Remodeling healthcare delivery in the ACA era – the last mile in the translational research spectrum

October 24, 2014
Jerry A. Krishnan, MD, PhD
Professor of Medicine and Public Health
Associate Vice President for Population Health Sciences
University of Illinois Hospital & Health Sciences System
CLOSER THAN YOU THINK.

With dozens of health care workers, researchers, doctors, nurses, pharmacists, and smiling faces standing behind you, you won't have to face your uncertainties alone. We're with you.

WELCOME TO THE UNIVERSITY OF ILLINOIS HOSPITAL

We're changing medicine. And we're changing it for good.

University of Illinois Hospital & Health Sciences System is made up of several facilities, all of which give you access to different levels of care. These include a 495-bed hospital, outpatient clinic, immediate care clinic, and 12 Mile Square Health Centers including locations in Back of the Yards, Cicero, Englewood, Near West, and South Shore. As a leader in patient care, research and education, UI Health is committed to making positive and lasting differences in health science and in people's lives.

UI HEALTH NEWS

UI HEALTH EVENTS

Are you a Medicaid patient who needs to pick a health plan?

UI Health Plus is your answer.

CHILDREN’S HOSPITAL UNIVERSITY OF ILLINOIS

FIND A DOCTOR

REFERRING PHYSICIANS
Outline

• Healthcare delivery reform and Affordable Care Act

• Delivery science as part of the NIH translational research spectrum
Outline

• Healthcare delivery reform and Affordable Care Act
  – Research funding for Academic Health Care centers
  – Examples of healthcare delivery research (delivery science) at UI Health

• Delivery science as part of the NIH translational research spectrum
### Table 3. Adherence to Quality Indicators, Overall and According to Type of Care and Function.

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. of Indicators</th>
<th>No. of Participants Eligible</th>
<th>Total No. of Times Indicator Eligibility Was Met</th>
<th>Percentage of Recommended Care Received (95% CI)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall care</td>
<td>439</td>
<td>6712</td>
<td>98,649</td>
<td>54.9 (54.3–55.5)</td>
</tr>
<tr>
<td>Type of care</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive</td>
<td>38</td>
<td>6711</td>
<td>55,268</td>
<td>54.9 (54.2–55.6)</td>
</tr>
<tr>
<td>Acute</td>
<td>153</td>
<td>2318</td>
<td>19,815</td>
<td>53.5 (52.0–55.0)</td>
</tr>
<tr>
<td>Chronic</td>
<td>248</td>
<td>3387</td>
<td>23,566</td>
<td>56.1 (55.0–57.3)</td>
</tr>
<tr>
<td>Function</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screening</td>
<td>41</td>
<td>6711</td>
<td>39,486</td>
<td>52.2 (51.3–53.2)</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>178</td>
<td>6217</td>
<td>29,679</td>
<td>55.7 (54.5–56.8)</td>
</tr>
<tr>
<td>Treatment</td>
<td>173</td>
<td>6707</td>
<td>23,019</td>
<td>57.5 (56.5–58.4)</td>
</tr>
<tr>
<td>Follow-up</td>
<td>47</td>
<td>2413</td>
<td>6,465</td>
<td>58.5 (56.6–60.4)</td>
</tr>
</tbody>
</table>

* CI denotes confidence interval.

McGlynn EA, NEJM 2003
H. R. 3590

One Hundred Eleventh Congress of the United States of America

At the Second Session

Began and held at the City of Washington on Tuesday, the fifth day of January, two thousand and ten

An Act

Entitled The Patient Protection and Affordable Care Act.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION I. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the “Patient Protection and Affordable Care Act”.

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—QUALITY, AFFORDABLE HEALTH CARE FOR ALL AMERICANS

Subtitle A—Immediate Improvements in Health Care Coverage for All Americans

Sec. 1001. Amendments to the Public Health Service Act.

