delivery

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[b] Pritzker School of Medicine at University of Chicago, 5841 S. Maryland Ave. MC 2007 AMB W216, Chicago, IL 60637, USA

As healthcare delivery systems undergo widespread clinical transformation, it is important that medical trainees, who will be our future healthcare workforce, are not left behind. Unfortunately, medical education programs are not producing physicians with the skills to work in the delivery systems of the future.[1] A recent National Academy of Medicine report highlighted this problem and suggested a new system to allocate Medicare graduate medical education (GME) funding based on performance of GME programs.[1]

In addition, the Accreditation Council of Graduate Medical Education (ACGME) Clinical Learning Environment Review (CLER) program aims to spur "a coordinated and concerted effort by both the leadership of GME and the executive leadership and governance of US teaching hospitals" to ensure resident engagement in systems-based practice.[2]

With this growing imperative, a number of teaching hospitals are updating their programs and curricula to better align residency education and the improvement of healthcare delivery. Although some of this work is in response to external pressures, such as the CLER program, the true goal of alignment is to mutually benefit the institution as well as trainees. This article will discuss recent innovations in graduate medical training that are specifically aimed at improving healthcare delivery in teaching hospitals through better alignment of their educational and clinical operations. The three key components to achieving this alignment are: (1) bridging educational and clinical priorities; (2) developing curricula to support alignment; (3) and fostering resident-led programs that lead to systems change (Fig. 1).

### 1. Aligning educational and clinical priorities

While critically formative education experiences for trainees are embedded within clinical environments, the leadership and priorities of the educational and clinical operations enterprises typically exist in distinct siloes. Currently, perceptions of alignment between health systems and GME are highly variable.[3] Greater perceived alignment is associated with more institutional support and resources for engaging residents in improving care delivery in the health system, as well as educational leaders who are more likely to report staying in their job.[3]

Recently, a number of medical schools and centers have tasked leaders with "bridging" GME and the health system to integrate educational and clinical missions.[4] These bridging leaders have generally originated from the GME realm (titles include "GME Director of Quality and Safety" and "GME Director of CLER") and have subsequently taken on more clinical administrative duties, gaining a seat at the table for education in the C-suite. Ideally, bridging leaders are well versed in both quality and safety and the language of medical training so that they are positioned to promote better alignment and communication across an organization. Bridging leaders typically serve on institutional quality and safety committees and can facilitate translation of institutional priorities across the medical education enterprise through incorporation into orientation programs, creation of quality/safety curricula, direction of housestaff quality/safety council efforts, and even development of performance incentive plans targeted at residency trainees.[4,5] Through these types of bridging leaders, the organizational structure of the institution is transformed to support alignment by removing silos between education and medical center operations.

As clinical and educational leaders look for simple win-wins in aligning priorities, an obvious opportunity is to engage trainees in improvement work that fulfills operational objectives.[6–8] For example, a multispecialty housestaff-led initiative at the University of Washington sought to improve the use of the problem list in the electronic health record, helping the medical system fulfill meaningful use criteria, while simultaneously developing quality improvement leadership skills among involved resident physicians.[6] Taking this a step further, the University of California at San Francisco (UCSF) introduced a financial incentive program for residents and fellows that provides them with small monetary bonuses for achieving agreed upon resident-led quality metrics.[5] While these metrics were proposed by residents, they were selected by hospital administration to align with operational priorities. Over the first six years of this program, more than 70% of resident projects were successful in meeting their pre-determined goals. These programs illustrate how alignment is ideally about making the residents more visible to the institution in a value-added way, as well as giving residents a window into how the hospital works.

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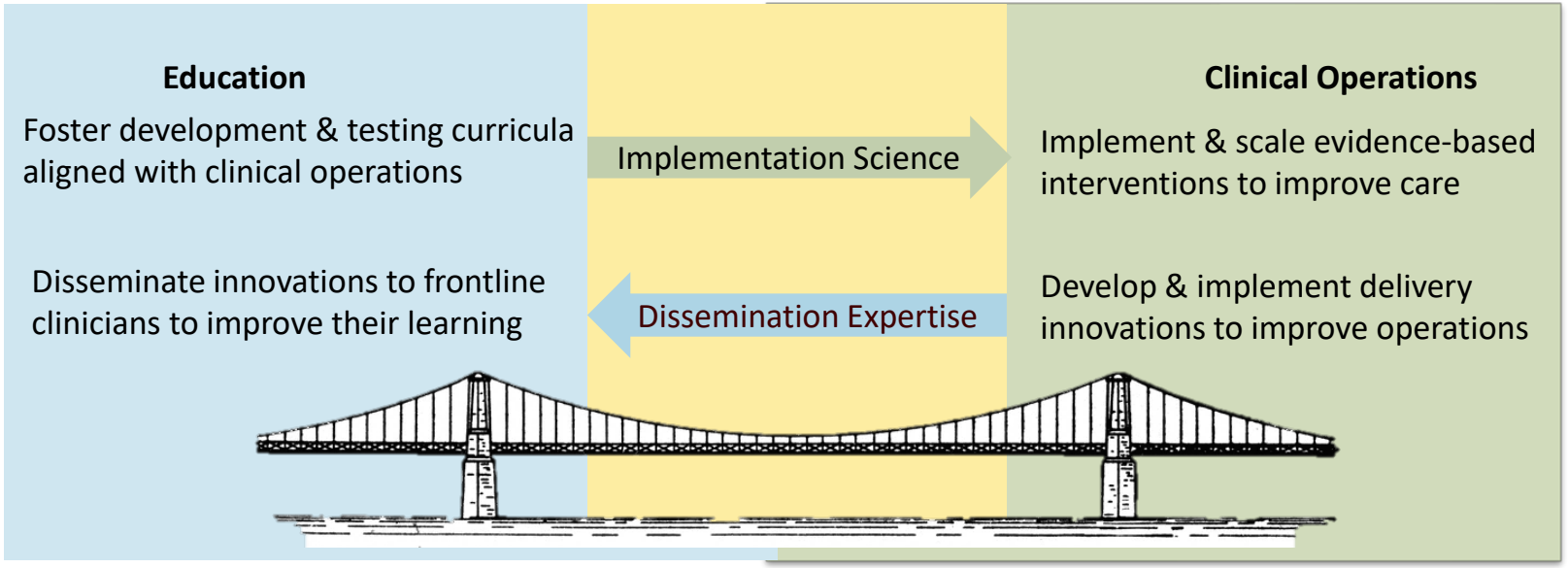
JAMA®
The Journal of the American Medical Association

healthcare
The Journal of DELIVERY SCIENCE and INNOVATION

# Bridging Leader to Broker Innovations Between Education & Clinical Enterprise

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Adapted from Moriates & Arora. Healthcare

