Translating Research into Practice: Using AHRQ and PCORI Evidence-Based Research for Nursing Practice

• The Webinar will begin momentarily

• Audio lines have been muted to minimize background noise

• To ask a question, Use the Question/Chat box
  ▶ You may chat a question for the presenters at any time
  ▶ Questions will be answered at the end of the presentation
  ▶ If you are experiencing technical issues, you may also use the Question/Chat box to request help or contact Amanda Gage at Amanda.Gage@dutyfirst.com

• At the conclusion of the Webinar we request that you stay online to answer a few questions
Translating Research into Practice: Using AHRQ and PCORI Evidence-Based Research for Nursing Practice

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Mary Jo Goolsby, Ed.D., M.S.N., A.N.P.-C.

September 10, 2014
• Review of AHRQ and EHC Program
  ► Jennifer E. Moore, Ph.D., R.N., Patient Centered Outcomes Research Fellow with AHRQ

• PCORI – Generation of Evidence
  ► Amanda Greene, Ph.D, M.P.H, M.S.N, R.N. Senior Program Officer for PCORI

• Non-Surgical Treatments for Urinary Incontinence in Adult Women: Diagnosis and Comparative Effectiveness
  ► Jean F. Wyman, Ph.D., R.N., G.N.P.-B.C., F.A.A.N., F.G.S.A., Professor and Cora Meidl Siehl Endowed Chair in Nursing Research

• AHRQ – Systematic Review of Evidence
  ► Jennifer E. Moore, Ph.D., R.N., Patient Centered Outcomes Research Fellow with AHRQ

• Evidence in Action – Nursing Workgroup Update
  ► Mary Jo Goolsby, Ed.D., M.S.N., ANP-C, Institute of Nurses Practitioner Excellence

• Q&A

• How to get involved with AHRQ & PCORI
Objectives

- Communicate AHRQ’s and PCORI’s shared interest supporting nursing via increased use of PCOR
- Involving nurses in AHRQ and PCORI research
- Identify resources that can be used in clinical practice
- Learn how nurses, advanced practice nurses, educators, and researchers can be engaged in AHRQ and PCORI research, implementation, and dissemination
- Identify what constitutes an adequate diagnostic evaluation of Urinary Incontinence
- Identify the difference between the effectiveness of pharmacological and nonpharmacological treatment for Urinary Incontinence in women
AHRQ Mission

To produce evidence to make health care safer, higher quality, more accessible, equitable, and affordable, and to work with the U.S. Department of Health and Human Services (HHS) and other partners to make sure that the evidence is understood and used

- AHRQ's priorities:
  - Improve health care quality
  - Make health care safer
  - Increase accessibility to health care
  - Improve health care affordability, efficiency, and cost transparency
The AHRQ Effective Health Care Program

- Provides unbiased evidence on clinical effectiveness of health care interventions
- Focuses on patient-centered outcomes
- Helps consumers, providers, and policy-makers make informed choices
- Does not make treatment recommendations
- Long-term goal: Improve health care quality and patient health outcomes through informed decision making by patients, providers, and policymakers
- Stakeholder engagement
What is Patient-Centered Outcomes Research (PCOR)?

Patient Centered Outcomes Research (PCOR)

The intent is 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 clinical and health system design interventions are most effective for which patients under specific circumstances. Stakeholder engagement and involvement (e.g., patients, community advocates, clinicians, etc.) are involved in all stages of the research.
What is Comparative Effectiveness Research?

Comparative Effectiveness Research (CER)

The conduct and synthesis of research comparing the benefits and harms of different interventions and strategies to prevent, diagnose, treat and monitor health conditions, as well as the delivery of health care in “real world” settings.
A Framework for CER

Horizon Scanning

Evidence Synthesis

Evidence Need Identification

Evidence Generation

Strategies Interventions Conditions Populations

Translation Dissemination Implementation

Improvements in Health Care

Research Platform
Infrastructure – Methods Development – Training

Stakeholder Engagement
Nursing and AHRQ

- AHRQ's mission includes both translating research findings and providing health care leaders and policymakers with information to make critical decisions about health care.