PART A—INDIVIDUAL AND GROUP MARKET REFORMS
ACA and Healthcare delivery reform

• Access to care (expansion of insurance coverage)
  – Individual mandate, Medicaid expansion, State insurance exchanges

Stoto M, AcademyHealth, 2013
ACA and Healthcare delivery reform

• Access to care

• Quality of care
  – CMS Center for Medicare and Medicaid Innovation, Patient Centered Outcomes Research

Stoto M, AcademyHealth, 2013
ACA and Healthcare delivery reform

- Access to care
- Quality of care
- Prevention and health promotion in healthcare delivery systems
  - Accountable Care Organizations, Primary healthcare training, Private health plans and Medicare to provide preventative services recommended by US Preventative Services Task Force

Stoto M, AcademyHealth, 2013
ACA and Healthcare delivery reform

- Access to care
- Quality of care
- Prevention and health promotion in healthcare delivery systems
- Community and population-based activities
  - Community Transformation Grants, Community Health Needs Assessments every 3 yrs

Stoto M, AcademyHealth, 2013
WEATHERING CATEGORY 5 CHANGES IN CHICAGO HEALTHCARE

Associate Vice President for Population Health Sciences

University of Illinois Hospital & Health Sciences System
Changes in Chicago healthcare market place (also U.S.)

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

- Alignment of operations of academic healthcare centers (research, teaching, clinical) and health systems
  - improving quality, outcomes, and efficiency
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.

US Recovery Act Spend Plan, Office of the Secretary, DHHS, 11/09
Carson SS et al. Am J Respir Crit Care Med 2013
Project ACHIEVE (Achieving Patient-Centered Care and Optimized Health In Care Transitions by Evaluating the Value of Evidence)

**Principal Investigator:**
Mark V. Williams, MD

**Organization**
University of Kentucky

**State**
Kentucky

**Year Awarded**
2014

**Funding Announcement**
The Effectiveness of Transitional Care

**Requested Project Budget**
$14,908,541

**Project Period**
3 Years

**Project Summary**
Background: Patients in the United States suffer harm too often as they move between sites of health care, and their caregivers experience significant burden. Unfortunately, the usual approach to health care does not support continuity and coordination.
Outline

• Healthcare delivery reform and Affordable Care Act

• Delivery science as part of the NIH translational research spectrum
  • National Center for Advancing Translational Research (NCATS)
  • Implementation science at NIH
    – Office of Behavioral and Social Sciences Research / OD Center for Translational Research and Implementation Science (CTRIS)
Catalyzing Collaboration within NCATS Across the Translational Spectrum

- **Bench to bedside**
- **Efficacy trials**
- **Comparative effectiveness research – trials and observational designs**
- **Dissemination and implementation research**

**Delivery science**

NIH/National Center for Advancing Translational Sciences (NCATS), 2014
NIH/NHLBI Workshop, 2011
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.

US Recovery Act Spend Plan, Office of the Secretary, DHHS, 11/09
Carson SS et al. Am J Respir Crit Care Med 2013
Dissemination and Implementation

Health scientists have successfully developed and tested a plethora of clinical and community interventions demonstrated to treat and prevent medical and behavioral illnesses. However, as leaders in research and clinical practice have noted, there is still an enormous gap between what we know can maximize the quality of health care and what is currently being delivered in practice and community settings. More present than ever within the research community is the belief that to optimize public health we must not only understand how to create the best interventions, but how to best ensure that they are effectively delivered within clinical and community practice. This is the focus of dissemination and implementation research, and building this knowledge base is imperative to get the best return on decades of investment in biomedical and behavioral research.

OBSSR Funding Opportunities for Dissemination and Implementation Research

- Dissemination and Implementation Research in Health (R01)
- Dissemination and Implementation Research in Health (R03)
- Dissemination and Implementation Research in Health (R21)

Funded Projects in Dissemination and Implementation Research in Health

- **R01 Projects**
  - **R02 Projects**
Dissemination research

Research to understand what underlies the creation, transmission, and reception of information on evidence-based interventions to different target audiences.