# Engaging Zero Gravity Thinkers

Center for Healthcare Delivery Science and Innovation

ABOUT RESEARCH PROGRAMS TRAINING EVENTS NEWS RESOURCES

Choosing Wisely®

*An initiative of the ABIM Foundation*

## Part 1: Choosing Wisely Idea Incubator

**Deadline: Monday January 30, 2017 at noon**

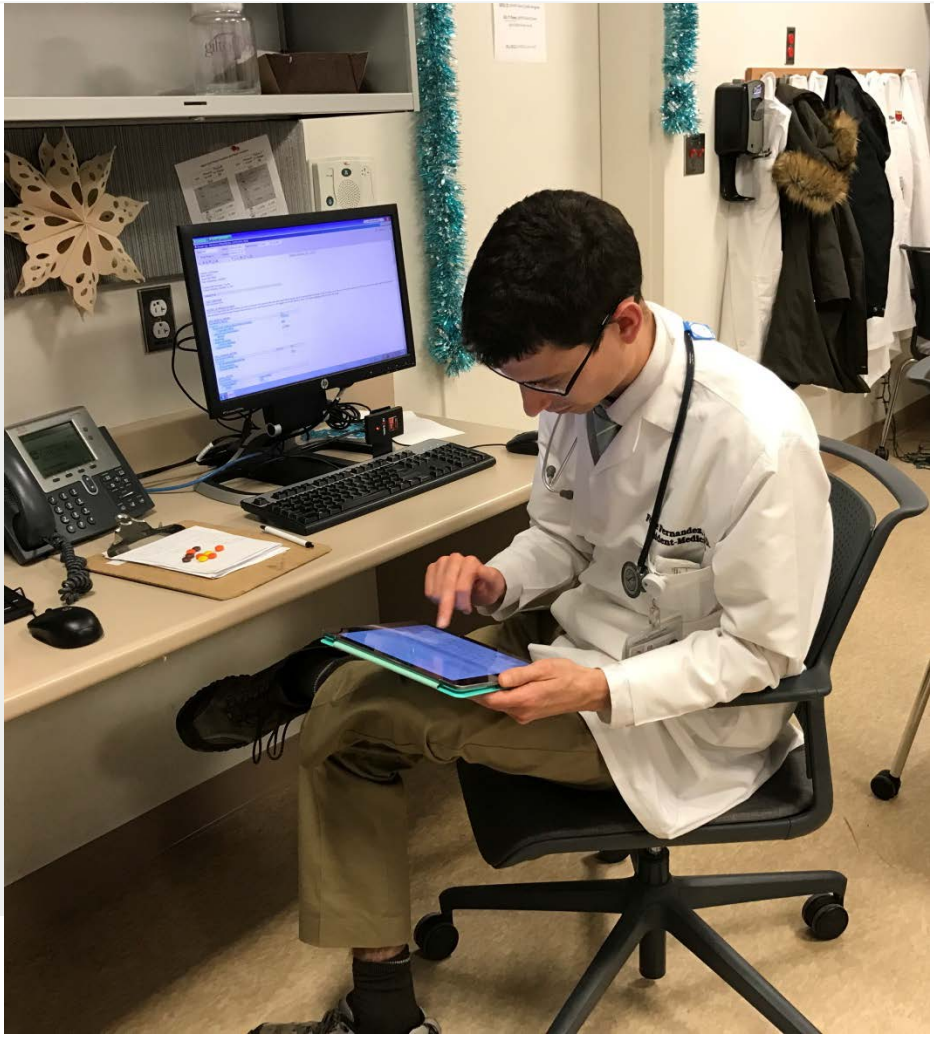
**Instructions**

1. Students, residents, fellows, and staff are asked to submit a description of a low value problem occurring at UCM in *20 words or less*.

- Multiple submissions by the same individual are permissible.

2. The top five problems will be selected by the Center for Healthcare Delivery Science & Innovation faculty for the *themes* for the 2017 Choose Wisely Challenge.

**Idea Incubator Form**



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# Choosing Wisely Challenge 2017

## VOTE + NOTE

### To Vote:

- Vote to indicate:
  - → top 3 themes we should use for the Choosing Wisely Challenge

### To Note:

- Make notes to indicate the following:
  - → Reflections, ideas + Solutions
  - → What can YOU do to help this area in your role as HDSI faculty

THE UNIVERSITY OF CHICAGO MEDICINE

## University of Chicago Medicine Annual Operating Plan FY2017

AT THE FOREFRONT OF MEDICINE®

| OUR MISSION | OUR VISION | OUR VALUES |
|---|---|---|
| Our mission is to provide superior health care in a compassionate manner, ever mindful of each patient's dignity and individuality. To accomplish our mission, we call upon the skills and expertise of all who work together to advance medical innovation, serve the health needs of the community, and further the knowledge of those dedicated to caring. | On a foundation of mutual respect, we will work together to build the University of Chicago Medicine into one of the finest organizations in the country as measured by the quality of patient care, the satisfaction of patients and their families, and the level of pride among everyone who works here. | **Participation:** A spirit of teamwork and sharing<br>**Respect:** A consideration and appreciation for others<br>**Integrity:** Honesty in our words and actions<br>**Diversity:** Honoring the power of different backgrounds and perspectives<br>**Excellence:** A commitment to do our best at all times |

| PEOPLE | PATIENT EXPERIENCE | QUALITY AND SAFETY | FINANCE | LONG-TERM POSITIONING |
|---|---|---|---|---|
| **PURPOSE** | | | | |
| Attract and develop an engaged workforce, recognized for their contributions locally, regionally, and nationally | Improve the experience of patients and families and enhance patient engagement with our care delivery system | Achieve national leadership for excellence in patient quality and safety | Generate earnings and cash flow to sustain growth and fulfill our mission | Execute strategic initiatives to achieve market leadership |
| **TARGETED OUTCOMES** | | | | |
| • Attract talent invested in delivering the optimal patient experience<br>• Build a culturally and linguistically competent organization<br>• Develop people to advance careers and create organizational bench strength<br>• Engage employees and providers in continually improving our work environment and work-life balance | • Enhance the patient/family experience to exceed expectations, improve satisfaction and increase engagement<br>• Meaningfully engage patients and families to enhance UCM care delivery and to optimize their own outcomes<br>• Optimize performance on external patient experience measures<br>• Improve access and capacity by enhancing patient flow and minimizing avoidable waits | • Prevent harm, including healthcare associated infections, through reliable and innovative processes and targeted EHR enhancements<br>• Ensure safe delivery of medication and therapeutics<br>• Optimize performance on external quality and safety measures<br>• Develop core capabilities and ensure readiness for shift to value-based care delivery by optimizing targeted outcomes | • Expand our engagement and performance in risk-based reimbursement contracts<br>• Develop and execute payor contract strategy for affiliated and employed physicians to support the growth and development of the Care Network<br>• Actively identify and implement cost-savings measures to maintain and improve operating margins<br>• Optimize pharmaceuticals utilization and grow specialty pharmacy revenue | • Grow prioritized clinical service lines and programs<br>• Improve access and enhance referring-physician and partner- hospital relationships<br>• Execute successful integration with key network partners<br>• Improve coordination of care across our network and continuum of services<br>• Plan for successful expansion in emergency, trauma and complex-care services through Get CARE<br>• Execute successful launch of Orland Park and South Loop |
| **KEY METRICS** | | | | |
| • Employee Engagement Indicator Score<br>• Workforce turn-over in critical roles<br>• Diversity and Inclusion Index Score | • "Overall Rating of Care" score in Patient Satisfaction Survey<br>• Call Center Performance metrics<br>• 3rd Next Available Appointment | • Priority Metric Scorecard<br>• Ambulatory Quality & Safety Scorecard | • EBIDA tracking<br>• Salary and benefits as a % of net patient service revenue<br>• Pharmacy utilization<br>• Specialty pharmacy revenue | • Volume and revenue growth, including service line growth<br>• Physician network growth |
| OUR FOUNDATION: E3 LEADERSHIP | | | | |

