A Primer on Engaging Health Systems in Research

June 30, 2015

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Changing medicine. For good.

Disclosures

- Pharmaceutical industry
  - No research funding or speaker board

- Consultant/Advisor
  - eMAX Health   Epidemiology of eosinophilic asthma
  - Adelphi Values   Patient reported outcome (PRO) for asthma
  - CVS Caremark   National P&T committee
  - Sanofi   Independent Data Monitoring Committee
  - COPD Foundation   Medical and Scientific Advisory Committee
  - NHLBI   Clinical Trials study section
  - PCORI   Merit Review Panel Chair, Improving Healthcare Systems

- Research funding
  - PCORI (PArTNER, PELICAN, CHICAGO Plan, COPD PPRN, CAPriCORN, ACHIEVE)
  - NIH (AsthmaNet, COPD CRN, SPIROMICS)

- 1973 and 2010

- Health system leaders as decision-makers relevant to comparative effectiveness research

- PCORI PArTNER project

- Lessons learned about engaging health system leaders

Who are they? What is their signature contribution to U.S. healthcare?

A

B

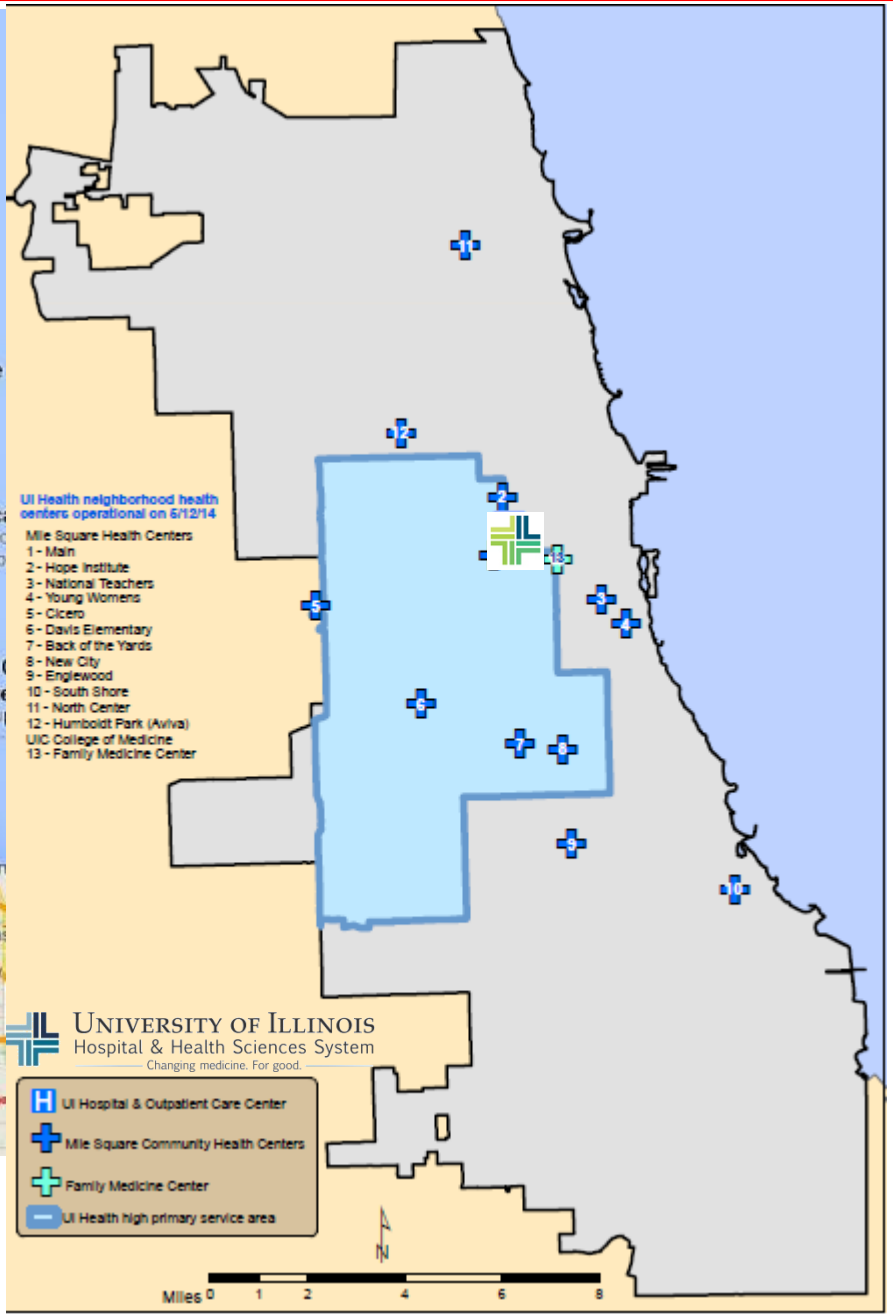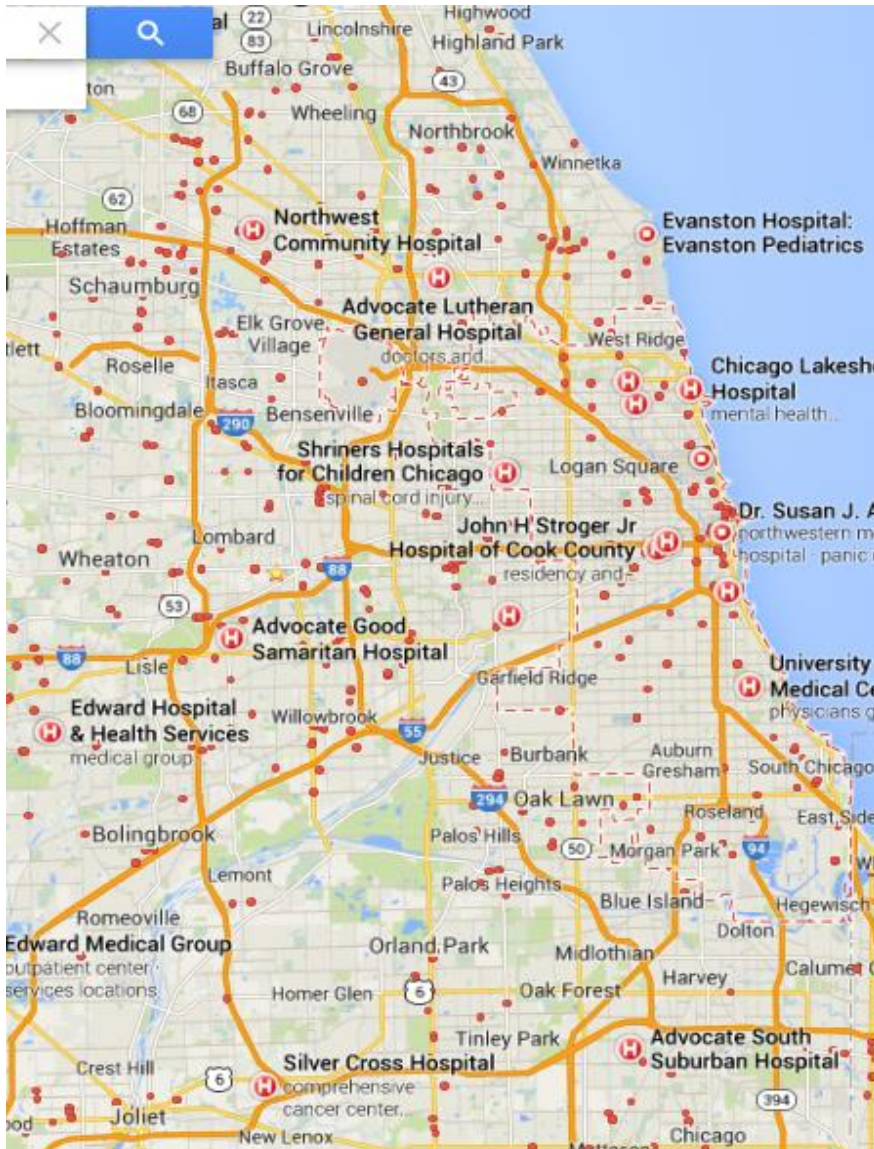| Managed care (~1970s)	• 1973 Health Maintenance Organization Act • Payer-led focus on cost • Utilization management • Mixed results