- As healthcare leaders, nurses can use the translated research to improve health outcomes for our patients.
Vision for the Future

- Respond effectively to rapidly changing health care settings and an evolving health care system
- Work with government, businesses, health care organizations, and professional associations to ensure that the health care system provides seamless, affordable, quality care that is accessible to all and leads to improved health outcomes
- Practice to the full extent of education and training
- Be full partners, with physicians and other health care professionals, in redesigning health care in the United States
• AHRQ is building a repository of unbiased, evidence-based comparative clinical information through its Effective Health Care (EHC) Program

• Created in 2005, the EHC Program was authorized as part of the Medicare Prescription Drug, Improvement, and Modernization Act (MMA) of 2003

• MMA established AHRQ as the first federal Agency mandated to conduct comparative effectiveness research

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<th>Association/Group</th>
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<tbody>
<tr>
<td>American Association of Colleges of Nursing (AACN)</td>
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<td>American Association of Nurse Practitioners (AANP)</td>
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<td>American College of Nurse Midwives (ACNM)</td>
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<td>American Nurses Association (ANA)</td>
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<td>American Psychiatric Nurses Association (APNA)</td>
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<td>Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN)</td>
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<td>Institute of Nurse Practitioner Excellence (INPE)</td>
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<td>Institute of Pediatric Nursing (IPN)</td>
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<td>National Association of Pediatric Nurse Practitioners (NAPNAP)</td>
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<td>National Black Nurses Association (NBNA)</td>
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<td>Oncology Nursing Society (ONS)</td>
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*As of September 2014*
Exploring PCORI’s Portfolio

Nursing Research in PCORI’s Portfolio

Amanda L. Greene, Ph.D., M.P.H., M.S.N., R.N., Senior Program Officer, Research Integration and Evaluation, PCORI
Funded Projects to Date

Total number of research projects awarded: **313**

Total funds awarded: **$548.9 million**

Number of states where we are funding research: **38 states** (plus the District of Columbia and Quebec, Canada)
Snapshot of Funded Projects

Selected Conditions Studied
(Broad Funding Cycles through Dec. 17, 2013)

- Cardiovascular Diseases: 40 studies
- Mental Disorders: 37 studies
- Cancer: 31 studies
- Endocrine System Diseases: 21 studies
- Nervous System Diseases: 19 studies
- Musculoskeletal Diseases: 13 studies

Selected Populations Studied
(Broad Funding Cycles through Dec. 17, 2013)

- Racial/Ethnic Minorities: 89 studies
- Older Adults: 70 studies
- Socioeconomic Status: 61 studies
- Rural: 51 studies
- Children: 32 studies
- Urban: 23 studies
PCORI Pilot Projects

Seeks to fund investigator-initiated research that:

- Advance methods for engaging patients and other stakeholders in all aspects of the research process.

**Portfolio Snapshot**

- **50 Projects**
- **$30.6 Million Awarded**
Assessment of Prevention, Diagnosis, and Treatment Options

Seeks to fund investigator-initiated research that:

• Compares the effectiveness of two or more options that are known to be effective but have not been adequately compared in previous studies.

• Among compared population groups, investigates factors that account for variation in treatment outcomes that may influence those outcomes in the context of comparing at least two treatment approaches.
Improving Healthcare Systems

Seeks to fund investigator-initiated research on effects of system changes on:

- Patients’ access to high quality, support for self-care, and coordination across healthcare settings.
- Decision making based on patients’ values.
- Experiences that are important to patients and their caregivers, such as overall health, functional ability, quality of life, stress, and survival.
- The efficiency of healthcare delivery, as measured by the amount of ineffective, duplicative, or wasteful care provided to patients.
Seeking to fund investigator-initiated research in:

- Clinician engagement with CER.
- Translating research, decision support interventions, and risk communication.
  - For this funding announcement, studies of decision support aids are not encouraged.
- Distribution of CER to patients, caregivers, and providers.

