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LIVE in 5 Minutes

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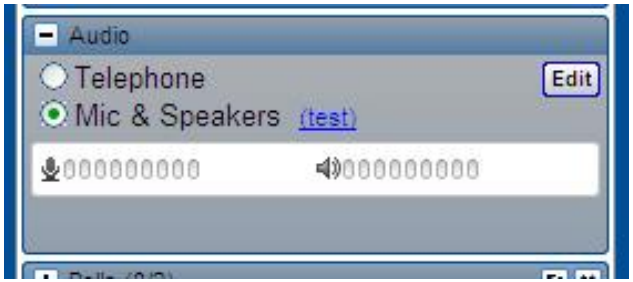

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Who Is Transforming Healthcare on Metrics that Matter?
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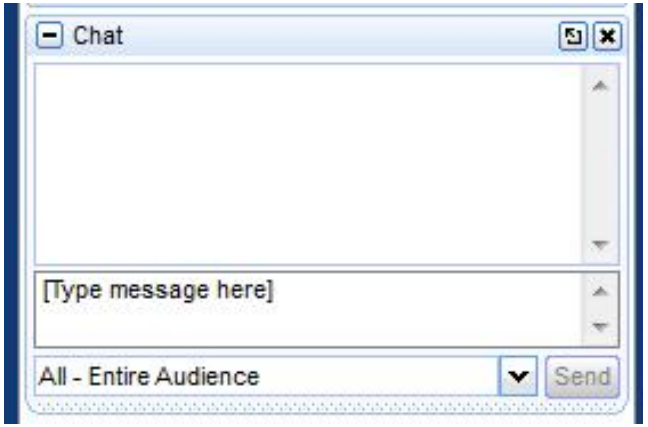

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Who Is Transforming Healthcare on Metrics That Matter?

Presented by: **Improvement Science Research Network**

SCHOOL OF NURSING
UT HEALTH SCIENCE CENTER
ACE • ACADEMIC CENTER FOR EVIDENCE-BASED PRACTICE

Moderator

Kathleen R. Stevens, RN, EdD, FAAN
Professor and Director
Improvement Science Research Network
University of Texas Health Science Center San Antonio

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A. Coordination and Transitions of Care
B. High-Performing Clinical Systems and Microsystems Approaches to Improvement
C. Evidence-Based Quality Improvement and Best Practice
D. Learning Organizations and Culture of Quality and Safety

Improvement Science Research Network (ISRN). (2010). Research priorities. Retrieved from http://www.isrn.net/research.

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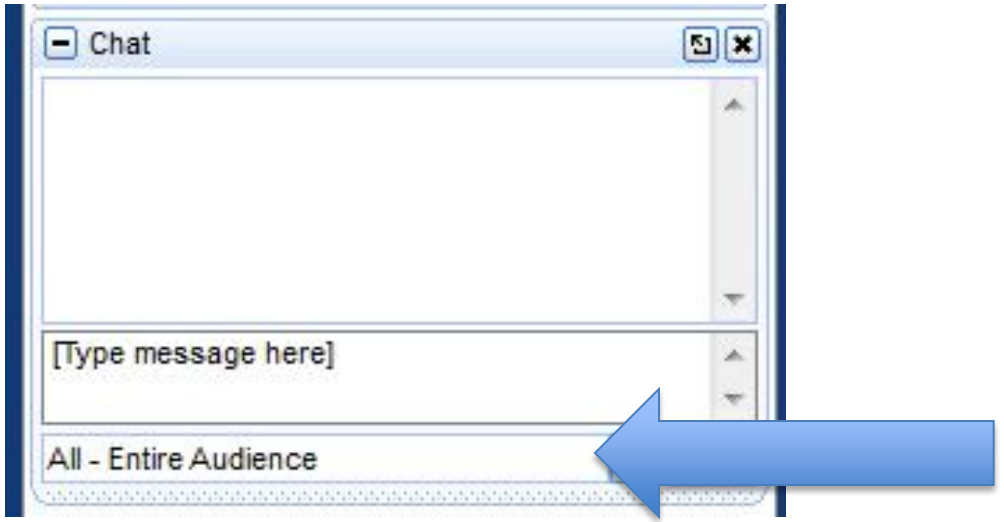

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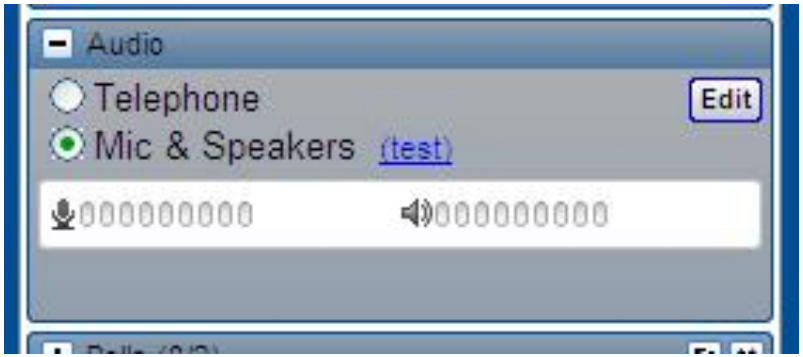

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Who Is Transforming Healthcare on Metrics that Matter?

Presented by: **Improvement Science Research Network**

Presenters

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Who Is Transforming Healthcare on Metrics that Matter?

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Disclosures

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- The content of this presentation is the responsibility of the author(s) alone and does not necessarily reflect the views or policies of the Department of Veterans Affairs or the United States Government. A portion of the material presented was the result of work supported in part with resources and the use of facilities at the Central Texas Veterans Health Care System

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  - Alice Avolio, DNP RN, Portland VA, Portland OR
  - Patricia Baker, MS RN, CNL, Methodist HealthCare System, San Antonio TX
  - James Harris, PhD RN MBA CNL FAAN, University of South Alabama, Mobile AL
  - Nancy Hilton, MN RN NEA-BC, St. Lucie Medical Center, Port St. Lucie FL
  - Linda Roussel, PhD RN NEA-BC CNL, University of Alabama, Birmingham AL
  - Bobbie Shirley, MS RN CNL, Maine Medical Center, Portland ME
  - Joan Stanley, PhD, FAAN, American Association of Colleges of Nursing, Washington DC
  - Tricia Thomas, PhD RN, Trinity Health, Livonia MI

Why do Metrics Matter?

