

Optimizing Interprofessional
Clinical Learning Environments

BETTER CARE
BETTER VALUE
BETTER EDUCATION



The Clinical Learning Environment: Where Practice and Education Collide And Shape the Future of Health Care

Welcome! The Program will begin at 8:00 a.m.



NATIONAL CENTER for
INTERPROFESSIONAL
PRACTICE and EDUCATION

THE NEXUS SUMMIT

AUGUST 18-20, 2019 • MINNEAPOLIS

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Welcome to the Nexus Summit 2019!



Barbara F. Brandt
Director and Co-Chair



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The Clinical Learning Environment: Where Practice and Education Collide And Shape the Future of Health Care



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University of Carolina

Council on Graduate
Medical Education



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Medicine



Shaping the Clinical Learning Environment to Meet the Evolving Needs of the Health Care System and Patients

Erin Fraher, PhD MPP

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Director, Carolina Health Workforce Research Center
University of North Carolina at Chapel Hill

NexusSummit2019

National Center for Interprofessional Practice and Education

August 19, 2019



UNC

THE CECIL G. SHEPS CENTER
FOR HEALTH SERVICES RESEARCH

This presentation in one slide

- My frame – I am a workforce researcher and policy wonk
- The context—lots of uncertainty, lots of pressure and rapidly changing payment and care delivery models
- The health workforce is shifting to ambulatory and community-based settings. Training needs to shift as well
- Efforts to redesign education have traditionally focused on pipeline. We also need to retool the existing workforce for new roles and settings
- Education, practice and regulatory changes are needed to support team-based models of care
- More and better data are needed to win hearts and minds

This is noble, challenging work that is rife with turf battles. Here is my “frame”

- I am a student of the health professions—all professions
- I believe in patient-centered, not profession-centered, workforce planning
- “Data agitator”—I like to use data to challenge prevailing narratives and to shape new narratives
- Policy wonk who believes deeply in power of evidence to shape policy
- I teach and mentor learners from medicine, nursing, social work, and health policy



The context for our work: lots of uncertainty, lots of pressure and rapid change

- Ongoing experimentation underway to transform the way health care is paid for, organized, and delivered
- Rising pressure to contain costs, increase value and address “upstream” social determinants of health
- Increased competition from corporate players like CVS, DispatchHealth, CityBlock, and Amazon who are using redesigned workforce, telehealth and house calls to meet patient needs (they get it...it’s about the patient!)
- Most hospitals and health care systems currently operating predominantly in fee-for-service model, but actively planning for value-based payment future

It sort of feels like this...

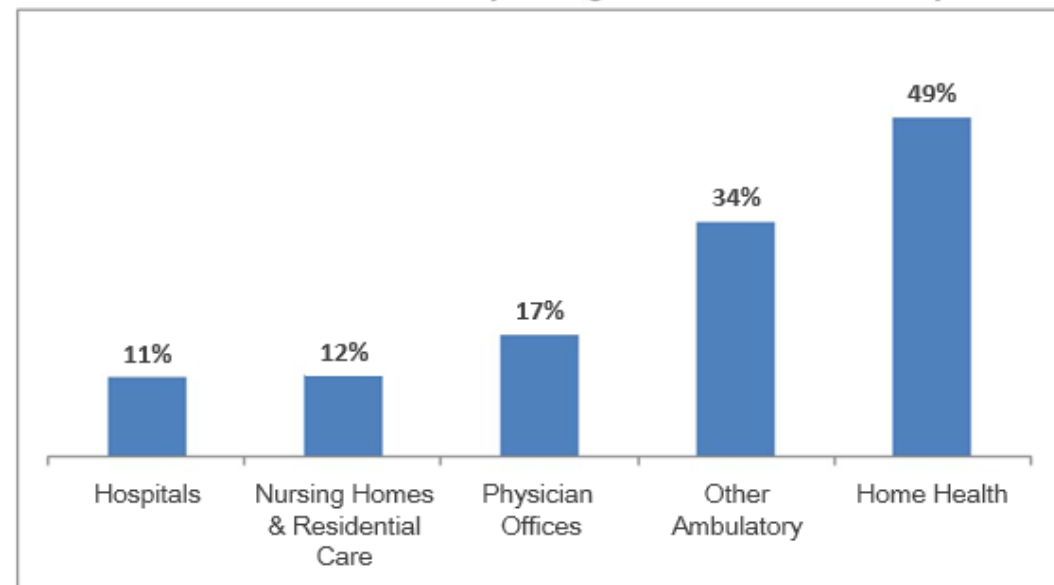


Hospitals, health systems and practices are simultaneously uninterested in workforce planning and hungry for a roadmap on how to redesign care delivery and workforce to deliver value