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<tr>
<th>Population</th>
<th>Projects</th>
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<tr>
<td>Other</td>
<td>8</td>
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<tr>
<td>Racial/Ethnic Minority</td>
<td>8</td>
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<tr>
<td>Older Adults</td>
<td>7</td>
</tr>
<tr>
<td>Low Socioeconomic Status</td>
<td>5</td>
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<tr>
<td>Rural</td>
<td>4</td>
</tr>
<tr>
<td>Children</td>
<td>3</td>
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28 PROJECTS
$48.1 MM AWARDED

By population; some projects address multiple populations.
Addressing Disparities

Seeks to fund investigator-initiated research that:

- Compares interventions to reduce or eliminate disparities in patient-centered outcomes.
- Identifies/comparisons promising practices that address contextual factors and their impact on outcomes.
- Compares health care options across different patient populations.
- Compares and identifies best practices within various patient populations for information sharing about outcomes and research.
Improving Methods for Conducting Patient-Centered Outcomes Research

Seeks to fund investigator-initiated research that:

- Addresses gaps in methodological research relevant to conducting PCOR. Results of these projects will inform future iterations of PCORI’s Methodology Report.

- Focuses on Patient-Reported Outcome Measurement Information System (PROMIS)-related research.

Portfolio Snapshot

- 40 Projects
- $38.8 Million Awarded
Pragmatic Clinical Studies

Seeks to fund investigator-initiated research that compares two or more alternatives for:

- Addressing prevention, diagnosis, treatment, or management of a disease or symptom
- Improving health care system–level approaches to managing care; or
- Eliminating health or healthcare disparities
- Research topics of particular interest identified by stakeholders or questions included in IOM’s Top 100 Topics for CER or AHRQ’s Future Research Needs

Opportunity Snapshot

Number of Anticipated Awards: Six to Nine
Funds Available: $90 Million
Maximum Project Duration: 5 Years
Maximum Direct Costs Per Project: $10 Million
Nursing in PCORI’s Portfolio

- Nursing research is essential to PCORI’s portfolio

- PCORI has made research awards to over 15 nurse PIs
Computerized PAINRelieve-It Protocol for Cancer Pain Control in Hospice

Engagement
- PAINRelieve-It relies on patient-reported data to generate information for patients, caregivers and hospice nurses.

Potential Impact
- Could change practice by opening the door to large-scale research that tests this tool in managing patient/caregiver pain outcomes in hospice settings.

Methods
- The study is conducted through a randomized controlled trial.

Compare effects of usual hospice care and PAINRelieve-It on pain outcomes. PAINRelieve-It is system-level intervention of computerized tools with patient-reported pain outcomes, decision support for clinicians, and multimedia education tailored to each cancer patient and lay caregiver.

Diana J. Wilkie, BSN, MS, PhD
University of Illinois at Chicago

Improving Healthcare Systems, awarded September 2013
Engagement

- Patient and family stakeholders and care team members will assist in the design and refinement of the PCMH model, including advance practice and dialysis nurses

Potential Impact

- Could change practice by increasing the likelihood of preventing complications or identifying problems earlier, allowing for more successful treatment for patients with kidney disease

Methods

- The study is conducted through a mixed methods approach

Comparative effectiveness research of a patient-centered medical home model of care for patients with end-stage renal disease. Model of care includes the provision of a primary care physician in the context of regular dialysis sessions and health promoters to support patients and caregivers.

Denise Hynes, MPH, PhD, RN
University of Illinois at Chicago

Improving Healthcare Systems, awarded May 2013
CAPE: Patient-Centered Quality Assessment of Psychiatric Inpatient Environments

Engagement
• Uses patient and staff nurses' perspectives to create an innovative measure of patient-centered care in psychiatric inpatient settings.

Potential Impact
• Could provide a nationally recognized measure to guide achievement of optimal patient-centered care in inpatient psychiatric settings and predict outcomes of psychiatric care.

Methods
• Qualitative research methods related to patient-centered outcomes.

Develop two versions of a measure of patient-centered care called the Combined Assessment of Psychiatric Environments (CAPE): one reflecting patients' perceptions of the five quality dimensions of the inpatient environment, and the other representing staff nurses' perceptions.