Choosing Wisely®

*An initiative of the ABIM Foundation*

# Provide Framework for Sustaining Practice Innovations in Value

| | Interventions | Description | Skip the Drips |
|---|---|---|---|
| C | Culture | Valuing cost-consciousness and resource stewardship at the individual and team level | Subspecialty faculty champions recruited to email peers |
| O | Oversight | Requiring accountability for cost-conscious decision-making at a peer and organizational level | Pharmacy receives a monthly audit of PPI drips ordered and why |
| S | Systems Change | Creating systems to make cost-conscious decisions using institutional policy, decision-support tools, and clinical guidelines | Epic now requires indications for PPI drips when ordering |
| T | Training | Providing knowledge & skills clinicians need to make cost-conscious decisions | "Brochures" on Skip the Drips shared in workrooms & at morning report |

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Adapted from Understanding Value-Based Healthcare

# Market with Right Message & Messenger

## Choosing Wisely Challenge

## SKIP THE DRIPS

**Improve meaningful use of continuous infusions to improve value of care**

**PPI FOR UPPER GI BLEED**

- Goals

✓ Improve survival from life threatening GI bleed
✓ Avoid complications such as C diff
✓ Improve likelihood of successful endoscopy

- Recommend

✓ Pre-endoscopy: reserve PPI drip for suspected high risk upper GI bleeds.
✓ Post-endoscopy:

- **All PPIs should be discontinued unless endoscopy identifies ulcers or erosions**
- Continuous IV PPI can be used for ulcers with high-risk lesions

Dr. Gautham Reddy,
GI Fellowship
Program Director

Special thanks to UCM Office of Clinical Effectiveness, led by Michael Howell, MD.

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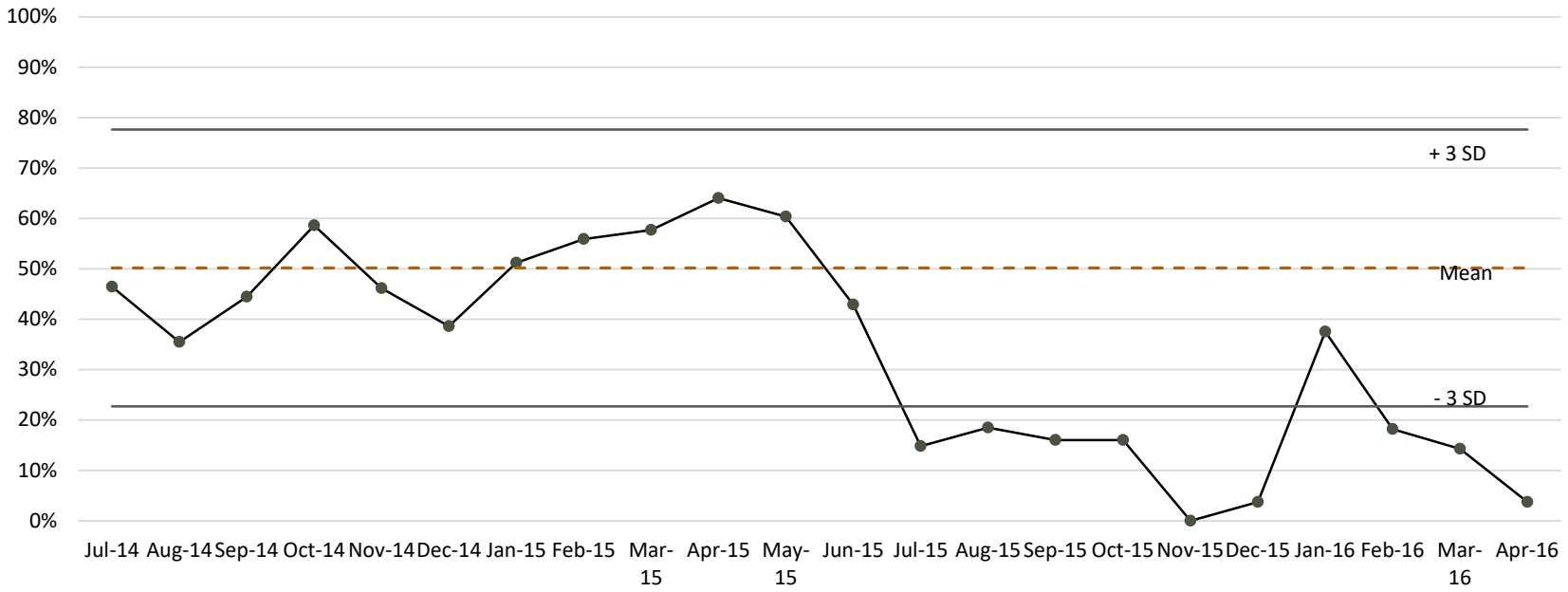
# Skip the Drips: Inappropriate PPI Orders

Nikhil Bassi




Statistical process control chart using standard UCL (LCL/UCL is defined by +/- 3 standard deviation)

JAMA Internal Medicine

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# Patient List Indicators for Tele /Foley

Charlie Wray


**Figure 1. Electronic indicator on patient list screen within Epic® Electronic Health Record.** Check marks indicate active telemetry and urinary catheter orders.