That road map leads out of the hospital into outpatient, community and home settings

- Shift from fee-for-service to value-based payments and fines that penalize hospitals for readmissions are shifting care from inpatient to ambulatory and community-based settings
- But we generally train the workforce in inpatient settings
- Need to develop more interprofessional training sites in community-based settings

Exhibit 1: Health Care Job Growth by Setting: December 2007–January 2017



Source: Authors' analysis of BLS Current Employment Statistics data.

Turner A, Roehrig C, Hempstead K. What's Behind 2.5 Million New Health Jobs?
Health Affairs Blog. March 17, 2017.

<http://healthaffairs.org/blog/2017/03/17/whats-behind-2-5-million-new-health-jobs/>

Increased focus on social determinants of health is moving care upstream

- Shift narrative from health workforce to “workforce for health”
- Expand workforce planning efforts to include workers in home- and community-based settings
- Embrace the role of patient navigators, community health workers, home health workers, community paramedics, dietitians, medical lawyers and other community-based workers
- Integrated behavioral health and primary care models are spawning new team structures and new roles.

Example: social workers who are serving as:

- Behavioral health specialists: providing interventions for mental, behavioral health and substance abuse disorders
- Care Managers: coordinating, monitoring and assessing treatment plans
- Referral role: connecting patients to community resources, transportation, food

And don't forget that the patient, family and community are on the team

Patient-engagement models:

- Promote shared decision-making with patient and family
- Encourage providers to do more asking/listening and shift from telling to educating
- Focus on health literacy, coaching, goal setting, and teach-back methods
- Honor and validate work of caregivers and family
- Include faith-based institutions, legal aid and other community resources



Increasing recognition that workforce already employed in the system will be the ones who transform care

- Most interprofessional education focused on redesigning curriculum for students in pipeline
- But health care workforce ***already employed in system*** will transform care
- Need to embed learning in collaborative practice environments that benefit patients, learners and the health care system

Number of Health Professionals in the Workforce Versus New Entrants to the Workforce, Select Professions, 2012

Profession	Total workforce	New entrants	New entrants as a percentage of total workforce
Physicians	835,723	21,294 ^a	2.5%
Physician assistants	106,419	6,207	5.8%
Registered nurses	2,682,262	146,572	5.5%
Licensed practical nurses and licensed vocational nurses	630,395	60,519	9.6%
Dentists	157,395	5,084	3.2%
Chiropractors	54,444	2,496	4.6%
Optometrists	33,202	1,404	4.2%
Social workers	724,618	41,769	5.8%
Physical therapists	198,400	10,102	5.1%
Occupational therapists	90,483	6,227	6.9%

Fraher E, Ricketts TC. Building a Value-Based Workforce in North Carolina. *North Carolina Medical Journal*. 2016; 77(2): 94-8.

So how do we get there from here?



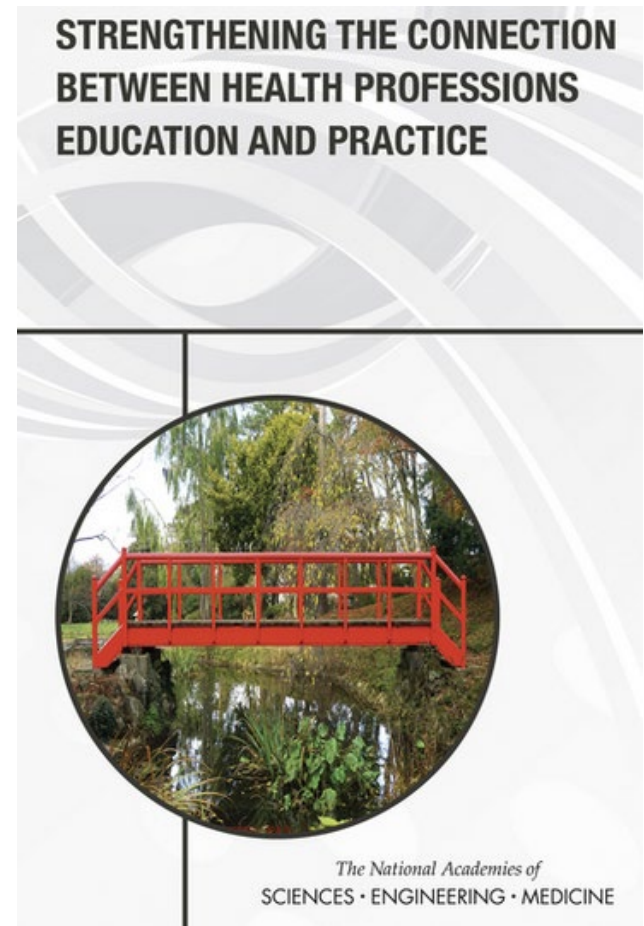
We need to redesign the broader system that supports interprofessional education and practice through:

- Education
- Practice
- Regulation

We need to better connect education to practice

“Revolutionary changes in the nature and form of health care delivery are reverberating backward into...education as leaders of the new practice organizations demand that the educational mission be responsive to their needs for practitioners who can work with teams in more flexible and changing organizations...”

Source: Ricketts T, Fraher E. Reconfiguring health workforce policy so that education, training, and actual delivery of care are closely connected. *Health Aff* (Millwood). 2013 Nov;32(11):1874-80.



<http://www.nationalacademies.org/hmd/Reports/2019/strengthening-connection-between-health-professions-education-practice-proceedings.aspx>

Redesign structures to support team-based care ➡ Education

- Clinical rotations need to include “purposeful exposure” to high-performing teams in ambulatory and community settings
- Foundational and continuing education must be convenient – timing, location, and financial incentives must be taken into consideration
- Need to prepare faculty to teach new roles and functions
- Close partnerships between educators and employers needed to:
 - not produce more workers than market demands
 - ensure new grads are ready for practice in transformed system
 - identify professions, settings and roles in which the workforce over- and under-skilled

Redesign structures to support team-based care ➡ Practice

- Need to design teams around patients, not professions
- Job descriptions must be rewritten or created
- Workflows must be redesigned
- Minimize role confusion by clearly defining competencies and training for new functions
- Existing staff won't delegate or share roles if don't trust other staff members are competent
- Culture change ***is possible*** as successful models spread and are scaled



Redesign structures to support team-based care ➡ Regulation

“The workforce innovations needed to implement ACA programs require an adaptable regulatory system capable of evolving with the health care environment. The health profession regulation system in place today does not have the flexibility to support change

To create a more dynamic regulatory system, we need to:

- develop evidence to support regulatory changes, especially for new roles in interprofessional teams
- evaluate new/expanded roles to understand if interventions improve health, lower costs and enhance satisfaction (patient and provider)

We need data and rigorous analyses to win the hearts and minds of the IPE naysayers

Team-based care for patients with 2 or more chronic conditions produced a statistically significant reduction of:

- 18.6% in hospitalizations
- 25.2% in ED visits
- 36.7% in ambulatory care–sensitive emergency department visits

JAMA Internal Medicine | [Original Investigation](#)

Association of Team-Based Primary Care With Health Care Utilization and Costs Among Chronically Ill Patients

David J. Meyers, MPH; Alyna T. Chien, MD, MS; Kevin H. Nguyen, MS; Zhonghe Li, MS; Sara J. Singer, MBA, PhD; Meredith B. Rosenthal, PhD

[+ Invited Commentary](#)
[+ Supplemental content](#)

IMPORTANCE Empirical study findings to date are mixed on the association between team-based primary care initiatives and health care use and costs for Medicaid and commercially insured patients, especially those with multiple chronic conditions.

OBJECTIVE To evaluate the association of establishing team-based primary care with patient health care use and costs.

DESIGN, SETTING, AND PARTICIPANTS We used difference-in-differences to compare preutilization and postutilization rates between intervention and comparison practices with inverse probability weighting to balance observable differences. We fit a linear model using generalized estimating equations to adjust for clustering at 18 academically affiliated primary care practices in the Boston, Massachusetts, area between 2011 and 2015. The study included 83 953 patients accounting for 138 113 patient-years across 18 intervention practices and 238 455 patients accounting for 401 573 patient-years across 76 comparison practices. Data were analyzed between April and August 2018.