Kathleen Delaney, PhD, PMH-NP, FAAN
Rush University Medical Center/Rush College of Nursing

Pilot Projects, awarded April 2012
AHRQ – Systematic Review of Evidence

Jennifer E. Moore, Ph.D., R.N.
Patient Centered Outcomes Research Fellow
with AHRQ
• Foster awareness and use of CER findings, products, and tools by a wide range of audiences

• Inform professional and consumer audiences about AHRQ’s Effective Health Care Program and its processes and products

• Drive toward greater degree of shared decision making between clinicians and patients and caregivers
“Evidence may be necessary, but it is certainly not sufficient. The findings of research need to be translated into information that is useful for each health care decision maker.”

-- Former AHRQ Director John Eisenberg, 1999, in JAMA
Tools and Resources from the EHC Program

- Executive Summary
- Web Site
- Clinician Summary
- Systematic Review Report
- Consumer Summary
- Policymaker Summary
- Patient Decision Aid
- CE Modules
- Faculty Slides
- Interactive Case Study
AANP to expand continuing education (CE) opportunities for its members

Developed two online programs in 2009 by incorporating AHRQ’s EHC Program products

Between June and July 2009, 122 nurse practitioners completed the post-test. AANP launched a second CE offering

AHRQ Case Study - American Academy of Nurse Practitioners

Goal

Action

Result
Allnurses.com is an open forum to engage in conversations with nurses across the country.

AHRQ used the forum to highlight new resources including continuing education and patient resources.

Nurses were encouraged to interact and comment.

15 articles were posted that focused on childhood obesity, c-diff, and health literacy.
Selected Available Topics

- Non-surgical Treatments for Urinary Incontinence: A Review of the Research for Women
- Managing Chronic Gastroesophageal Reflux Disease
- Self-Measured Blood Pressure Monitoring

Available in English and Spanish
Available Materials

Brochure

Fact Sheets

Podcasts

Web Buttons

Get the clinical bottom line. Evidence-based tools for you and your patients.

Get the clinical bottom line. Review the evidence, educate patients, improve care.

¿Cuidas a alguien con una enfermedad? Aprende sobre las opciones de tratamiento.

Comparing Nonsurgical Treatments for Urinary Incontinence in Women

Podcast Description:
This audio program features current news and information from the U.S. Agency for Healthcare Research and Quality (AHRQ).

Urinary incontinence can affect how women feel about themselves and their ability to enjoy their favorite activities, but there are nonsurgical treatments.
Non-Surgical Treatments for Urinary Incontinence in Adult Women: Diagnosis and Comparative Effectiveness

Jean F. Wyman, Ph.D., R.N., G.N.P.-B.C., F.A.A.N., F.G.S.A.
Nursing and CER

• Gerontological nurse practitioner with a research and clinical practice focus on urinary incontinence in women

• Member of CER Team from the University of Minnesota’s Evidence-Based Practice Center that conducted the systematic review on the diagnosis and non-surgical treatments in adult women

• Excellent professional experience which involved learning the CER review process, examining the evidence, and developing clinician and consumer guides based on the evidence

• Nurses’ participation in the CER process (team member, consultant, or reviewer) improves the quality of the synthesis of the evidence and its translation to practice
What is Urinary Incontinence?

- Urinary Incontinence is the involuntary leakage of urine.
- It affects 1 in 4 young women and 3 in 4 older women.
- It can affect women’s physical, psychological, and social well-being; and can impose significant lifestyle restrictions.
- 25 million adult Americans experience transient or chronic UI.
- The National Association for Continence estimates that 75-80% of those sufferers are women, 9-13 million of whom have bothersome, severe, symptoms.
Types of Incontinence

Stress Incontinence

The inability to retain urine during coughing or sneezing

Urgency Incontinence

An involuntary loss of urine associated with the sensation of a sudden urge to urinate that is difficult to defer
# Treatments for Urinary Incontinence

## Stress Incontinence

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<tr>
<th>Exercise</th>
<th>Medical Devices</th>
<th>Medicines</th>
</tr>
</thead>
</table>
| • Pelvic floor muscle training (PFMT)  
• PFMT with biofeedback | • Electric stimulation  
• Magnetic stimulation | • Topical estrogen |

