TRANSLATING SCIENCE TO BETTER HEALTH: THE POWER OF DIVERSITY AND MULTICULTURAL ENGAGEMENT

TRAINING WORKSHOP III
Understanding the Benefits of Incorporating Translational Research with Clinical Research for Better Health: A New Paradigm to Increase Effectiveness in Health Care

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Understanding the Benefits of Incorporating Translational Research with Clinical Research for Better Health: A New Paradigm to Increase Effectiveness in Healthcare

Workshop Objectives:

- Describe the importance of integrating Translational and Clinical Research in developing a health research workforce that will advance knowledge into practice;
- Provide a brief overview of healthcare disparities;
- Discuss the importance of incorporating translational research with clinical research and its impact in improving health care to promote minority health and to reduce and ultimately eliminate health disparities;
- Provide examples of successful strategies in the formation of clinical and translational researchers that will conduct basic, clinical, social, and behavioral research, disseminate information, and reach out to minority and other health disparity communities; and
- Share ideas about each of the topics discussed.
Translation for implementation

- Incorporating (integrating, merging, joining, including, uniting) **translational and clinical research** are now “one” unifying model.
- How this integration can be of benefit in increasing **effectiveness** in healthcare without losing **efficiency**?

Efficiency

- One of the main reasons for translation is to transfer **knowledge at a faster pace to practice**, to be more efficient.
- Ability to carry out actions more quickly, producing results with little wasted effort, the ability to carry actions quickly with as few resources as possible = “doing things right.”

Effectiveness

- But, one has to be careful, not to confuse being effective with achieving **effectiveness**, which in terms of healthcare means taking the time to stop and evaluate.
- To achieve goals as fully as possible, to give the best service, “to do the right things”
Translation for healthcare

Evaluation includes 3 E’s:

- Effectiveness
- Efficiency
- Equity

Workshop’s Topics

For this conference we will discuss the impact of this new model in four areas:
1. Research workforce
2. Healthcare disparities
3. Comparative effectiveness research
4. Community-based participatory research

Plenary Speaker Presentations

4 topics: research education, healthcare disparities, comparative effectiveness, community-based research.
- Each topic will have at least two to three (2-3) questions which will be answered by the Speaker during the presentation according to their expertise.
- Participants will choose before the Workshop their Topic for the Roundtable Discussion and will receive the Speakers Questions prior to the presentations.
- If time allows, questions will be allowed after each of the Speaker’s Presentations.
- All questions and answers will be discussed during the Roundtable discussions.
Research Education

- **Estela Estape, MT, PhD, DHL**
  Dean, School of Health Professions, Medical Sciences Campus, UPR
  Director, CRECD Post-Doctoral Master of Science in Clinical and Translational Research
  Co-PI, Hispanics in Research Capability (HiREC) Endowment Program
  Leader, Multidisciplinary Training and Career Development Key function, PRCTRC

- **Magda Shaheen, MD, PhD, MPH, MS**
  Associate Professor
  Chair, RTRN Education & Dissemination Committee
  Director, Research Design and Biostatistics
  Co-director, UCLA-CTSI, Biostatistics, Study Design and Clinical Data Management Program
  Charles R Drew University of Medicine & Science, Los Angeles, CA

Healthcare disparities

- **Robert M. Mayberry, M.S., M.P.H., Ph.D.**
  Professor of Epidemiology
  Associate Director for Clinical Research and Community Engagement
  Director, the R-CENTER Study Design, Biostatistics, and Data Management Core
  Morehouse School of Medicine, Atlanta, GA

- **Lourdes Soto deLaurido, MPHE, EdD**
  Associate Dean and Professor, School of Health Professions
  Director, Research Institute for Global Health Promotion & Education (IIPESAG)
  Collaborator, HiREC Endowment Program
  UPR, Medical Sciences Campus, San Juan, PR

Comparative Effectiveness

- **Margarita Alegría, Ph.D.**
  Professor, Harvard Medical School and
  Director Center for Multicultural Mental Health Research
  Cambridge Health Alliance, Somerville, MA

- **Alexander Quashie, MD, MS**
  Co-Director, CRECD Master of Science in Clinical Research Program
  Director, Biomedical Informatics Program
  Director, Interdisciplinary T32 Training Program in Clinical Cardiovascular & Sleep Disorders
  Morehouse School of Medicine, Atlanta, GA
Community-based