IOM, 2015

"Measurement … is a tool for achieving health care goals"

"Measures reflect goals and aspirations"

"Offers a reliable reflections of the status of health and health care at the national, state, local and institutional level"

"Provide[s] a quantitative indication of current status on the most important elements in a given field, and that can be used as a standardized and accurate tool for informing, comparing, focusing, monitoring, and reporting change."

What are current healthcare goals?

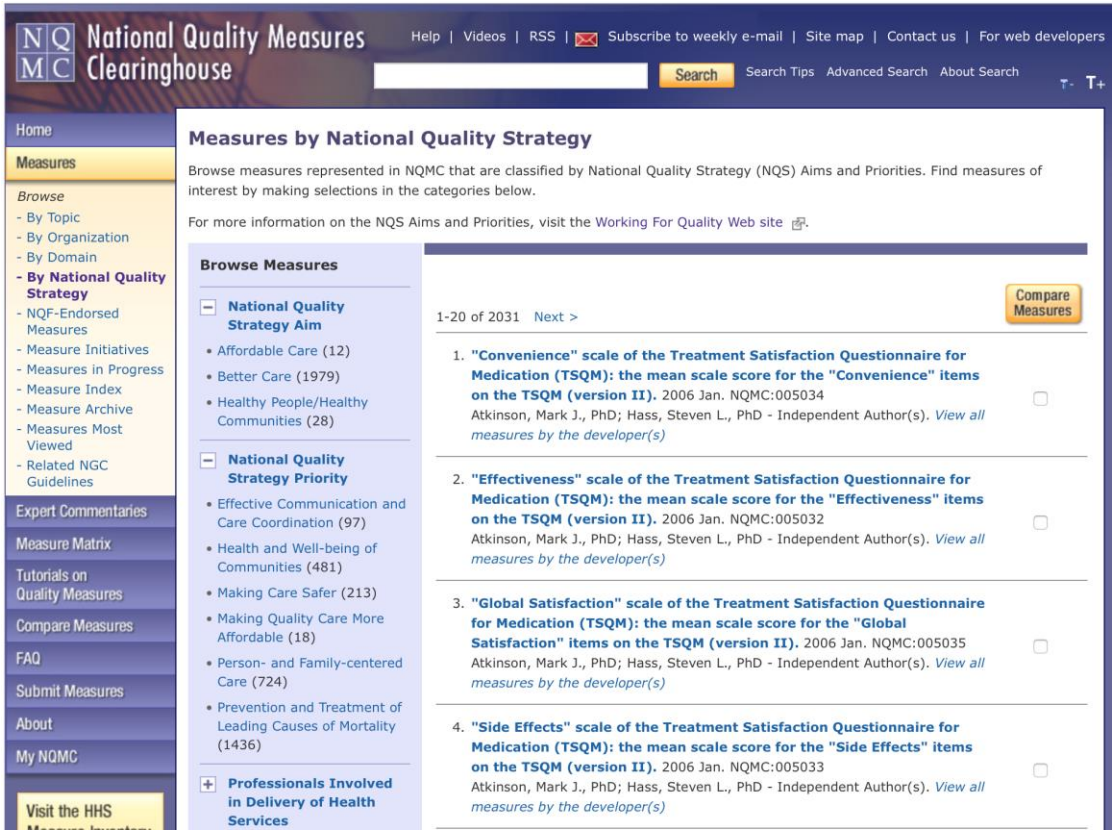
Established by the Affordable Care Act to **improve the delivery of health care services, patient health outcomes, and population health**

What are some metrics that matter?