Population health management (~2010s)	• 2010 Affordable Care Act
	• Provider-led focus on quality, outcomes, and cost
	    • Patient and community engagement
	    • Prevention, wellness
	    • Care coordination
	    • High risk care teams, medical homes
	• Results - TBD

UI Health neighborhood health
centers operational on 5/12/14

Mile Square Health Centers
1 - Main
2 - Hope Institute
3 - National Teachers
4 - Young Womens
5 - Cicero
6 - Davis Elementary
7 - Back of the Yards
8 - New City
9 - Englewood
10 - South Shore
11 - North Center
12 - Humboldt Park (Aviva)
UIC College of Medicine
13 - Family Medicine Center

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UI Hospital & Outpatient Care Center
Mile Square Community Health Centers
Family Medicine Center
UI Health high primary service area

Miles 0 1 2 4 6 8

Image Landsat
Image NOAA

Imagery Date: 4/9/2013   42°30'39.6

(some) changes in Chicago (U.S.) healthcare market place

- Transparency and accountability
- Diminishing reimbursements tied to value, not encounters
- State budget deficits (and politics)
- Consolidation and competition

- Alignment of academic healthcare centers (research, teaching, *then* clinical) and health systems (clinical)
  - improving population health

Syllabus

SUPREME COURT OF THE UNITED STATES

Syllabus

KING ET AL. *v.* BURWELL, SECRETARY OF HEALTH AND HUMAN SERVICES, ET AL.