EXPOSURES Practices participated in a 4-year learning collaborative that created and supported team-based primary care.

MAIN OUTCOMES AND MEASURES Outpatient visits, hospitalizations, emergency department visits, ambulatory care–sensitive hospitalizations, ambulatory care–sensitive emergency department visits, and total costs of care.

RESULTS Of 322 408 participants, 176 259 (54.7%) were female; 64 030 (19.9%) were younger than 18 years and 258 378 (80.1%) were age 19 to 64 years. Intervention practices had fewer participants, with 2 or more chronic conditions ($n = 51\,155$ [37.0%] vs $n = 186\,954$ [46.6%]), more participants younger than 18 years ($n = 337\,931$ [77.5%] vs $n = 74\,691$ [18.6%]), higher

Meyers DJ et al. Association of Team-Based Primary Care With Health Care Utilization and Costs Among Chronically Ill Patients. JAMA Intern Med 2019 Jan 1;179(1):54-61. doi: 10.1001/jamainternmed.2018.5118.

And we need to be prepared to discover data that run counter to our hopes and expectations

That same JAMA Intern Med study concluded:

“Team-based care practice transformation in primary care settings may be a valuable tool in improving the care of sicker patients, thereby reducing avoidable use; however, it may lead to greater use among healthier patients”

Meyers DJ et al. Association of Team-Based Primary Care With Health Care Utilization and Costs Among Chronically Ill Patients. JAMA Intern Med 2019 Jan 1;179(1):54-61. doi: 10.1001/jamainternmed.2018.5118



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University of Rochester Medical Center

- 820 bed quaternary care medical center
- 84 medical residencies and fellowships
- Medical, dental, and nursing schools
- Trauma center
- Transplant center
- Cancer center
- Children's Hospital



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UR Pursuing Excellence

- ACGME Innovator grant
- Transforming the way clinical teams work
- Developing dyad leaders (faculty and nurse managers)
 - Year long training program
- Given skills and support to build collaborative improvement teams
 - Faculty, nurses, staff, trainees, etc.
- Built on foundation of UPP teams
- Goal to develop clinical leaders who can lead improvements in team-based, collaborative care within UR Medicine, and enrich the learning environment
 - This will improve patient outcome (value), improve provider and patient satisfaction, provide academic opportunity, and develop our leaders of the future

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UChicago Medicine: The System

Patients and Facilities

- 4 Adult & Pediatric hospitals
- 1,286 licensed beds
- 11 Ambulatory Care Facilities
- 2.21B Annual Revenue

Volume

- 45,300 Admissions
- 27,890 Operations
- 149,355 Emergency dept. visits
- 954,173 Outpatient Encounters

Providers and People

- 11,910 Employees
- 1,385 Attending physicians
- 1,132 Residents and Fellows
- 3,418 Nurses



- Research and education are critically important
- 412 NIH grants totaling over \$179M



AT THE FOREFRONT
UChicago
Medicine

UCM's Hyde Park Campus and Hub

FACILITIES

3 Facilities

- Center for Care and Discovery
- Bernard M. Mitchell Hospital
- Comer Children's Hospital

811 Licensed Beds

37 Operating Rooms

5 Ambulatory Care Facilities



VOLUME

602,517 Outpatient Encounters

31,577 Hospital Admissions

198,745 Hospital Patient Days

22,801 Surgical Cases

101,567 ER Visits

FINANCIALS

\$1.86B Operating Revenue

\$477.3M Community Benefit
(fiscal 2018)

PEOPLE

9,737 Employees

Including:

909 Physicians

2,797 Nurses

1,132 Residents, fellows



AT THE FOREFRONT

**UChicago
Medicine**



IGNITE (Improving GME-Nursing Interprofessional Team Experiences) aims to engage trainees and nurses together in performance improvement initiatives at both the unit-level and the institutional level with the ultimate goal of improving healthcare delivery for our patients.