TABLE S-2 Core Measure Set with Related Priority Measures

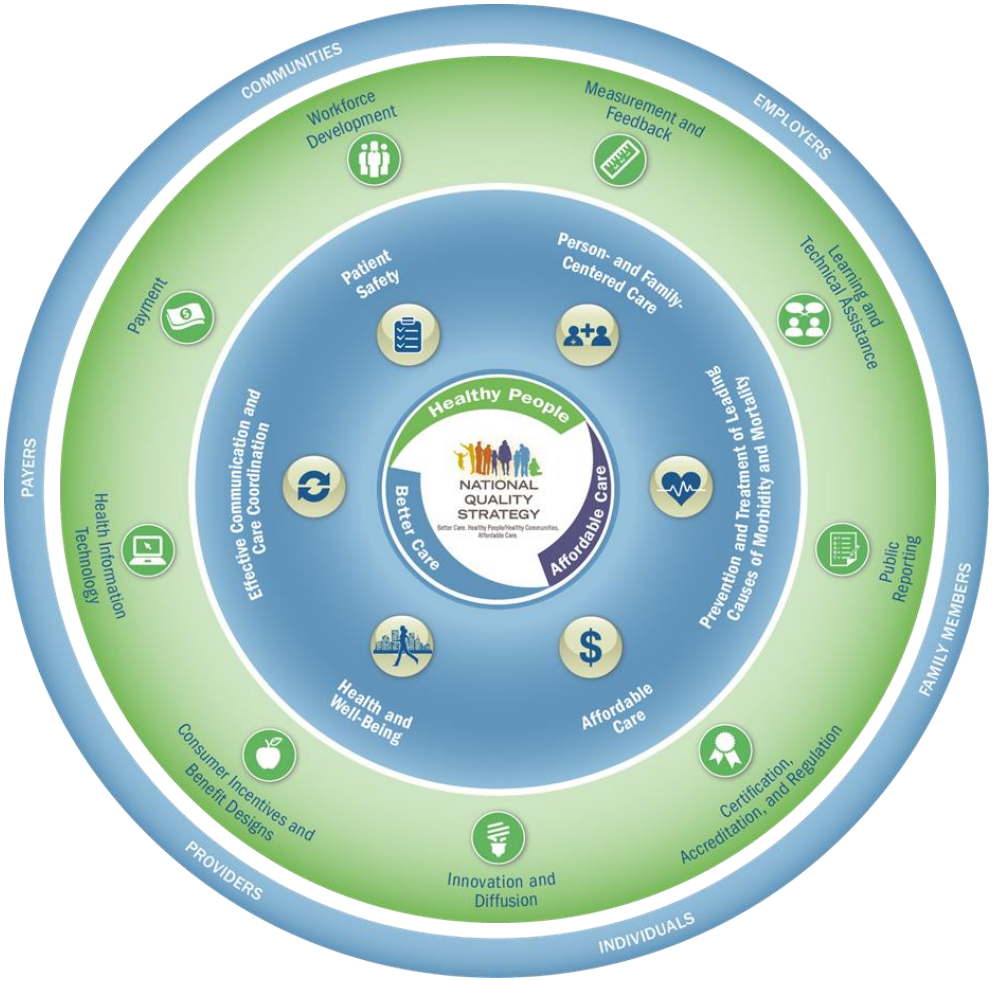
Core Measure Focus	Related Priority Measures
Life expectancy	Infant mortality Maternal mortality Violence and injury mortality
Well-being	Multiple chronic conditions Depression
Overweight and obesity	Activity levels Healthy eating patterns
Addictive behavior	Tobacco use Drug dependence/illicit use Alcohol dependence/misuse
Unintended pregnancy	Contraceptive use
Healthy communities	Childhood poverty rate Childhood asthma Air quality index Drinking water quality index
Preventive services	Influenza immunizations Colorectal cancer screening Breast cancer screening
Care access	Usual source of care Delay of needed care
Patient safety	Wrong-site surgery Pressure ulcers Medication reconciliation
Evidence-based care	Cardiovascular risk reduction Hypertension control Diabetes control composite Heart attack therapy protocol Stroke therapy protocol Unnecessary care composite
Care match with patient goals	Patient experience Shared decision making End-of-life/advanced care planning
Personal spending burden	Health care–related bankruptcies
Population spending burden	Total cost of care Health care spending growth

IOM 2015



National Quality Forum

How do we get there?



NATIONAL QUALITY STRATEGY LEVERS

Measurement and Feedback
Provide performance feedback to plans and providers to improve care

Public Reporting
Compare treatment results, costs, and patient experience for consumers

Learning and Technical Assistance
Foster learning environments that offer training, resources, tools, and guidance to help organizations achieve quality improvement goals

Certification, Accreditation, and Regulation
Adopt or adhere to approaches to meet safety and quality standards

Consumer Incentives and Benefit Designs
Help consumers adopt healthy behaviors and make informed decisions

Payment
Reward and incentivize providers to deliver high-quality, patient-centered care

Health Information Technology
Improve communications, transparency, and efficiency for better coordinated health and health care

Innovation and Diffusion
Foster innovation in health care quality improvement and facilitate rapid adoption within and across organizations and communities

Workforce Development
Invest in people to prepare the next generation of health care professionals and support lifelong learning for providers

Levels for Levers of Quality

NATIONAL LEVEL:

Creating accountability for quality

- Department of Health and Human Services
- Agency for Healthcare Quality and Research
- Centers for Medicare & Medicaid Services

COMMUNITY-ORGANIZATION LEVEL:

Creating infrastructure for quality

- Learning Health Systems
- Patient Centered Medical Homes
- Accountable Care Organizations

MICROSYSTEM LEVEL:

Creating quality

Reducing Harm
Patient Engagement
Effective Communication And Coordination
Prevention Practices
Working With Communities
Cost Effective Care Delivery Models

Why Focus on the Microsystem?

The Joint Commission Journal on Quality and Patient Safety

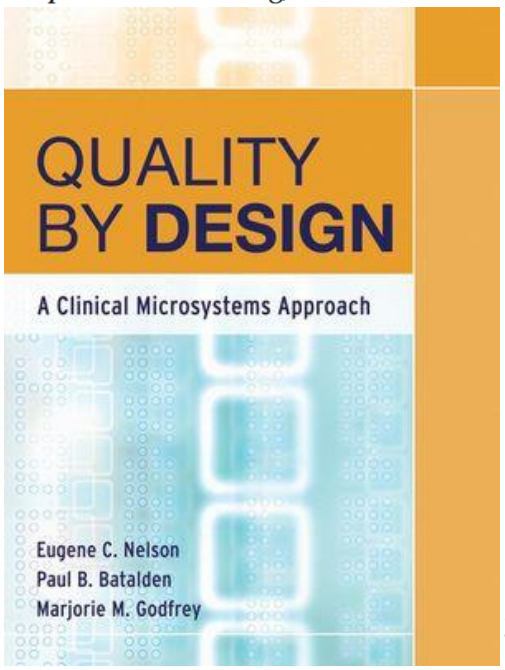
Clinical Microsystems Series

Clinical Microsystems, Part 1.
The Building Blocks of Health Systems

Eugene C. Nelson, D.Sc., M.P.H.; Marjorie M. Godfrey, M.S., R.N.; Paul B. Batalden, M.D.; Scott A. Berry, M.S.; Albert E. Bothe, Jr., M.D.; Karen E. McKinley, R.N., M.B.A.; Craig N. Melin, M.S., M.B.A.; Stephen E. Muething, M.D.; L. Gordon Moore, M.D.; John H. Wasson, M.D.; Thomas W. Nolan, Ph.D.