Implementation research (implementation science, knowledge transfer)

Research to promote the integration of research findings and evidence-based interventions into healthcare policy and practice:
Why therapies are not fully adopted? How to accelerate adoption? How to achieve high-fidelity and sustainable evidence-based practice.
Center for Translation Research and Implementation Science (CTRIS)

The Center for Translation Research and Implementation Science (CTRIS) is part of the National Heart, Lung, and Blood Institute (NHLBI), one of 27 institutes and centers at the National Institutes of Health (NIH). CTRIS plans, fosters, and supports an integrated and coordinated program of research to understand the multi-level processes and factors that are associated with successful integration of evidence-based interventions within specific clinical and public health settings such as worksites, communities, and schools; identifies and makes readily available to implementation and dissemination practitioners emergent knowledge about the late phases of translation research, especially the “T4” phase, for rapid and sustained adoption of effective interventions in real world settings; leads the NHLBI effort in the rigorous, systematic evidentiary reviews and subsequent NHLBI participation in the collaborative model for clinical practice guidelines development; supports training and career development of personnel in “T4” translation research and health inequities relating to heart, lung, and blood diseases; provides a focal point for advice and guidance on matters pertaining to minority health, health inequities and minority participation in research; represents the NHLBI to other governments, other Federal Departments and agencies, international organizations, and the private sector on global health issues; and provides data analytics and portfolio analysis to evaluate and inform future directions of implementation research programs.

CTRIS Office of the Director Branch

The CTRIS Office of the Director Branch plans, coordinates, and manages activities of all CTRIS subdivisions; fosters and coordinates inter-NHLBI and interagency collaborative national and international research translation, dissemination and utilization activities, and knowledge network activities; develops and maintains the necessary technical management capability to foster and guide effective national and international research translation, dissemination, and utilization programs; and provides administrative and crosscutting technical support and coordination to achieve NHLBI strategic planning goals and objectives.
Request for Information: Collaborative Translational Research Consortium to Develop T4 Translation of Evidence-based Interventions

Notice Number: NOT-HL-14-028

Key Dates
Release Date: July 2, 2014
Response Date: October 3, 2014 (new date per NOT-HL-14-234: Originally August 29, 2014).

Related Announcements
NOT-HL-14-234

Issued by
National Heart, Lung, and Blood Institute (NHLBI)

Purpose
The NHLBI is considering creating a research consortium to evaluate methods for increasing the uptake and application of evidence-based interventions for heart, lung and blood diseases and sleep disorders. This Request for Information (RFI) seeks advice from experts in translating and disseminating evidence-based interventions into clinical practice (T4 Translation) on the design of an effective and practical Research Network that would be "disease agnostic." The objective is to provide an expert infrastructure platform for research on translation related to a variety of diseases and conditions within the mission of the NHLBI. Individuals, institutions and organizations with experience in translation and implementation science and clinical trials networks are invited to submit comments.

Background
Despite significant advances in knowledge on the prevention and treatment of heart, lung and blood diseases and sleep disorders, such interventions are not being implemented to the full extent and do not reach a significant proportion of the US population. By one estimate, adults in the US receive only 55% of recommended care, whether for prevention or treatment of acute or chronic conditions. No mechanism presently exists to expedite the rapid evaluation of methods for improved translation of evidence-based interventions into health care. A concerted effort is needed to reduce the associated morbidity, mortality, public health burden and cost to society resulting from an inadequate application of proven health care interventions. Such an effort will likely require intensive health-care delivery research, including adequately powered randomized trials of multi-level interventions that involve health care providers and patients. It is expected that a T4 Translation Research Network will serve as a platform for studies in different domains and result in a cost-effective generation of knowledge.
Notice of Intent to Publish a Funding Opportunity Announcement for Testing of Multi-Level Interventions to Improve Blood Pressure Control in Racial/Ethnic Minority, Low Socioeconomic Status, and/or Rural Populations (UH2/UH3)

Notice Number:
NOT-HL-14-238

Key Dates

Release Date: September 25, 2014
Estimated Publication Date of Announcement: November 2014
First Estimated Application Due Date: January 2015
Earliest Estimated Award Date: September 2015
Earliest Estimated Start Date: September 2015

Related Announcements
None

Issued by

National Heart, Lung, and Blood Institute (NHLBI)
National Institute of Neurological Disorders and Stroke (NINDS)
Patient-Centered Outcomes Research Institute (PCORI)
“... there are things we know we know.... We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns—the ones we don’t know we don’t know.”

Donald Rumsfeld
On improving healthcare delivery in ACA era