IGNITE UNIT-BASED TEAMS

› Unit-based teams comprised of GME trainees, nurse managers, & staff nurses co-design and implement a performance improvement project who receive support in the form of:

- QI coaching/guidance from GME and hospital leaders
- Ongoing project management and data analytic support

› We are currently operational in 6 units and seek to expand to at least 12 by 2020

IGNITE KAIZEN EVENTS

› Partnership between GME, Nursing, and Operational Excellence to sponsor up to 2 mini-Kaizen events yearly to improve care on institution-wide

› 3 Roles for trainees in any program include:

- Kaizen Champion (3 day participant)
- Voice of customer (1-3 hour participant)
- Kaizen Liaison to GME program (Represent your program at report-out & report-back to your program)

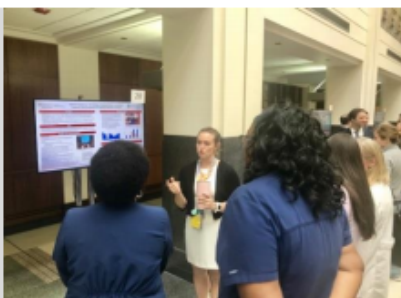


*VP Operational Excellence
Greg Horner, GME Director
Clinical Learning Environment
Vineet Arora, and Chief
Nursing Officer & SVP Patient
Care Services Debra Albert
co-sponsor IGNITE Kaizen
events*

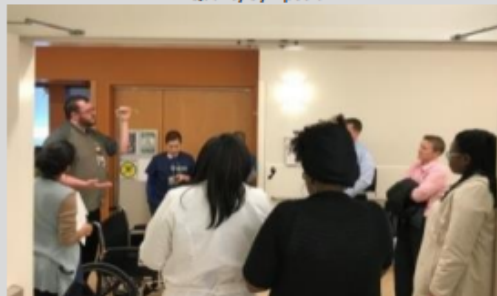
改善

Kai = Change Zen = Good

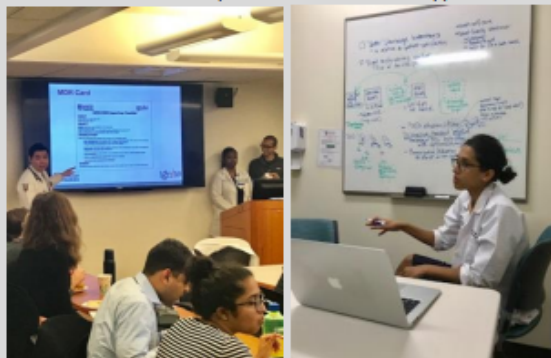
The Japanese word kaizen means "change for better", with inherent meaning of either "continuous" or "philosophy"



IGNITE nurse champion presents her team's work at the annual Quality Symposium



IGNITE Kaizen participants interview a patient transporter on a "Gemba walk". Gemba is Japanese for "where work happens."



IGNITE resident champion presents to peers (left), and ECLIPSE participant applies new E3 Leadership skill set in practice (right).



Our ECLIPSE (Educational & Clinical Leaders Improving Performance with Structured E3L training) program for senior-level trainees, faculty, and clinical staff aims to increase the capacity of clinicians to lead local quality improvement projects through offering a certification in E3 Leadership.

WHAT IS E3 LEADERSHIP?

- E3 stands for "Engage, Evolve, Excel" and represents our local approach to achieve high reliability and deliver high value care based on Six Sigma principles
- UCM relies on our management system of E3 Leadership (E3L) to reduce process variation and improve quality

E3 LEADERSHIP CERTIFICATION REQUIREMENTS

- Complete five E3L training modules available online (including: E3L Overview, Standard Work, PDSA Problem Solving, Data Lab, and Leading a Project)
Modules approved for AMA PRA Category 1 Credit™
- Participate in any Kaizen Event as a Kaizen Champion with an interprofessional team
- Pass a 30 question certification exam on E3 principles & standard performance improvement

E3 Leadership



ECLIPSE Steering Committee

"This event reinforced how standard work is best created by those performing the work"

-ECLIPSE Participant



Regional Medical Center



Heart & Vascular Institute



Children's Hospital



Senior Services



Academic Medicine



Cancer Center



Livingston



Assumption Community



Franciscan Missionaries of Our Lady University



Physician Group



LSU Health Baton Rouge



Community



Lake Surgery Center



OLOL – Pursuing Excellence

- TEAMWORK on the FLY

- Bringing QI and IPE where education and clinical care merge.
- IPE Huddles, Teaching, Shared Vision, and Positive Recognition