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

No. 14–114.   Argued March 4, 2015—Decided June 25, 2015

The Patient Protection and Affordable Care Act grew out of a long his-
tory of failed health insurance reform. In the 1990s, several States
sought to expand access to coverage by imposing a pair of insurance
market regulations—a "guaranteed issue" requirement, which bars
insurers from denying coverage to any person because of his health

Comparative Effectiveness Research

- conduct and synthesis of research comparing the benefits and harms of different interventions in "real world" settings.

- to improve health outcomes by developing and disseminating evidence-based information to patients, clinicians, and other decision-makers, responding to their expressed needs, about which interventions are most effective for which patients under specific circumstances.

Stakeholders – the 7Ps

Types

1. **P**atients and caregivers
2. **P**roviders (individuals, organizations)
3. **P**urchasers (e.g., employers)
4. **P**ayers (e.g., insurance)
5. **P**olicymakers (federal, state)
6. **P**roduct makers (drug and device manufacturer)
7. **P**rincipal investigators (researchers)

Roles

- ☐ Evidence prioritization
- ☐ Evidence generation
- ☐ Evidence synthesis
- ☐ Evidence dissemination
- ☐ Evidence implementation
- ☐ Feedback for future efforts

Building the IT Architecture for Accountable Care

Read how the successful delivery of accountable care—whether defined as care coordination, population health management or delivering better outcomes at lower cost—will depend heavily on a well-coordinated health information technology system to achieve its goals.

Healthcare

BUILDING THE IT ARCHITECTURE FOR ACCOUNTABLE CARE

HealthData Management

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Louisiana Bringing HIT Education Directly to Consumers
by GREG GOTH

Louisiana is pioneering a direct-to-consumer approach to educating the sta...
residents about the power of health information technology. The D-T-C cam...
is slated to begin statewide sometime in mid-July.

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EHR Implementations Linked to Revenue Risk
by ELLIOT M. KASS

As the rate of EHR adoption by hospitals increases, so does an unpleasan...
effect: lost revenue caused by disruptions related to system conversions.
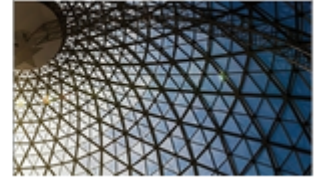
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Weekly review: How a hospital tech spread hep C; inside the CVS-Target deal

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Cone Health is closing its Women's Hospital after assessing its excess capacity at 200 beds.

RELATED CONTENT

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Hospitals face closures as 'a new day in healthcare' dawns

By Melanie Evans | February 21, 2015

As hospitals increasingly lose patients to medical care delivered in clinics and home settings, hospital operators are escalating their efforts to shrink capacity.

Hospitals are operating with fewer beds or closing outright, in some cases to make way for new ambulatory-care centers. In Lakewood, Ohio, where chronic conditions such as heart disease and diabetes are just as prevalent as in the rest of the country, the city is about to close its only hospital, whose 200 beds are typically half empty.

With three other hospitals within seven miles, the low occupancy rate makes city-owned Lakewood Hospital the high-cost provider in the area. "That's not sustainable or competitive," said Lakewood Mayor Mike Summers, a hospital trustee.

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Hospital Transactions & Valuation Issues

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Downers Grove-based Advocate Health Care and Evanston-based NorthShore University Health System unveiled plans to consolidate create a 16-hospital system yesterday. The newly created Advocate NorthShore Health Partners will be the largest in Illinois and the 11th largest nonprofit system in the country.

More articles on Chicago health system consolidation:

Advocate, NorthShore merger to create 16-hospital system

Northwestern Memorial HealthCare, Cadence Health finalize merger

Alexian Brothers, Adventist Midwest Health to Affiliate

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26A or 26B Reducing Medical Errors With Predictive Alerting

John H. Daniels, FACHE, FHIMSS *Vice President, Strategic Relations, HIMSS*
Stephen T. Lawless, MD *Vice President, Quality and Safety, Nemours*

Learning Objectives:
- Discuss the value of using IT to improve patient safety and quality.
- Apply examples from other industries to discover how logistically organized electronic alerting, bedside monitoring, in-room audio/visual techniques and decision support prevent medical errors. ✚

42A or 42B Improving the Bottom Line by Optimizing Patient Throughput

Ramona G. Lacy, FACHE *Managing Partner, Prism Healthcare Partners LTD*
Bonnie L. Barndt-Maglio, RN *Managing Director, Prism Healthcare Partners LTD*
Nancy M. Rongo, RN *Vice President, Quality and Patient Safety/Chief Quality Officer, United Health Services*

Learning Objectives:
- Describe tactics to create inpatient and ED bed capacity without adding beds by leveraging hospitalists and case management programs.
- Gain knowledge of specific enablers to achieving capacity, including daily and monthly dashboards, clinical leadership and patient level clinical analysis. ✚

76X Redefining Care Through Telehealth-Enabled Clinical Programs

Brian Rosenfeld, MD *CMO, Philips Hospital to Home*
Wendy Deibert, RN *Vice President, Telehealth Services, Mercy Telehealth, Mercy*
Julie A. Reisetter *CNO, iCare, Banner Health*