Microsystems in Health Care:
Part 9. Developing Small Clinical Units to Attain Peak Performance

Paul B. Batalden, M.D.
Eugene C. Nelson, D.Sc., M.P.H.
William H. Edwards, M.D.
Marjorie M. Godfrey, M.S., R.N.
Julie J. Mohr, M.S.P.H., Ph.D.



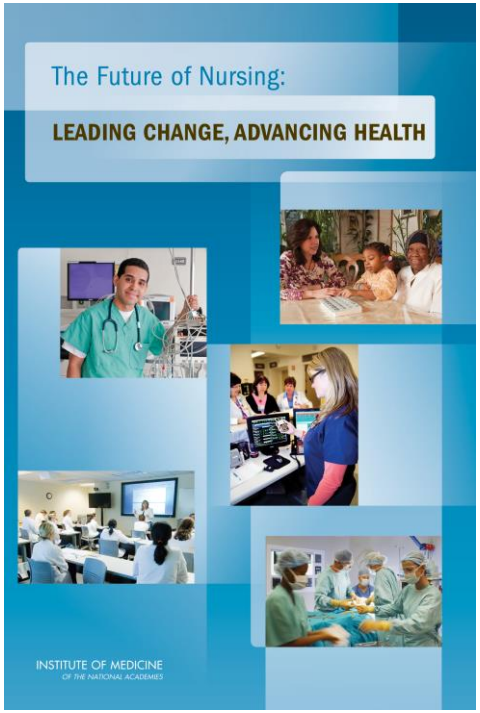
Nurses and Healthcare Microsystems

- Registered Nurses (RNs) comprise the largest sector of the healthcare workforce, with over 2.9 million RNs currently employed, which is more than four times the number of physicians

- This means RNs are a de-facto critical component of healthcare delivery, which provides a powerful incentive to fully leverage their scope of practice -- roles, responsibilities and functions that nurses are educated, competent, and licensed to perform -- into microsystem care models that consistently meet national quality mandates

Microsystem Transformation

"Transformation will require remodeling many aspects of the health care system …
Nurses must assume leadership positions and to serve as full partners in health care redesign"



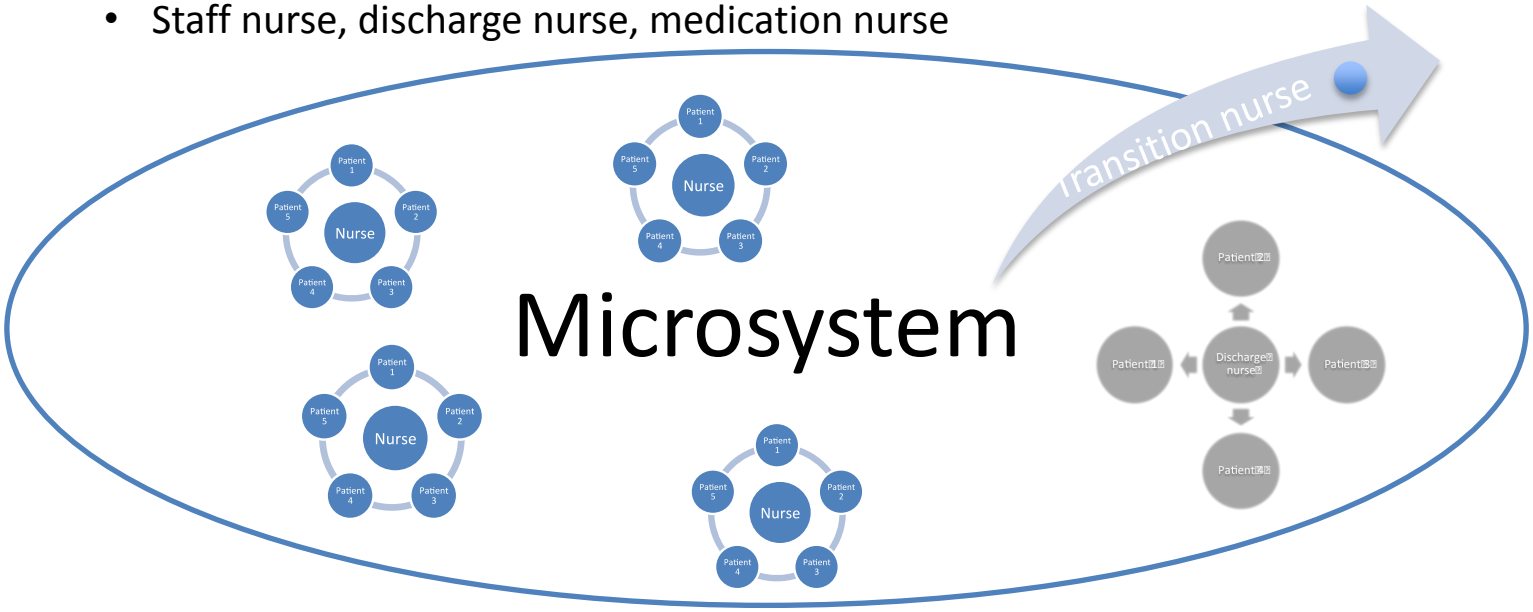
As leaders, nurses must:

- Act as full partners with other health care professionals
- Be accountable for their responsibility to deliver high-quality care
- Work collaboratively with leaders from other health professions
- Identify and propose solutions to problems in care environments
- Devise and implement plans for improvement
- Participate in health policy decision-making

Traditional Nursing Care Focus

- Current nursing knowledge and practice in clinical microsystems is generally organized as a series of separate, individual 'units'

- This individual nursing focus is on separate aspects of the microsystem
  - Individual nurses and their patient assignment
  - Individual nurses in specific task-focused roles with limited focus
    - Staff nurse, discharge nurse, medication nurse