## Urgency Incontinence

<table>
<thead>
<tr>
<th>Bladder Training</th>
<th>Medical Devices</th>
<th>Medicines</th>
</tr>
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</table>
| • Scheduling urination | • Percutaneous tibial nerve stimulation | • Oxybutynin  
• Oxytol (Ditropan®)  
• Tolterodine (Detrol®)  
• Darifenacin (Enablex®)  
• Solifenacin (VESIcare®)  
• Fesoterodine (Toviaz®)  
• Trospium (Sanctura®) |
1) What constitutes an adequate diagnostic evaluation on which to base treatment of UI?

2) How effective is the pharmacological treatment of UI in women?

3) How effective is the non-pharmacological treatment of UI in women?
Key Findings from the CER

- Degree of benefit was low for all drugs. Compliance rates for prescription drugs are low; treatment discontinuation due to adverse effects was common. Evidence about long-term adherence and safety of all available treatments is lacking.

- Nonpharmacological treatments result in significant clinical benefit with low risk of adverse effects. Magnitude of benefit is large with more than 100 percent relative difference in continence rates.

- Women with stress and mixed UI can achieve continence performing pelvic floor muscle training (PFMT). Continence rates are similar between those who undergo PFMT with and without biofeedback.

- Only a few randomized controlled trials (RCTs) examined the comparative effectiveness of drugs and nonpharmacological treatments. Direct evidence was insufficient to draw valid conclusions about the benefits of combined modalities compared to monotherapy.

- Very limited evidence exists for long-term benefits and harms from drug and nonpharmacological treatments for UI. The bulk of RCTs reported clinical outcomes at 12-24 weeks with treatments.
Kegel exercises strengthen the pelvic floor muscles, which support the uterus, bladder, small intestine and rectum.
Gaps in Knowledge

- Evidence is insufficient to permit conclusions about the effectiveness of nonpharmacological interventions when compared with drugs or combined modalities.

- The reasons for high discontinuation rates with nonpharmacological interventions and methods to improve adherence are not understood nor well investigated.

- Evidence is inadequate to determine whether increasing drug dosage leads to greater improvement or likelihood of achieving continence.

- Evidence about how patient characteristics influence the treatment benefits or adverse effects of treatment is incomplete and of limited value to guide decisionmaking (e.g., baseline frequency, age, race, type of UI, prior treatment, comorbidities, and obesity).
What To Discuss With Your Patients and Their Caregivers

• The roles of nonpharmacological, pharmacological, and surgical interventions for treating UI.

• The trade-offs between the likelihood of benefits and the types and severity of adverse effects associated with UI drug treatments.

• The benefits and low risk of adverse effects from nonpharmacological UI treatments, such as special exercises.

• The importance of adherence to exercise protocols to achieve continence or improve severity of UI.
Evidence in Action – Update from Nursing Workgroup Member

Mary Jo Goolsby, Ed.D., M.S.N., A.N.P.-C.
• Gaps between evidence and practice persist

• Strong interest among NPs to incorporate best available evidence in their practice

• Busy providers seek concise resources from credible sources

• EHC Program resources highly rated as resources for NPs and patients
“Let’s share the evidence. These materials can help us empower our patients regardless of their circumstance. Together we can decide what works best. After all, one treatment doesn’t fit all.”

Dolores Walton, J.D., M.S.N., R.N., President
National Black Nurses Association

Every minute with your patient counts. Maximize your time and effectiveness with reliable tools that support evidence-based measures. AHRQ’s concise, practical research summaries provide the clinical bottom line on treatment options for diabetes, hypertension, depression, and many other common conditions. Compassionate education materials are available for your patients, too.

Get the clinical bottom line at
www.ahrq.gov/clinicalbottomline
How to get involved with AHRQ

Contact AHRQ:
EHC_Outreach@ahrq.hhs.gov

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  www.ahrq.gov/clinicalbottomline
• National Partnership Network site:
  www.ahrq.gov/professionals/clinicians-providers/partnership/
• AHRQ Funding Opportunities
  http://www.ahrq.gov/funding/index.html

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