Learning Objectives:
- Explore other health systems' telehealth-based care strategies to inform your own system's options.
- Identify some of the practical care delivery design considerations when implementing telehealth-based care models in the hospital and community setting. ✚

Health system leaders- top 5 issues
March 2015

- Engaging physicians in cost and quality improvements

- Establishing sustainable acute care cost structures

- Controlling avoidable utilization

- Redesigning service portfolios for population health
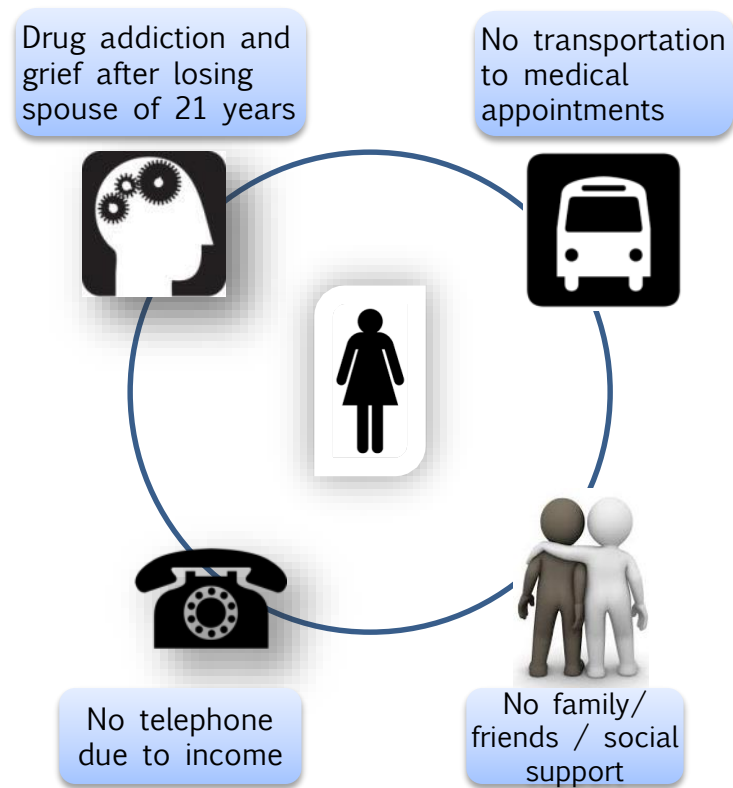
- Patient engagement strategies