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# Usage of Telemetry & Foley with FLIP

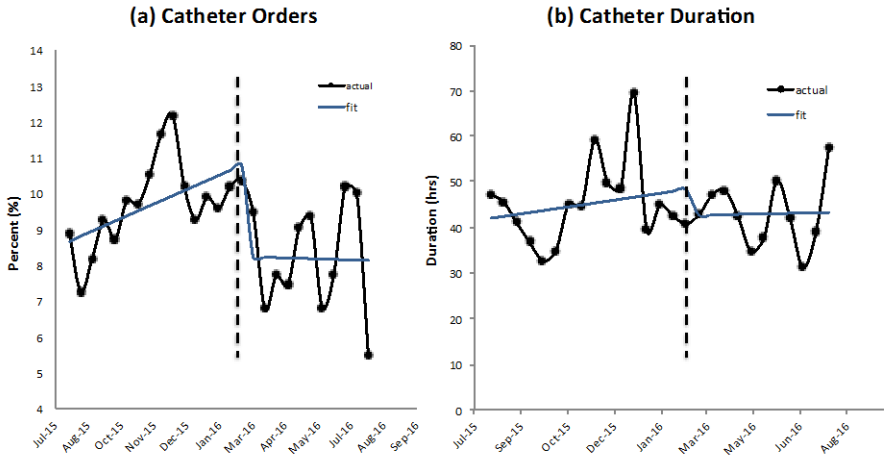


**Figure 2. Trend in urinary catheters ordered and duration of use; March 2015 – August 2016.** Vertical line indicates implementation of initiative.

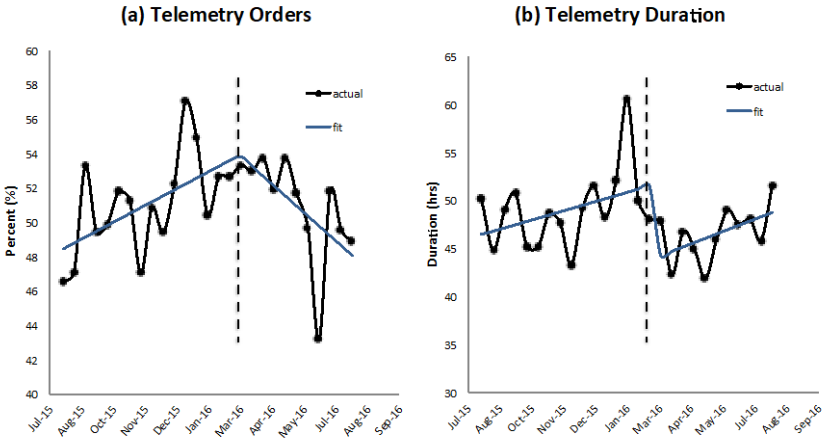


**Figure 3. Trend in telemetry orders and duration of use; March 2015 – August 2016.** Vertical line indicates implementation of initiative.

THE AMERICAN JOURNAL of MEDICINE®

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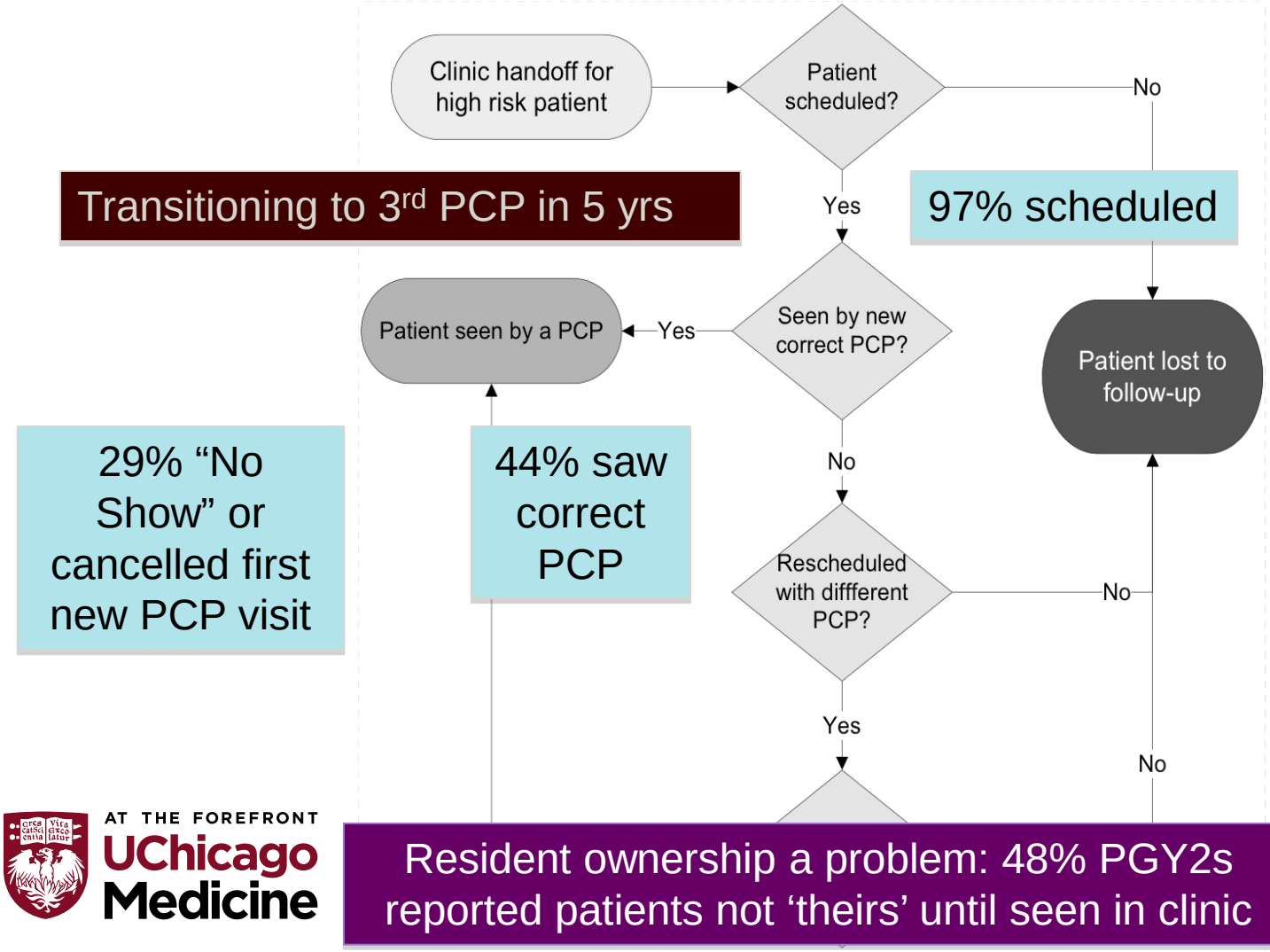
Wray, Farhenbach, Howell, Arora.