CNL-Integrated Nursing Care Delivery

- An innovative nursing model that integrates certified Clinical Nurse Leaders (CNL) into microsystem care delivery
  - Master's-level nursing curriculum
  - CNL certification for practice
    - Commission on Nurse Certification (CNC)
    - Accredited (in NDNQI)

CNL History

American Association of Colleges of Nursing

Spearheaded by the AACN using an innovative education-practice partnership framework

- Education/competencies developed with an understanding of microsystem dynamics in mind
  - Clinical leadership, interdisciplinary collaboration, teamwork, information technology, evidence base practice, quality improvement
- AACN White Paper released 2007, updated 2013
  - Currently 4000 certified CNLs nationally
  - 64% annual certification growth rate
  - 94 CNL-track Masters programs throughout the country

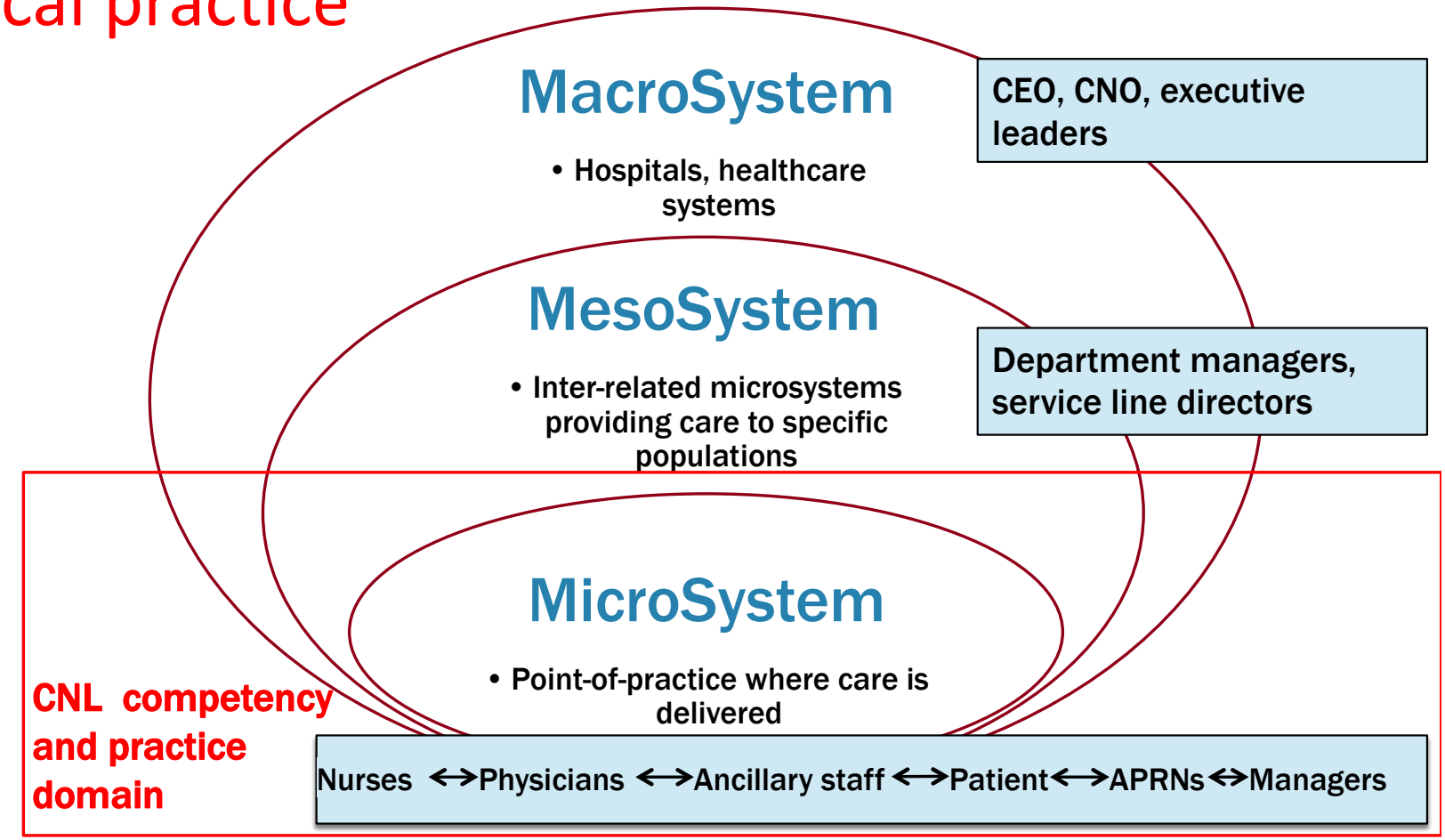
CNC COMMISSION ON NURSE CERTIFICATION

Why CNL Practice?

- Transform workplace structures
  - Reorganize nursing knowledge and practice into redesigned care delivery models
- Transform microsystem practice
  - CNL workflow organized to transform practice dynamics
- Transform care quality and safety outcomes
  - Transformed practice dynamics drive outcomes

CNL: Unique Orientation to Practice

The environment becomes a targeted domain of clinical practice



Current Published CNL Evidence

- 15 case reports describing the development, implementation and outcomes of CNL practice in federal, community nonprofit, and for-profit settings
  - NHPPD, staff/physician/patient satisfaction, care process efficiencies, LOS, falls, discharge teaching, sitter hours, pressure ulcers, turnover, CLABSI, CAUTI, VAP, transfusion rates, interdisciplinary communication/collaboration

- 2 cross-section correlation studies associating CNL practice with
  - improved nurse satisfaction, turnover and leadership practices

- 2 short interrupted time series studies quantifying significant correlations between CNL implementation and improved care environment and quality outcomes
  - Multiple aspects of patient experience, turnover, NHPPD

Bender M. (2014). The current evidence base for the clinical nurse leader: A narrative review of the literature. *Journal of Professional Nursing, 30*(2), 110–123.