One of our high-risk patients

Clinical note

- *59 year old woman*
- *6 times ED visits / hospitalizations in the past 12 months for heart failure*
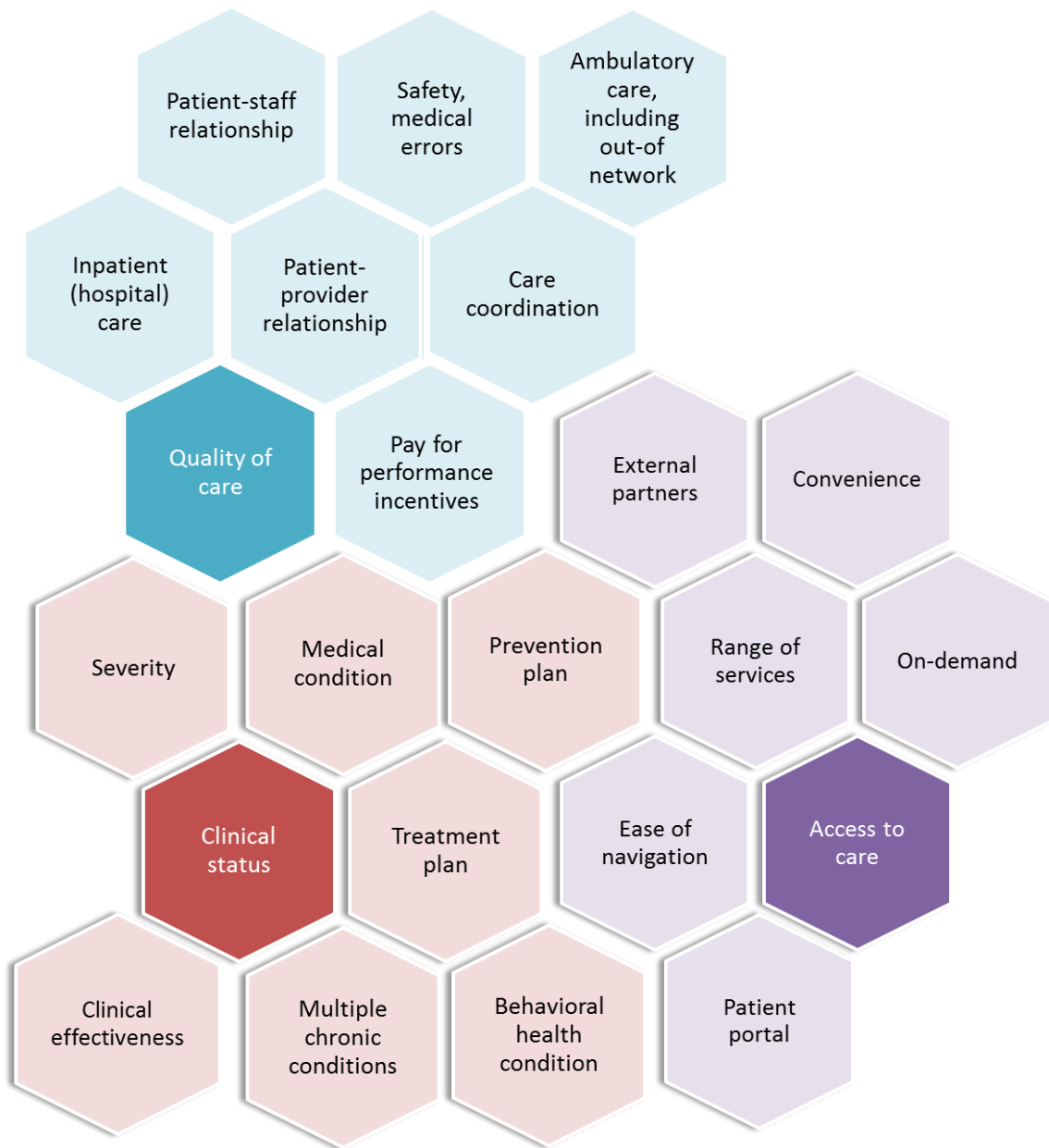- *Non-adherent to medications*
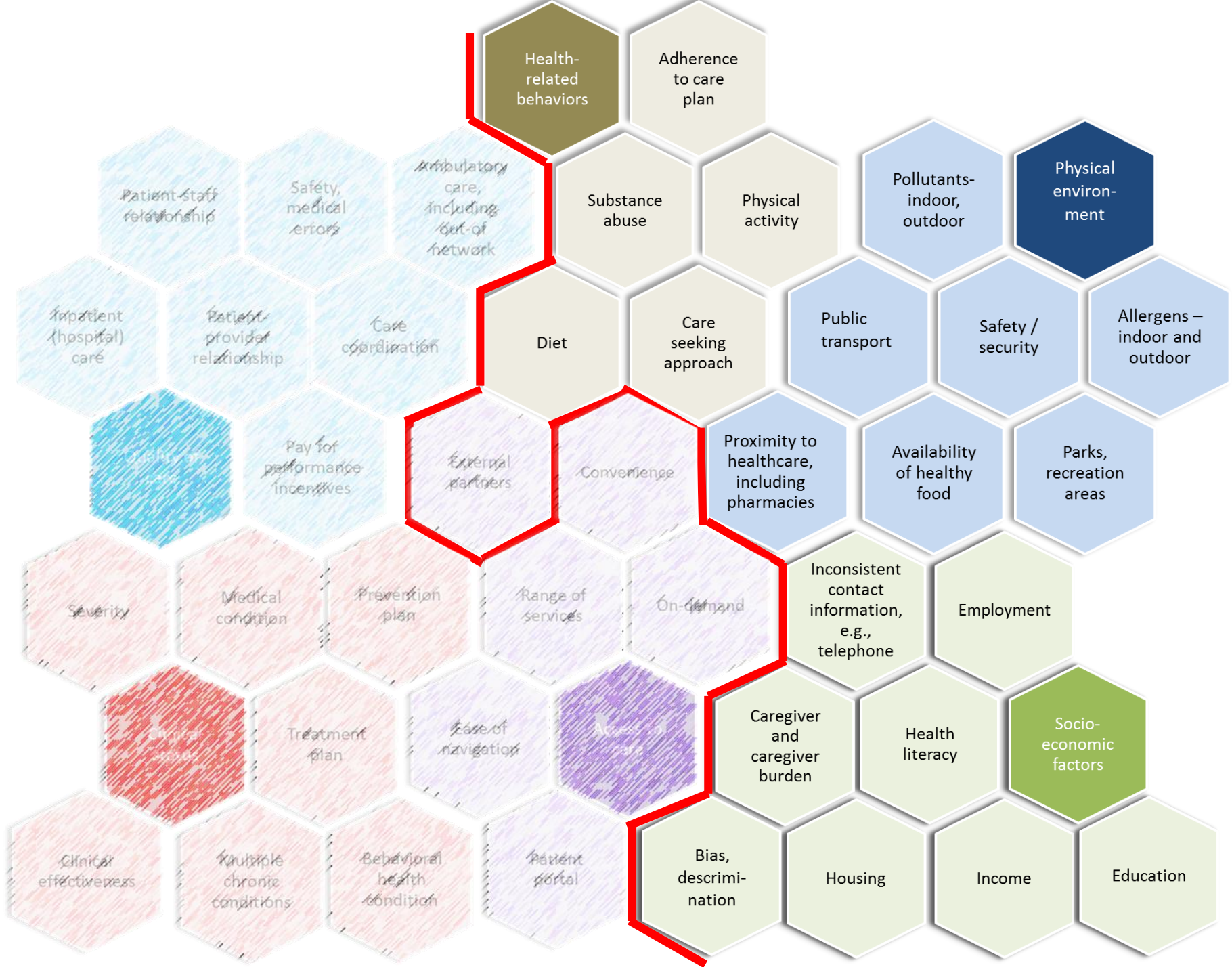- *Misses follow-up appointments regularly*