- Rosanne Harrigan, EdD, APRN-Rx, FAAN
  Professor & Chair, John Burns School of Medicine
  Director, Clinical Research Programs
  University of Hawaii at Manoa

- Stephanie T. Miller-Hughes, PhD, MSCI
  Associate Professor, Department of Surgery,
  School of Medicine
  Meharry Medical College, Nashville, TN

Organizing Committee

- Dr. Estela S. Estape
- Mrs. Aracelis Huertas Chardon, HiREC Project Manager
- Dr. Mary Helen Mays, PRCTRC Scientific Communication

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CONTINUE WORKING TOWARDS A HEALTHIER WORLD!
Clinical and Translational Research Training, Education and Career Development

Preparing the new research workforce needed to advance healthcare and eliminate health disparities

Estela S. Estape, MT, PhD, DHB
Dean, School of Health Professions
Director and PI, MHC and HBC

DISCLAIMER

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Looking at this figure, what do you think all translational research have in common?

Basic Biomedical Research
Translation from Basic Science to Human Studies
Clinical Science and Knowledge
Translation of Knowledge into Clinical Practice
Improved and Better Health
Question 1

Which elements of translational research definitions, you think are the most relevant for advancing practice and healthcare?

Translational Research

- Translational research means different things to different people, but it seems important to almost everyone. Steven H Woolf, JAMA. 2008.

- For some, the term translational research is a term to express the integration of basic sciences and clinical research ("from bench to bedside").

- For others, it means to accelerate the transfer of new knowledge to practice.

DEFINITION 1

"Translational research fosters the multidirectional and multidisciplinary integration of basic research, patient-oriented research and population–based research, with the long-term aim of improving the health of the public."

Clinical Research

- **Patient-oriented research**—studies that include groups of patients or healthy individuals designed to understand the mechanisms of disease and health, to determine the effects of a treatment, or to provide a decision analysis of the care trajectories of patients.


### DEFINITION 2

**Translational research** transforms **scientific discoveries** arising from laboratory, clinical or population studies into clinically relevant applications to improve health by reducing disease incidence, morbidity and mortality.


### DEFINITION 3

**Translational Research** as a process for developing **evidence-based interventions and implementing them in practice**, thus ensuring that new treatments and research knowledge actually reach the patients or populations for whom they are intended and are implemented correctly.

DEFINITION 4

- Can T1 be defined as basic science/discovery?
- T2 as development?
- T3 as delivery?
- T4 as adoption?

Other Thoughts?
- Is it bidirectional? A continuum?
- Is it transdisciplinary? Interdisciplinary?
- Is it incorporating? At the interface? Transformation?
- Is improving the health of the public the same as better healthcare?

Question 2

Which do you think are major benefits of incorporating translational research with clinical research?
Benefit 1: Government Emphasis
- Improvement of health quality for all
- Faster transfer of knowledge and scientific findings into health benefits
- While decreasing the economic burden of health cost.

Benefit 2: Emphasis on Timeline
- Decrease the time it takes to transfer discoveries to practice and healthcare
  - Takes an average of 17 years before research findings are actually incorporated into clinical practice
  - Tierney et al., Ann Fam Med 2007

Benefit 3: Eliminate the Gap between Research and Practice
- Facilitate research studies to address the patient care problems encountered in common clinical practice
- Tierney, Ann Fam Med 2007
Goal in clinical & translational research education

- A new health workforce that can integrate research efficacy with effectiveness
  - *efficacy trials* - assess a treatment’s impact in selected patients under ideal conditions.
  - *effectiveness trials* - test a treatment under usual practice conditions
  » Selker H, CTS, 2010

**Question 3**

- What challenges have to be surpassed for an effective integration of translational and clinical research?

**Challenges**

- Lack of funding
- Regulatory barriers
- Complex interactions
- Translational inertia
- Lack of data sharing

Sung NS, et al. JAMA 2003; 289 (10)
Challenges in Research Education

• Curriculum that complies with new scientific trends and government policies.

• Skills and competencies to facilitate dissemination and transfer of scientific advances

• New paradigms for effective collaboration and resource sharing

Estape E, et al. PRHSJ, 2011

TRANSLATIONAL RESEARCH

"Only look to the past (evidence) to create the future (hypothesis)."

Estela S. Estape

References


Thank you for participating!