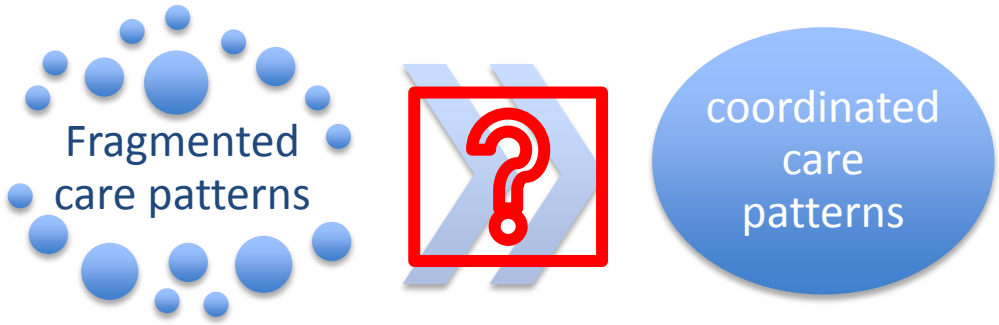
Clinical Perceptions of CNL Practice

- Numerous N=1 examples of CNL integrated practice - untapped embedded clinical knowledge

- Other ways of knowing - "What a difference…"
  - "I know I am making a big difference" (CNL)
  - "I know we can get through our toughest day when our CNL is here" (staff nurse)
  - "It is a whole different feeling when I round on this unit" (nurse executive)
  - "The CNL sure makes a difference; can we get one on every unit?" (physician)

Filling the CNL Evidence Gaps

- Who are CNLs and where are they practicing?
- What precisely is CNL practice?
  - How do they influence care quality and outcomes?
- What are facilitators/barriers to CNL success?



CNL Research Framework

Synthesize existing knowledge

- Define core elements
  - CNL theory
    - Practice and implementation
    - Mechanisms of action
  - CNL metrics
    - Identify existing variables
    - Develop new variables

Develop pragmatic research strategy

- Appropriate research designs
  - Harness existing data
  - Generate new data
- Generate implementation and effectiveness evidence

Conduct national level research

- Nationwide 'research laboratory'
- Combine resources for data collection and analysis
- Ensure comparable outcomes

Williams M, Bender M (2015). Growing and sustaining the CNL initiative: shifting the focus from pioneering innovation to evidence-driven integration into healthcare delivery. *Journal of Nursing Administration, 45*(11*), 540-543*

Characteristics of CNLs

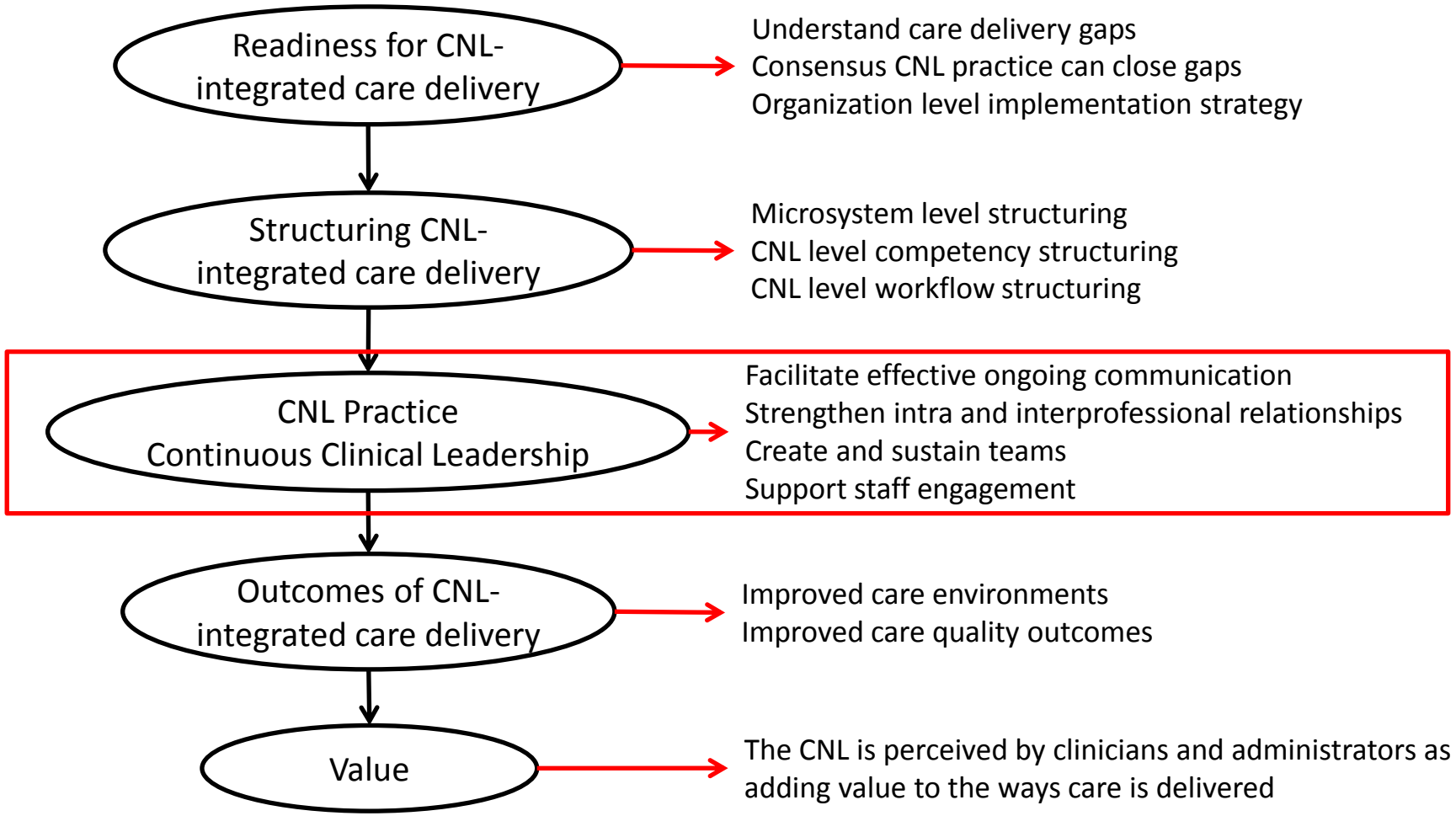
2015 National Survey

– Population of certified CNLs; 19% response rate (601/3126)