Underlying problems

Drug addiction and grief after losing spouse of 21 years

No transportation to medical appointments

No telephone due to income

No family/ friends / social support

16

Determinants of readmissions

Highly variable, and
patient-specific

Health-related behaviors

Adherence to care plan

Patient-staff relationship

Safety, medical errors

Ambulatory care, including out-of network

Substance abuse

Physical activity

Pollutants-indoor, outdoor

Physical environ-ment

Inpatient (hospital) care

Patient-provider relationship

Care coordination

Diet

Care seeking approach

Public transport

Safety / security

Allergens – indoor and outdoor

Health system

Pay for performance incentives

External partners

Convenience

Proximity to healthcare, including pharmacies

Availability of healthy food

Parks, recreation areas

Severity

Medical condition

Prevention plan

Range of services

On-demand

Inconsistent contact information, e.g., telephone

Employment

Standard of care

Treatment plan

Ease of navigation

Access to care

Caregiver and caregiver burden

Health literacy

Socio-economic factors

Clinical effectiveness

Multiple chronic conditions

Behavioral health condition

Patient portal

Bias, descrimi-nation

Housing

Income

Education

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Informatics Director, Cancer Center & RRC, UIC
University of Illinois

![pcori logo] Patient-Centered Outcomes Research Institute

Research & Results

OUR PROGRAMS

RESEARCH WE SUPPORT

HOW WE SELECT RESEARCH TOPICS

RESEARCH METHODOLOGY

PCORNET: THE NATIONAL PATIENT-CENTERED CLINICAL RESEARCH NETWORK

RESEARCH IN ACTION

PATient Navigator to rEduce Readmissions (PArTNER)

Principal Investigator:
Jerry Krishnan, MD, PhD

Organization

University of Illinois at Chicago

State

Illinois

Year Awarded

2013

Funding Announcement

Improving Healthcare Systems

Requested Project Budget*

$2,009,154

Project Period*

3 years

Project Summary

Background: Being healthy, feeling in control, and staying out of the hospital are outcomes strongly valued by patients. However, hospital readmissions remain high, especially among African-Americans and patients of minority-serving institutions (MSIs). MSIs provide care for many patients with limited social support and health literacy, who contribute to high readmission rates. Patients'

Q SEARCH

Obamacare law funds studies on better health care
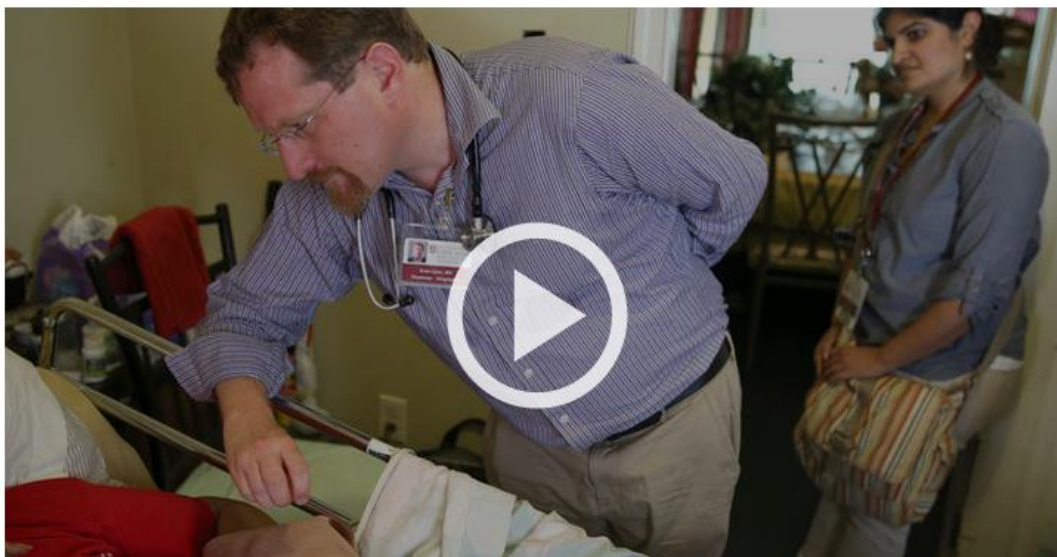
Before there was the Patient-Centered Outcomes Research Institute, or PCORI, "there was a disconnect between how health care research was being conducted and what patients actually needed," said Dr. Jerry Krishnan, a researcher at the University of Illinois at Chicago who is leading several PCORI studies.