# Studying PCP Handoffs in Resident Clinic

Amber Pincavage




Transitioning to 3rd PCP in 5 yrs

97% scheduled

29% "No Show" or cancelled first new PCP visit

44% saw correct PCP

By 3 months, 26% of ALL patients had ED visit or hospital stay

By 6 months, 19% lost to follow-up

Resident ownership a problem: 48% PGY2s reported patients not 'theirs' until seen in clinic

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# Innovations Emerged from Patients

- Notify and prepare patients for the handoff
- Telephone visits with the new physician
- Give guidance to residents how to assume care
- ***Recognize patients for their role as valued educators of trainees***
- ***Importance of personal sharing***
- Empower patients during the handoff

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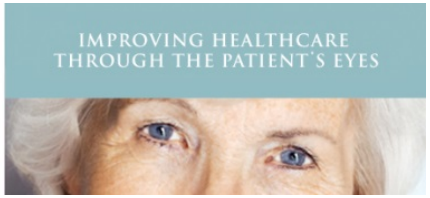
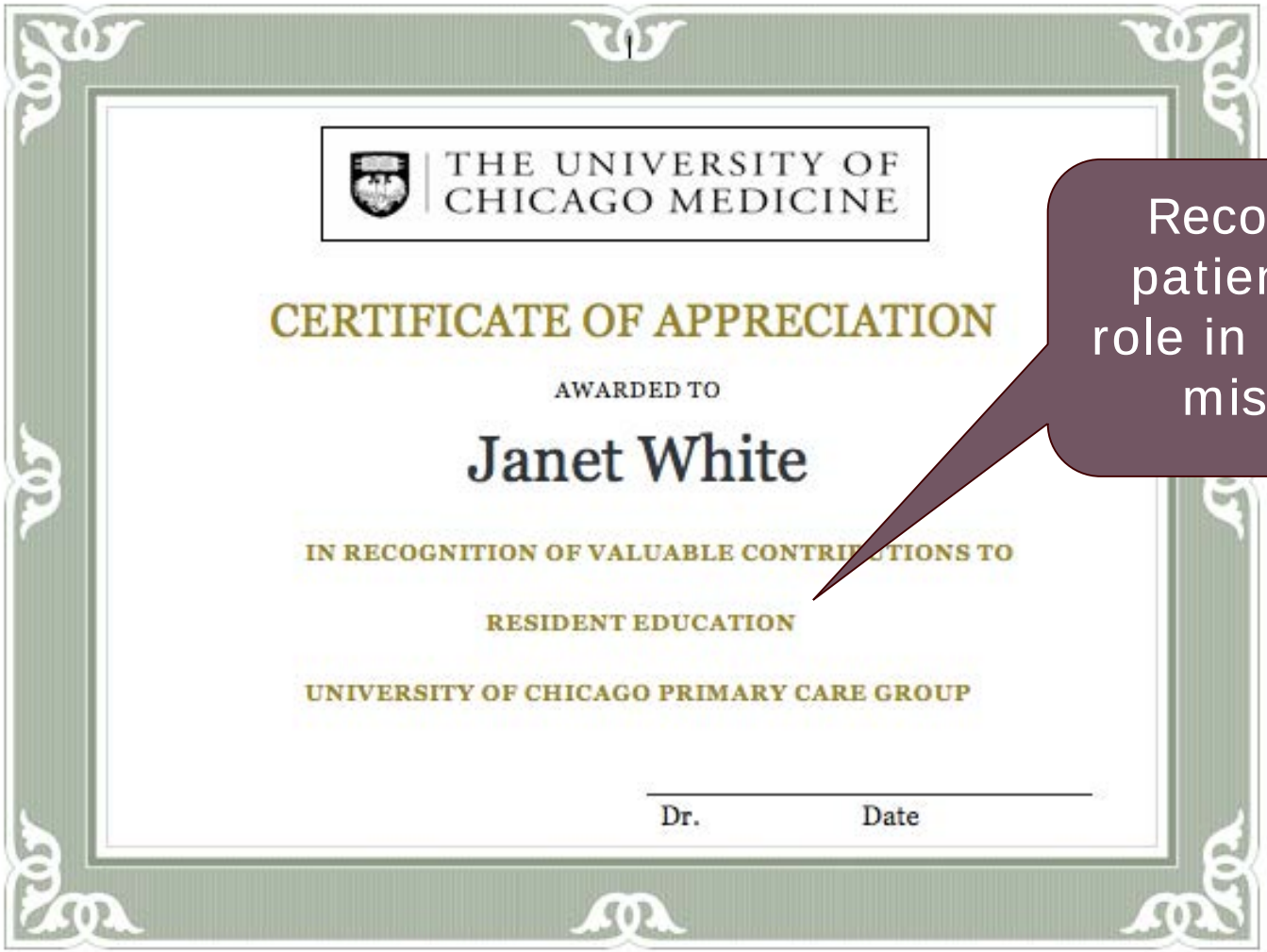
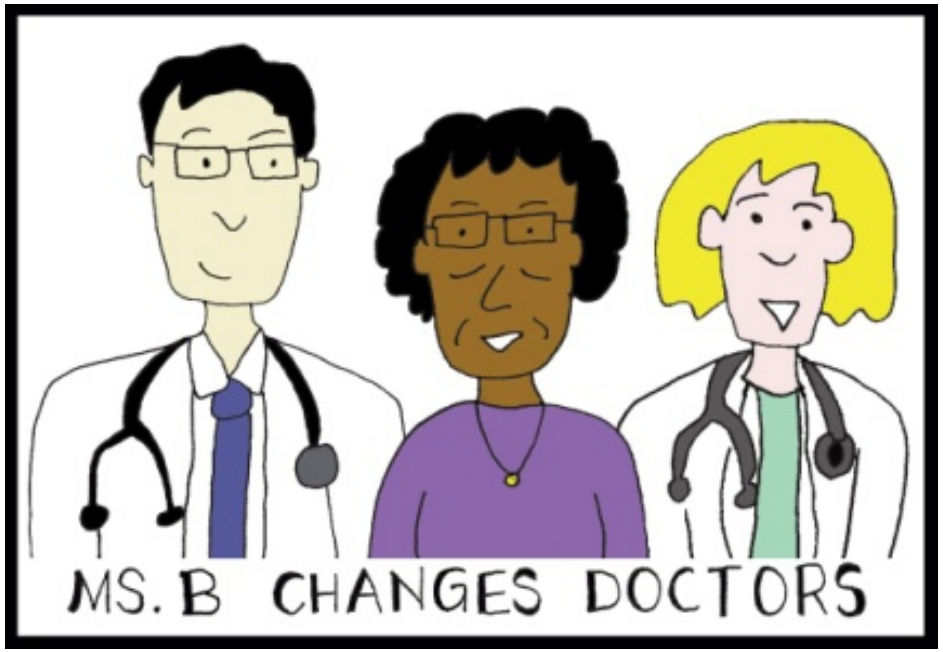
picker INSTITUTE