Certified CNL characteristics	Percent	Frequency (n=601)
Age 31-50	55%	328
Certified within last 5 years	66%	394
Years with RN License		
Less than 10 years	40%	240
More than 10 years	60%	361
Hold other certifications	75%	449
Practicing in formally designated CNL role	58%	347
Practicing in Hospital setting	75%	449
Practicing in Magnet Hospital	35%	209
Setting ownership status		
Not for profit	57%	342
Federal	26%	153
For-profit	8%	47

Bender M., Williams M., Su W. (In Press). Diffusion of a Nurse-led Healthcare Innovation: Describing Certified Clinical Nurse Leader Integration into Care Delivery. *Journal of Nursing Administration.*

What is CNL Practice?



Bender, M. Williams M., Su W., Hites, L. (In Review). Validating a conceptual model of nursing care delivery to improve patient quality and safety outcomes.

Facilitators/Barriers to CNL Success

Association between CNL organization and implementation variables and perceived level of CNL success

Variables (R^2=35%)	Estimate effect	P value
Intercept	37.57	<.001
Phase CNL initiative is in (reference category Piloted only)		
Spread to majority of microsystems	28.92	<.001
Initiated but not spread across setting(s)	15.29	<.001
CNL role consistency (reference category Inconsistency)		
Consistency every day/week	17.72	<.001
Consistency portion of every day/week	12.26	<.001
Initiative involvement: CNL instructor/preceptor	6.24	.002
CNL role reporting structure: Reports to front line manager	-6.13	.005
CNL setting ownership status (reference category Not-for-profit)		
Government	-5.58	.018
For-Profit	0.57	.878

Bender, M., Williams M., Su W., Hites, L. (In Press). Clinical Nurse Leader integrated care delivery to improve care quality and safety: factors influencing perceived success. *Journal of Nursing Scholarship.*

Ongoing CNL Research

Testing validated CNL Practice Model across diverse health settings

- Measures of CNL implementation
  - Fidelity, adherence, acceptance, barriers/facilitators
    - Validated CNL survey, semi-structured interviews
- Measures of CNL practice
  - Communication, relationship building, teamwork, staff engagement
    - CNL survey, participant observation/ethnography
- Measures of CNL effectiveness
  - Improved care environment, quality and safety
    - Nationally-endorsed standardized metrics
    - Time series analysis

Informing Care Delivery Questions

- Tapping embedded clinical nursing systems knowledge
  - What works, or doesn't, where?
  - What domain/component clusters are sufficient/necessary for success?
  - What are the metrics that matter?

- Evidence for CNL practice AND for quality improvement

- CNL Practice-Research Collaborative (CNL-PRC)
  - Goal: Further specify the CNL practice model
  - Goal: Address methodological/analytical challenges to knowledge generation about CNL integrated practice
  - Goal: Generate evidence to inform practice
  - Goal: Develop/provide a toolkit for strategic integration of CNL practice

Who Is Transforming Healthcare on Metrics that Matter?

CNL Commentary

Linda Roussel, PhD, RN, CNL, NEA-BC, FAAN, The University of Alabama Birmingham

Thank you! Questions?

Who Is Transforming Healthcare on Metrics that Matter?

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Closing Remarks

- ISRN Mission
  - To enhance the scientific foundation for quality improvement, safety, and efficiency through transdisciplinary research addressing healthcare delivery, patient-centeredness, and integration of evidence into practice.