"In the past, we did not have an opportunity to conduct studies together with patients and other stakeholders. PCORI provides resources to build such teams. It's focused on funding projects that patients care about: How can we support them after they get home from the hospital? How can we support their caregivers? How do we address outcomes like anxiety?"

Engaging clinicians

Cardiology
Pulmonary
Family medicine
Internal medicine
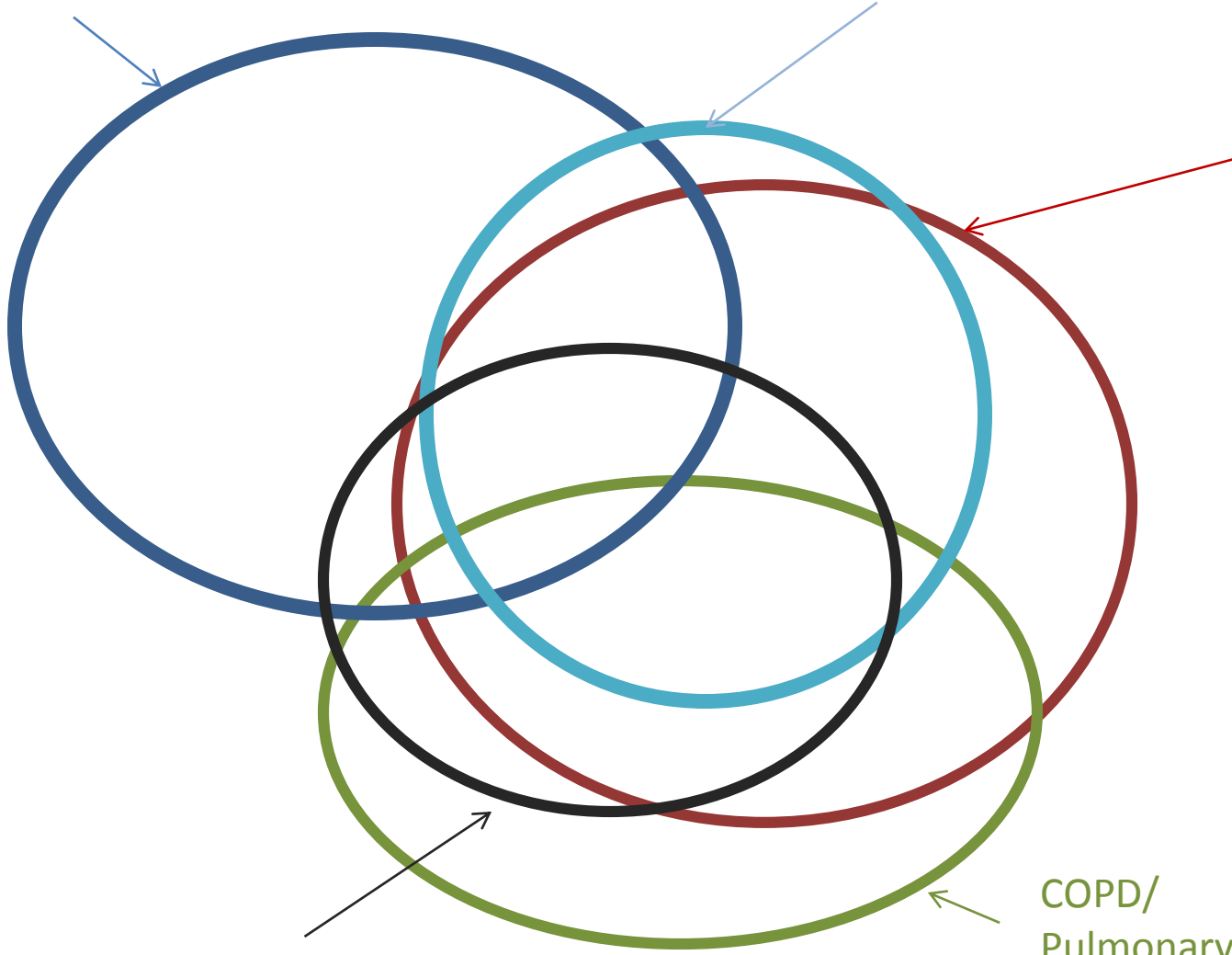Hematologists
Nurses
Pharmacists
Social workers

Sickle cell service

Social Work

Heart failure service

Discharge planners

COPD/ Pulmonary service

24

Sickle cell service

Social Work

EPIC

Heart failure service

RxCares

RUHFR

COPD/ Pulmonary service

Discharge planners

PArTNER

25

Budgetary impact analysis (BIA)

- Evaluation of financial impact of a new health care intervention for a finite period of time.