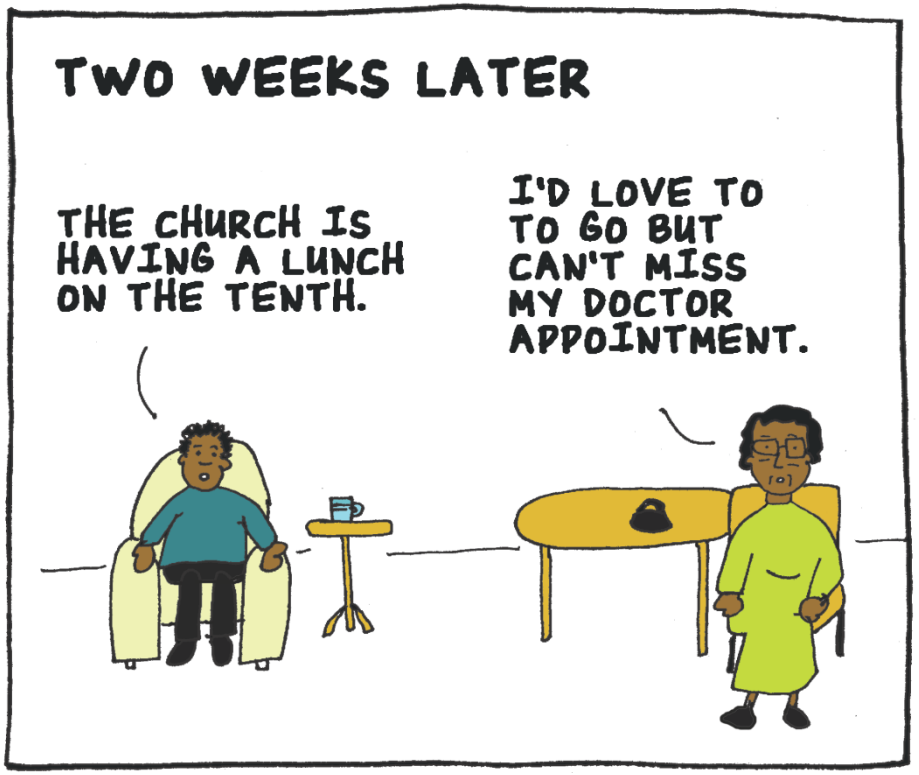





Recognize patients for role in training mission

# Improve Recall of Packet

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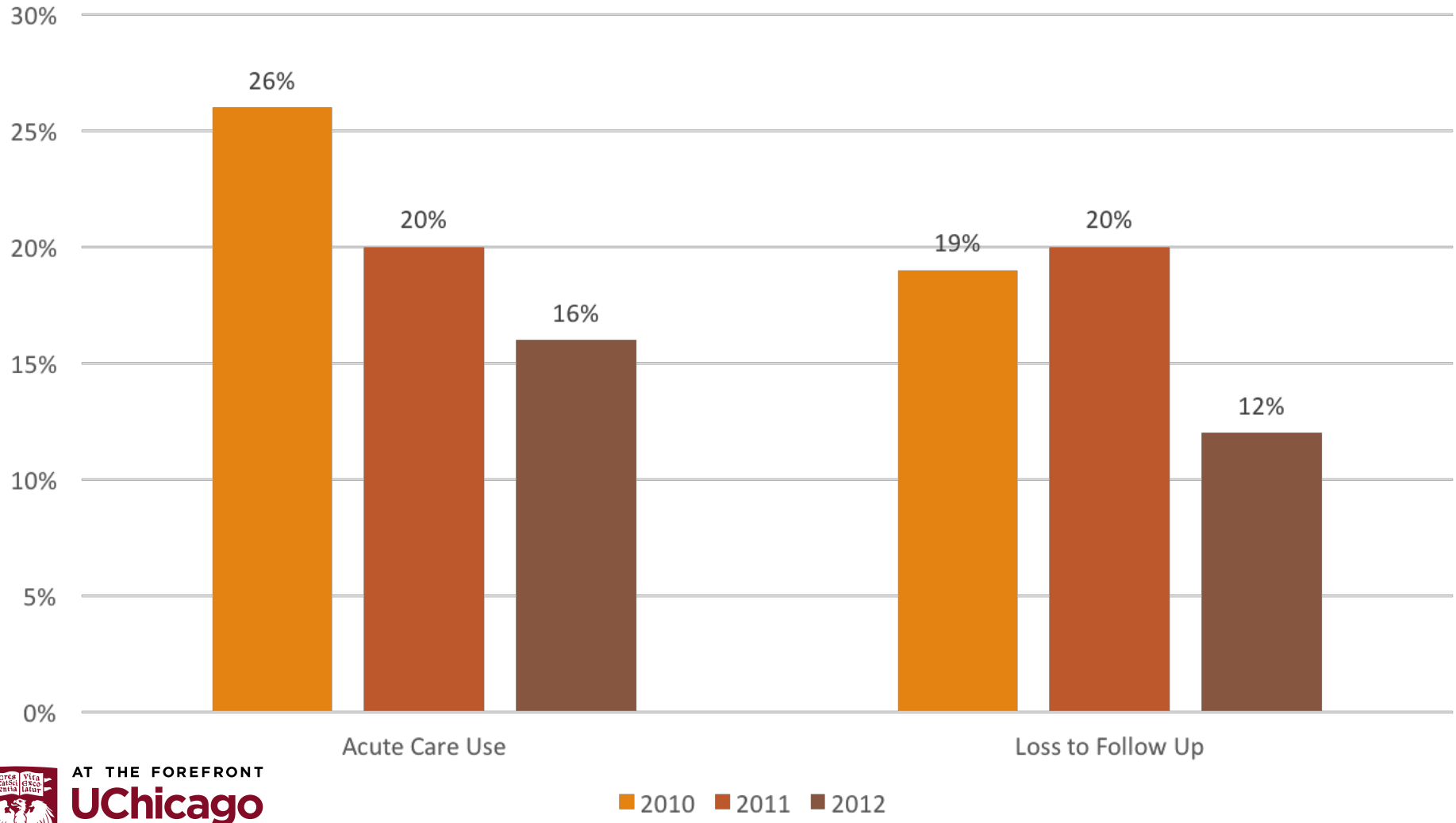
# Rates Acute Care & Loss to Follow Up

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Pincavage, et al AJM 2014

Accreditation Council for Graduate Medical Education

**Primary Drivers**

Clinical Learning Environment Review Program

Pursuing Excellence in Clinical Learning Environments

AIM

Integrate health care delivery system operations and graduate medical education (GME), such that the clinical learning environment enables measurable improvement in both learner experience and patient care.