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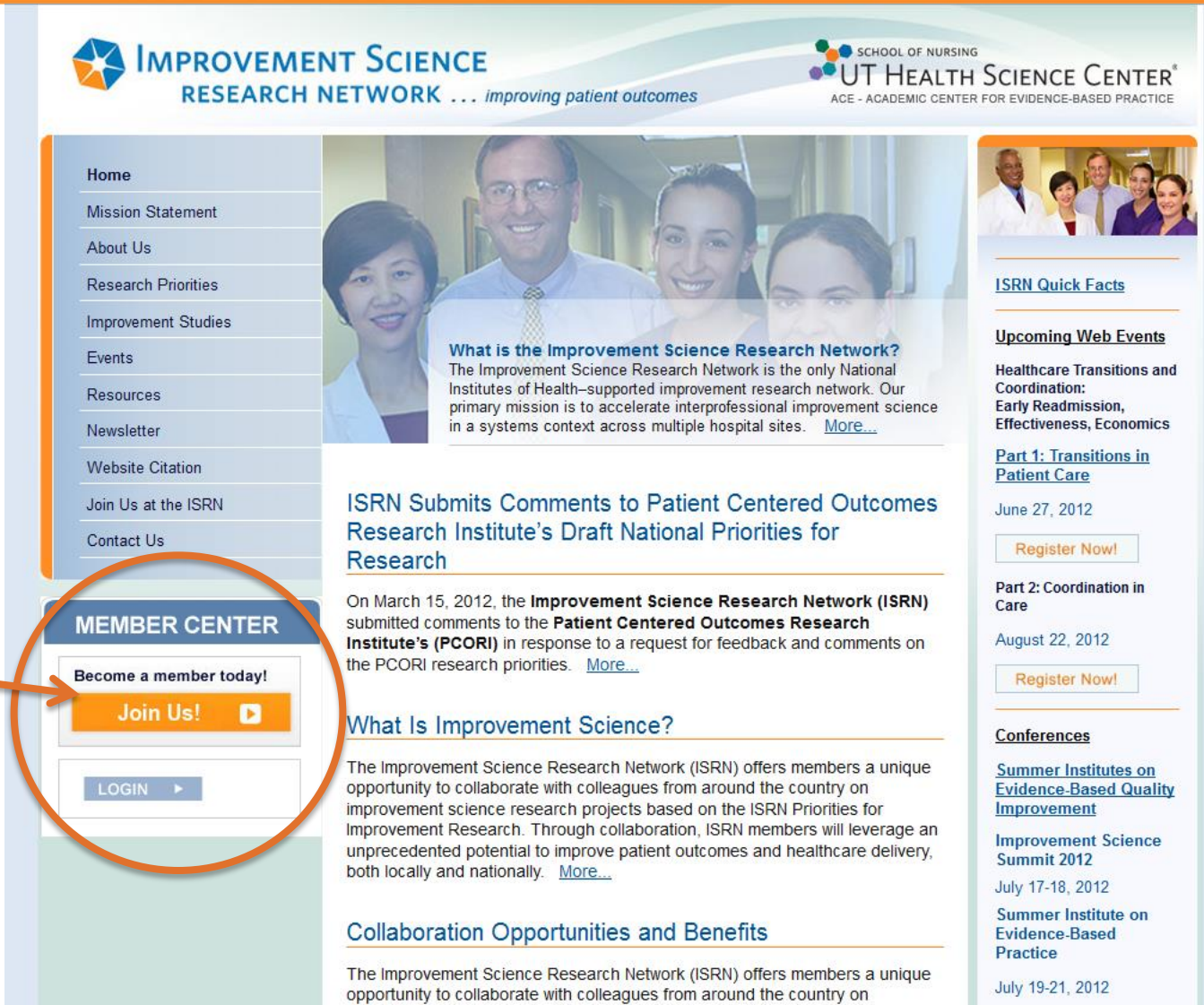

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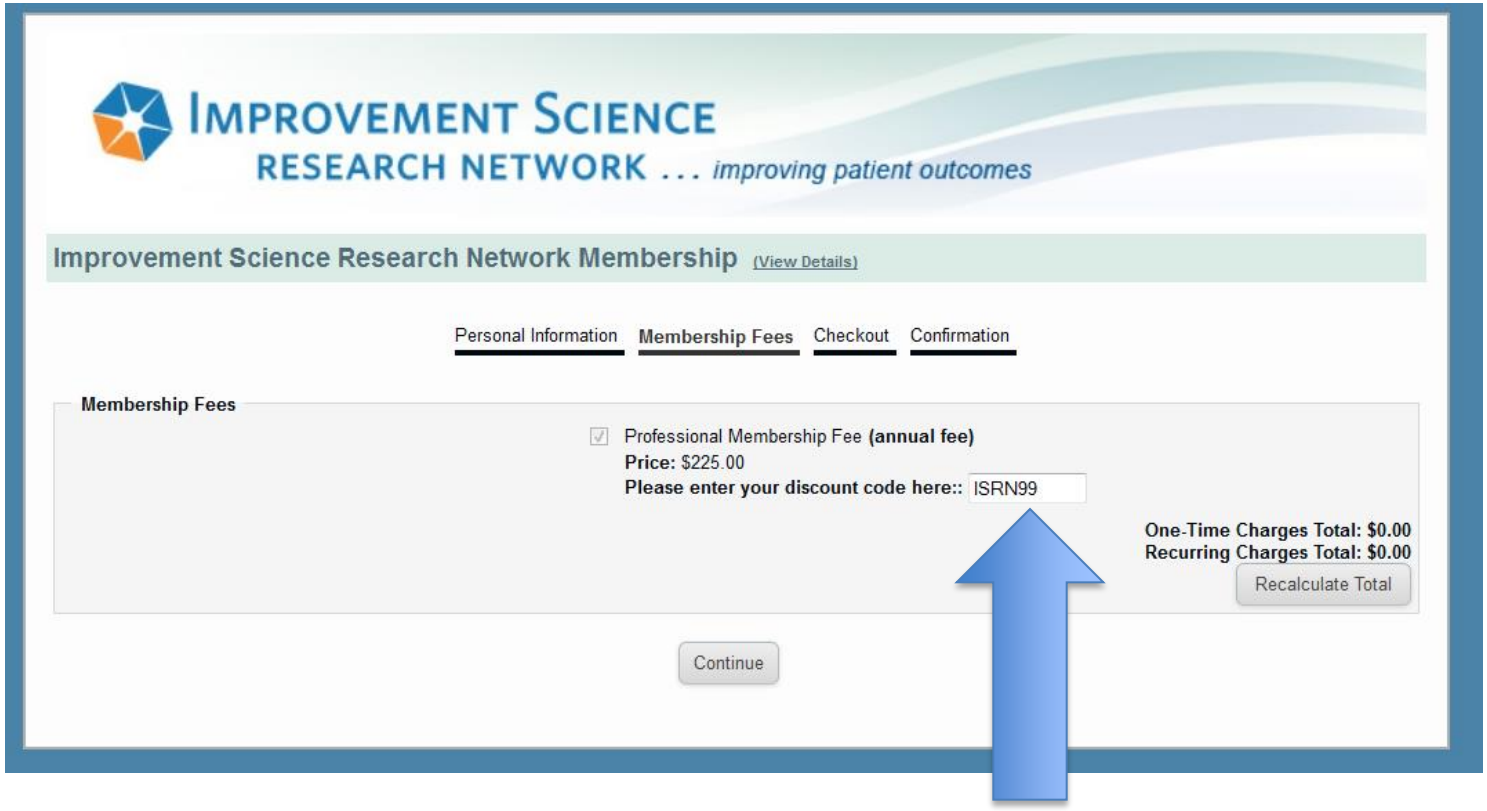

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