- Determinants
  - Size of eligible population
  - Change in treatment mix (before vs. after intervention)
  - Change in cost of treatment mix
  - Changes in expected condition-related costs
  - Sensitivity analysis of plausible scenarios from perspective of decision-maker
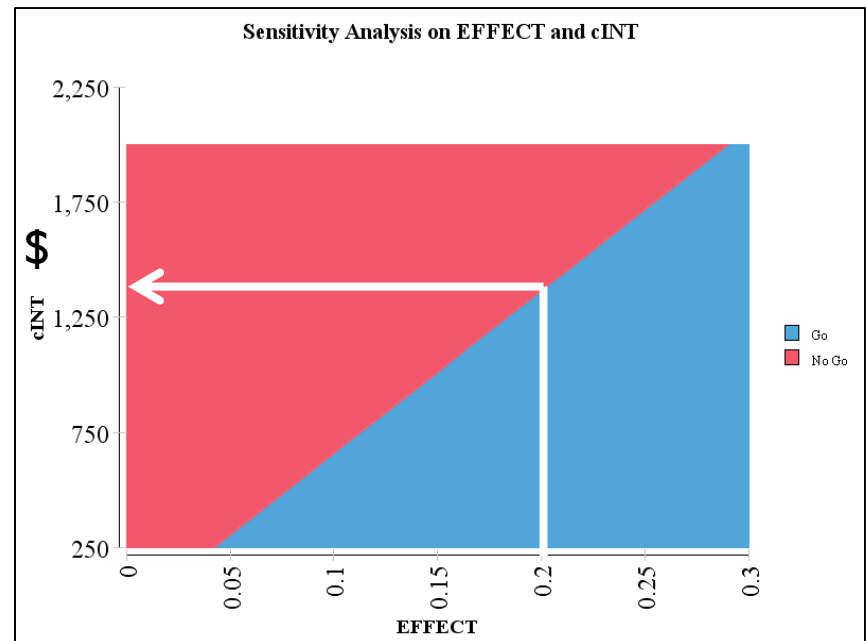
BIA (example)

- Break-even points

  – If intervention cost= $500, then ≥8% effect size

BIA (example)

- Break-even points

  – If intervention cost= $500, then ≥8% effect size

  – If 20% reduction in readmission (e.g., 20% to 16%) , intervention cost ≤$1,350
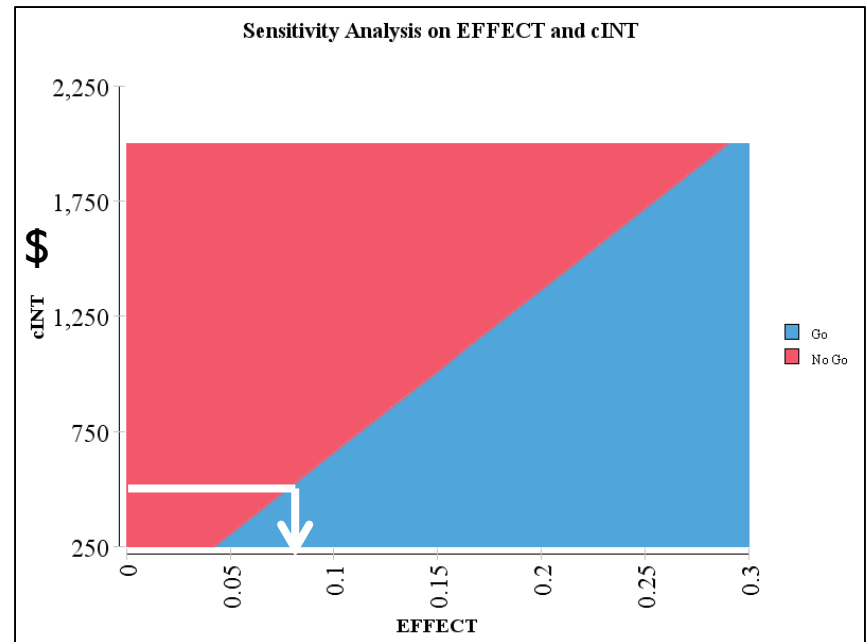
Courtesy of Joe Gerald, MD, PhD

Engaging health system leaders: Lessons learned

1. Get involved
    - Quality
    - Safety
    - Throughput committees
    - P & T committee
    - Unit head / Clinic director
    - Division Chiefs, Department Chairs, Dean
    - Other

2. Identify their priorities
3. Determine which, if any, are of interest to you and within your wheelhouse
4. Build relationships (a team)
5. Define and revise the project
6. Identify internal and external resources to test and implement the ideas
7. Be patient

Criteria for selecting among priorities

1. High resource utilization (e.g., cost, readmissions)

2. Strong evidence base to impact outcomes (quality, outcomes, cost)

3. Short timeline for measuring success

4. Clear ability to attract <u>internal</u> partners

5. Clear ability to attract <u>external</u> partners

6. Aligned with institution's mission

Acknowledgements

- AHRQ / NHLBI CONCERT investigators

- PCORI PArTNER investigators

- PCORI CHICAGO Plan investigators

- PCORI PELICAN investigators

- Population Health Sciences / Breathe Chicago Center staff

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