Create a shared infrastructure that aligns the organization's strategic priorities and GME strategy.


Leaders at Resident Forum, Resident Advisory Committee, GMEC

Establish the processes and practices that fully integrate CLE staff and learners into the pursuit of quality, safety, equity and value in the organization.

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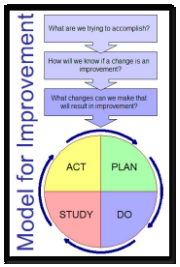


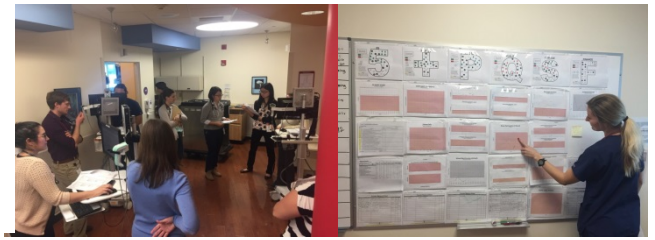

Inter-departmental QI/Safety Curriculum

Create qualified, engaged and motivated faculty capable of teaching quality and safety to residents.

ECLIPSE
Educational & Clinical Leaders Improving Performance with Structured E3L Training

Maximize shared learning with coordinated educational resources across health professions.

IGNITE
Improving GME-Nursing Interprofessional Team Experiences

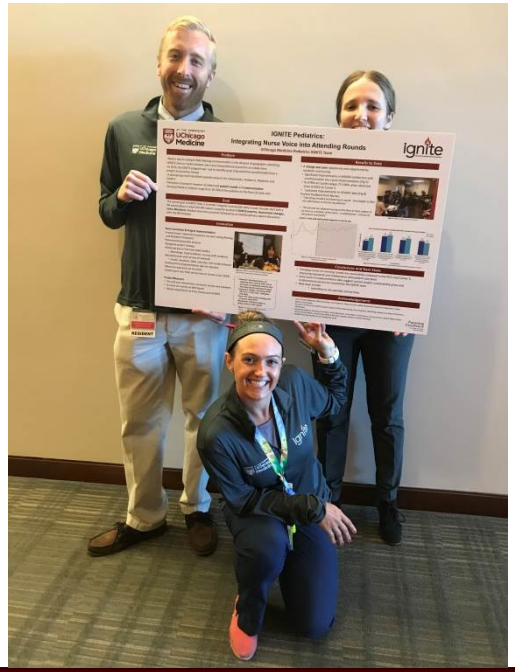


# IGNITE

## Improving GME-Nursing Interprofessional Team Experiences

Pursuing Excellence in Clinical Learning Environments

**Program Aim:** to engage residents, nurses, & other staff in institutional performance improvement through approaches at two levels:




**Unit-level:** unit-based teams, composed of Resident-Nurse champions, who work to identify & implement practice changes that improve both care & learning

**Institution-level:** institutional performance improvement “mini Kaizen” events to engage residents & staff on improving issues for which they are stakeholders & process owners.

# Why ignite ?

Improving GME-Nursing Interprofessional Team Experiences

## Interprofessional collaboration is associated with:

- Reduced medication errors
- Improved patient and nurse satisfaction
- Decreased inpatient mortality
- Shorter length of stay

## Patients not alwavs localized

## Absence of a nursing school

# What does this look like?

Cohort 1

Kaizen

Cohort 2

### IGNITE Internal Medicine

**Project aim:** Improve efficiency of multidisciplinary rounds via structured reporting tool **Metric:** resident report time

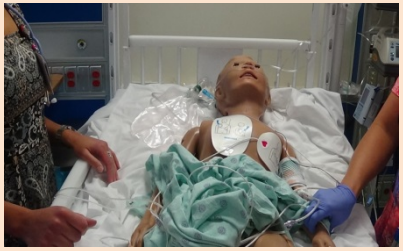
### IGNITE Pediatrics

**Project aim:** Improve MD/RN communication via including RN on morning bedside rounding **Metric:** % nurses attend rounds

### IGNITE Surgery

**Project aim:** Improve the % of patients who understand their discharge teaching early in the morning of day of discharge **Metric:** teach-backs failed

### IGNITE Kaizen - Peripheral IV Placement



**Project aim:** Improve policy/procedures for inpatient peripheral IV placement
**Metric:** fewer patients with more than 3 sticks

ignite
Improving GME-Nursing Interprofessional Team Experiences

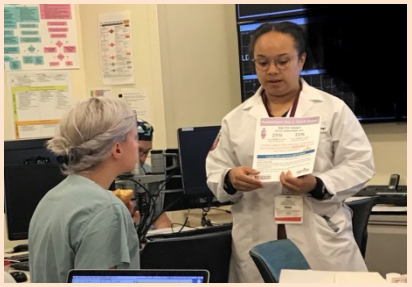
### IGNITE Kaizen - Transportation Delays

**Project aim:** improve processes to reduce patient transportation delays
**Metric:** reduce in-hospital transport delays for testing and procedures

### IGNITE Neurology

**Project aim:** Improve shared mental model of MD/RN on-call issues overnight via afternoon B-BRAINS huddle
**Metric:** on-call pages at night