- It's all in the HCAPS DATA

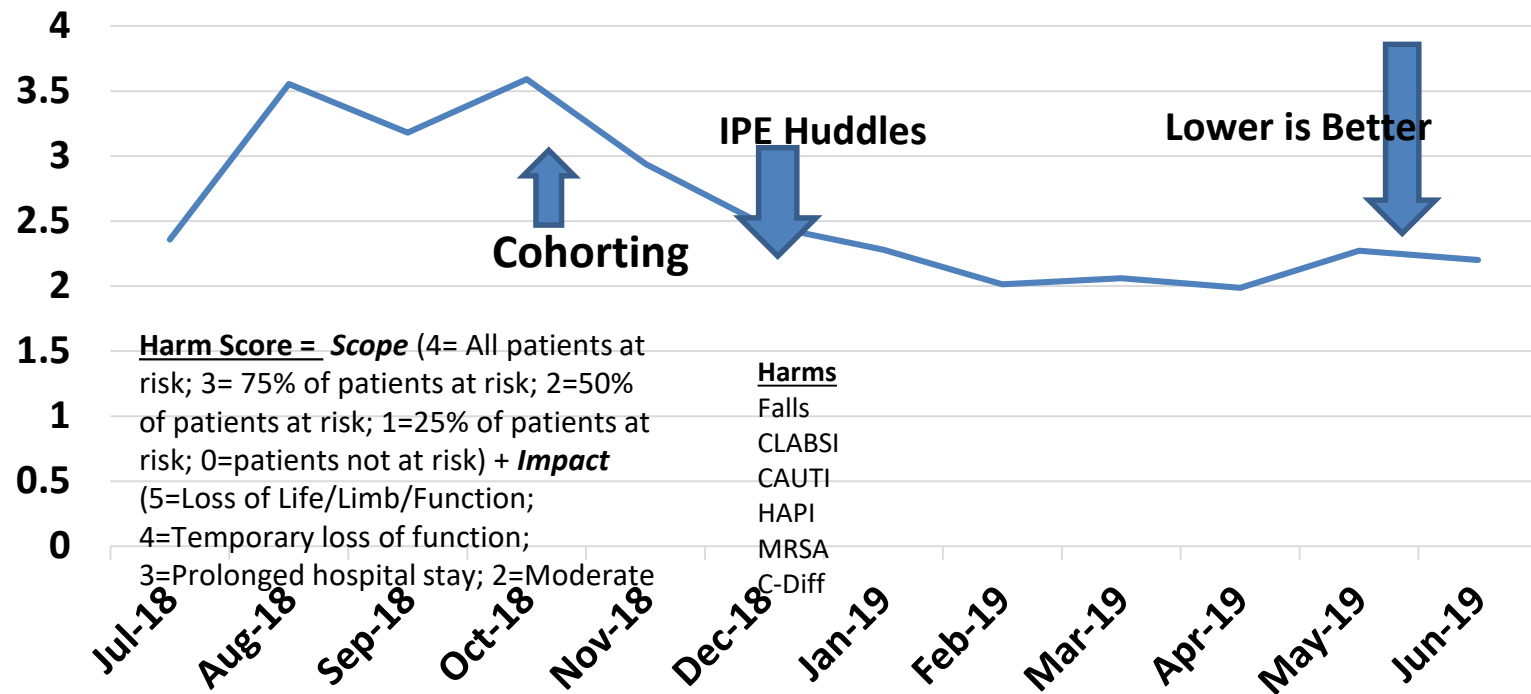
 + 45.2% Care Transitions – HCAPS YTD – 100%

 + 5.3% Discharge Information – HCAPS YTD – 100%

 + 23.4% Hospital Environment – HCAPS YTD – 100%



MED 5: CUMULATIVE UNIT HARM SCORE



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Discussion





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The National Center for Interprofessional Practice and Education is supported by the Josiah Macy Jr. Foundation, the Robert Wood Johnson Foundation, the Gordon and Betty Moore Foundation, The John A. Hartford Foundation and the University of Minnesota. The National Center was founded with support from a Health Resources and Services Administration Cooperative Agreement Award No.UE5HP25067. © 2017 Regents of the University of Minnesota.

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