### IGNITE Ob\gyne

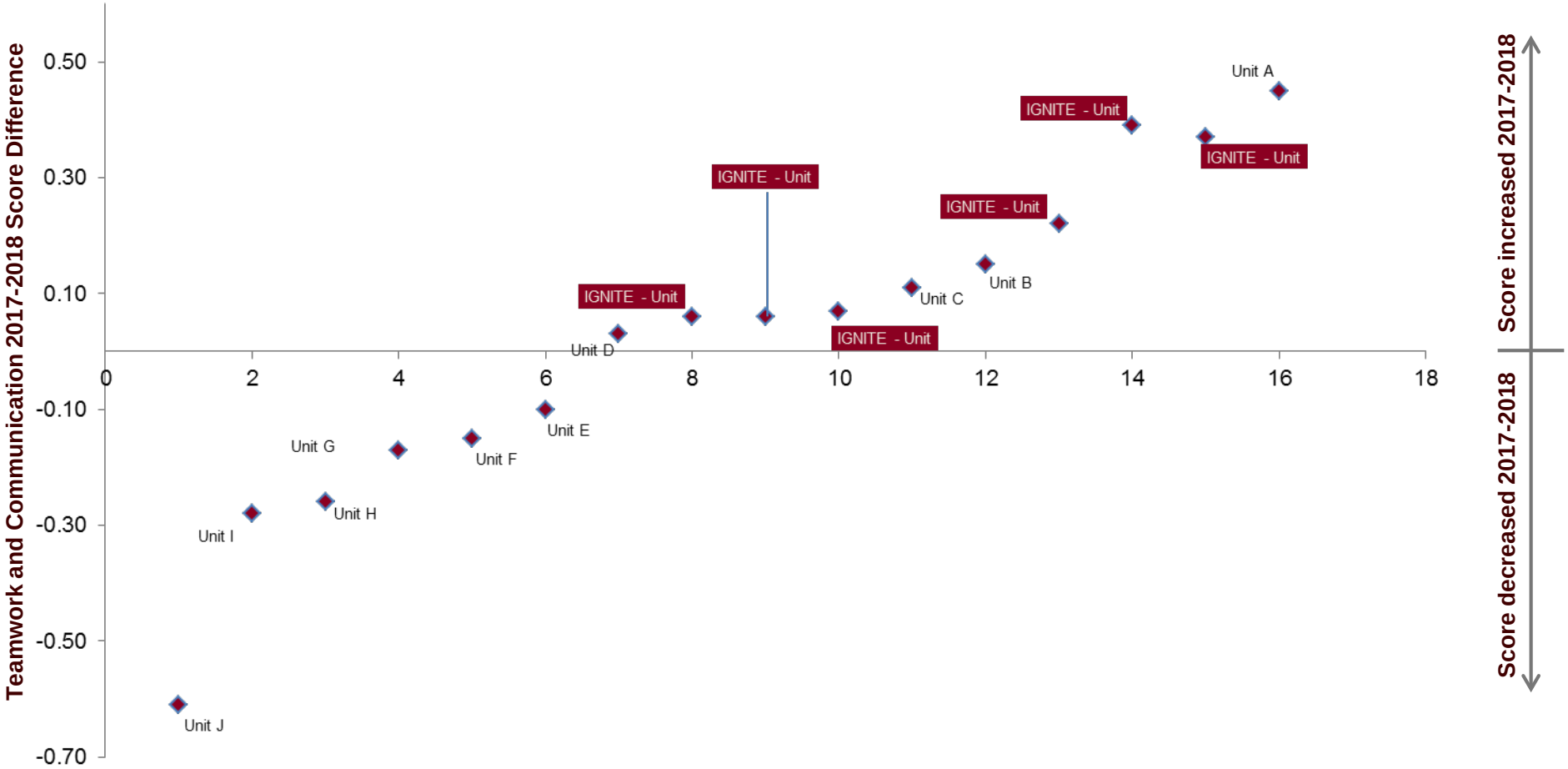


**Project aim:** Improve % low-risk patients discharged before noon via enhanced MD/RN communication after attending rounds
**Metric:** Discharge before noon

### IGNITE Orthopaedics

**Project aim:** Improving discharge communication to patients via standard EHR-based discharge template
**Metric:** Pages regarding discharge instructions

# Teamwork and Communication 2017-2018 YoY Score Difference




**Rank Order (biggest decrease to biggest increase)**

*Includes Adult Inpatient units only*

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IGNITE Participant

# Conclusions

- Innovation is urgently needed to ensure education is aligned with the advancements in clinical care we need to deliver in the future
- Bridging leadership is one way to close this gap
- Health system innovations can and should result in improved training


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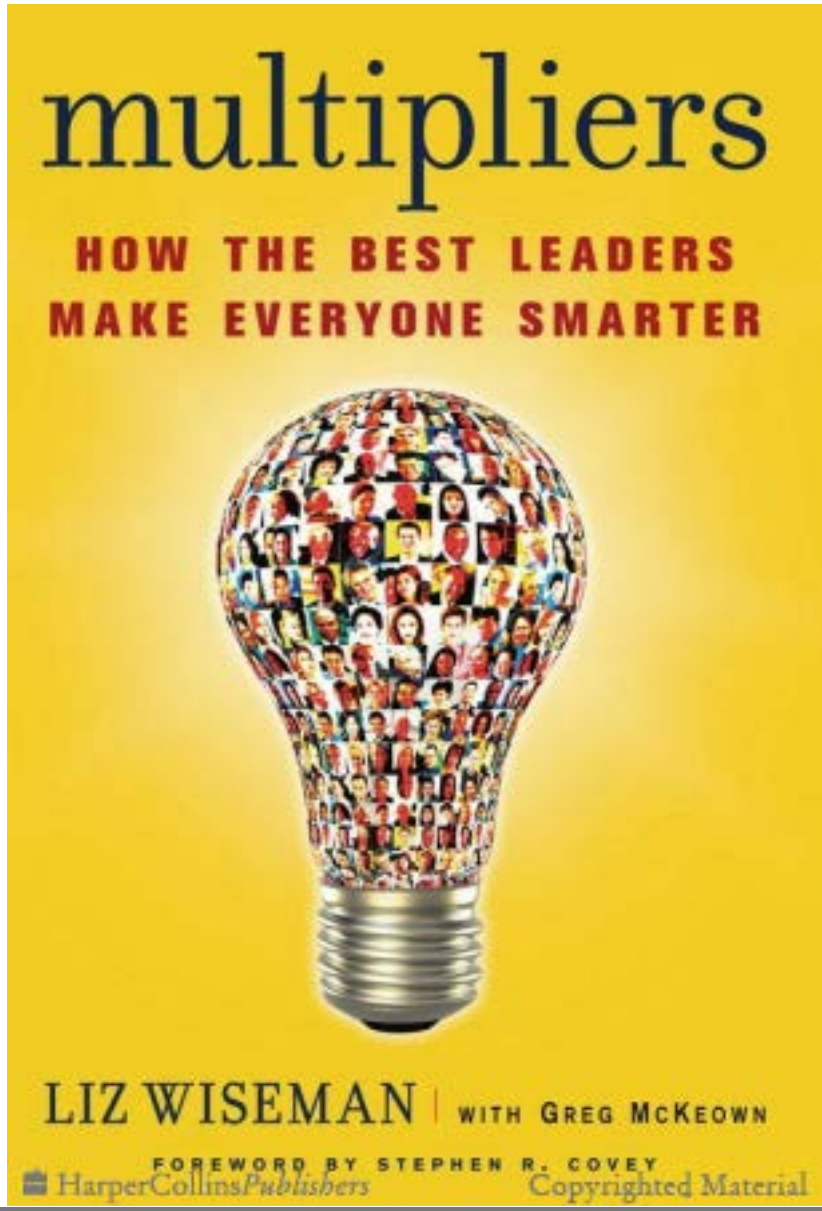
## Build legacy by investing in people

Multipliers are leaders who:

- Nurture & attract talent
- Amplify capabilities of those around them
- Invest in people
- Get twice as much from people

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