

Year One of the University of Maryland's Multi-Year Effort to Advance Implementation Science Education (AdvISE)

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Objectives:

- Describe why the University of Maryland School of Nursing launched the multi-year effort to Advance Implementation Science Education (AdvISE)
- Describe the major activities of the AdvISE grant
- Discuss next steps for the AdvISE grant

The Problem

- Inequities in population health
- Improve the quality and safety of healthcare structures, processes, and outcomes
- Reduce moral distress and burnout among RNs.



Institute of Medicine - 2001

It takes **17 years** to translate research into action.

Institute of Medicine (2001). Crossing the quality chasm: A new health system for the 21st Century, pg. 5.

DNP graduates with expertise in translation or diffusion of research into practice using QI methods are the key to reducing the 17-year research-to-practice gap!

Vision:

New DNP graduates will be skilled implementers and implementation scholars.

They will graduate with the knowledge, skills, and confidence to develop and lead quality improvement initiatives that utilize findings from implementation science to more effectively transform population health and healthcare.

Challenges

- Science on quality improvement and implementation science is rapidly expanding
- The journal of Implementation Science is only 12 years old
- It is hard for faculty to keep up-to-date
- Many faculty may not have had education or experience implementing and evaluating QI
- DNP degrees are new and were started by faculty with PhDs
- The taxonomy is under developed, e.g., there is not agreement nationally on how to define and distinguish between implementation science and improvement science

Definition of Quality Improvement (QI)

"... systematic, data-guided activities designed to bring about immediate, positive changes in the delivery of health care in particular settings."

Baily, M.A., Bottrell, M., Lynn, J., & Jennings (2006). Special report: the ethics of using QI methods to improve healthcare quality and safety. The Hastings Center: Garrison New York, pg. S5.

No two DNP Projects are identical

Yet ---- all DNP Projects share a similar road to success

1. Evaluate &
Grade the
Research or
Evidence for the
Practice (EBP),
Review
Population
Health Data &
Clinical
Outcomes

- *Review surveillance & utilization data to track and review population health and outcomes.
- *Review the research literature to determine which current practices need to change & how.
 *Determine the

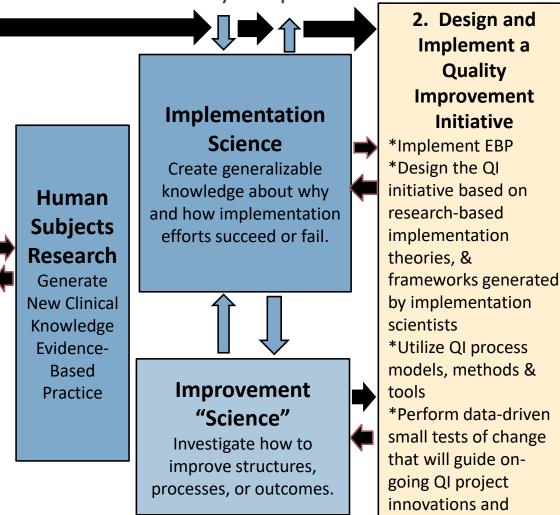
level of evidence

and Evidence-

Based Practice

(EBP) Gaps

Bingham's Evidence-Based Practice Quality Improvement Flow Chart



- 3. Evaluate & Determine Next Steps
- *Program evaluation:
- -Structures,
- -Processes,
- -Outcomes (Healthcare &
- Population Health)
 *Identify practice
- & policy
- implications
- *Track un-intended consequences
- *Recommend modifications
- *Sustain
- *Spread

adjustments

The University of Maryland School of Nursing has launched the:

Advancing Implementation Science Education (AdvISE) Initiative in 2017

NSP II Funding was obtained in July 2018 to enhance the AdVISE effort

AdvISE Steering Committee

- Debra Bingham, DrPH, RN, FAAN Committee Chair
- Susan Bindon, DNP, RN-BC, CNE, CNEcl
- Kathleen Buckley, PhD, RN
- Margaret Hammersla, PhD, CRNP-A
- Shannon Idzik DNP, CRNP, FAANP, FAAN Committee Co-Chair
- Kathryn Montgomery, PhD, RN, NEA-BC Committee Co-Chair
- Jeff Martin, MBA

Workgroup Representatives:

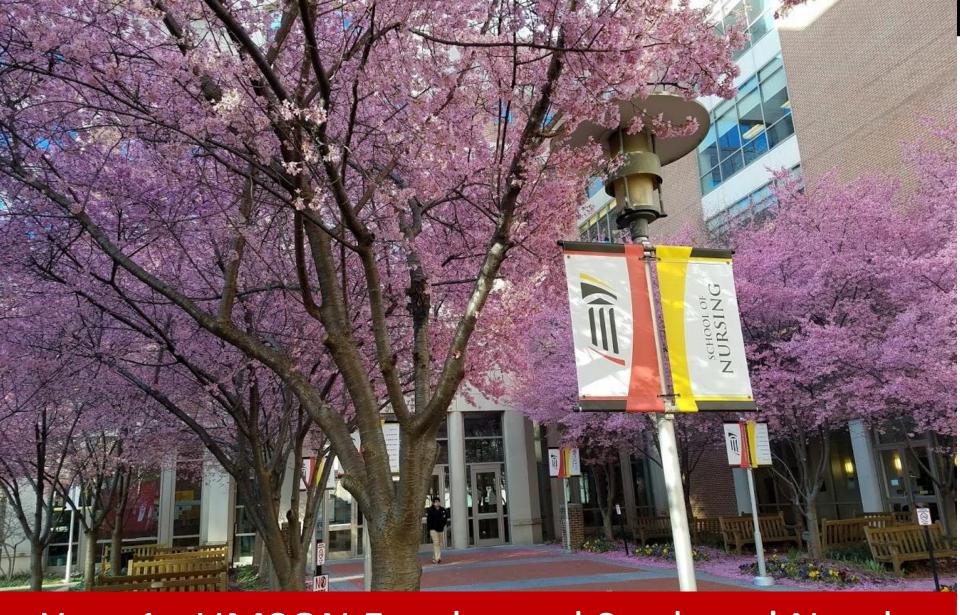
- Kathleen Buckley, PhD, RN (DNP Project Courses workgroup)
- Linda Costa, PhD, RN, NEA-BC (Measurement workgroup)
- Patricia Franklin, PhD, RN (Leadership workgroup)
- Lucy Rose Davidoff, RN, DNP* AdvISE Grant Project Management Specialist/Research Assistant

Work Groups

- Measurement
- Leadership
- DNP Project Courses
- Theory



Year	Major Activities for the AdvISE Project
Year 1	 Perform a needs assessment Obtain state and national input Form the AdvISE Expert Panel
Year 2	 Host the one-day AdvISE Summit – 9/24/2019 Synthesize and summarize the key recommendations for action based on the information gathered during year 1 Develop the IS and QI professional development education
Year 2 and 3	Develop the IS and QI professional development education
Year 3	Dissemination activities and final report



Year 1: UMSON Faculty and Students' Needs
Assessment

Consultant on the Needs Assessments



Anne Belcher, PhD, RN



- Faculty Needs Assessment
 - 38 (52%) out of 73 Faculty Responded
- Student Needs Pre-DNP Project Courses Assessment
 - 53 (36%) out of 147 DNP Students Responded
 - Follow up Post-DNP Project Courses Assessment
 - Fall 2019
- Employer and Recent Graduate Assessment
 - Survey
 - Semi-structured interviews & 2-3 focus groups
- Environmental Scan Interviews of DNP faculty at other schools of nursing

How familiar are you with the following Quality Improvement (QI) topics?

- 1. Differences between QI and Research
- 2. Ethical Consideration of QI
- 3. OI Frameworks and Theories
- 4. Implementation Science
- 5. Components of a QI Project
- 6. Developing a QI Project AIMs
- 7. Developing a QI Project Charter
- 8. QI Process Models
- 9. QI Tools Driver Diagrams
- 10. QI Tools Logic Model
- 11. QI Tools Fish Bone Diagrams
- 12. QI Tools Process Flow Charts
- 13. Data Collection Guidelines
- 14. Examples of Chart Audit Tools
- 15. Data Collection & Analysis
- 16. Implementation Barirers & Facilitators
- 17. Implementation Strategies and Tactics
- 18. SQUIRE Guidelines
- 19. Dissemination of QI Findings
- 20. Human Error Theory, Error Proofing
- 21. Characteristics of High-Reliability Organizations
- 22. Safety in Healthcare



Year 1: Obtain State and National Input



2. Obtain State & National Input



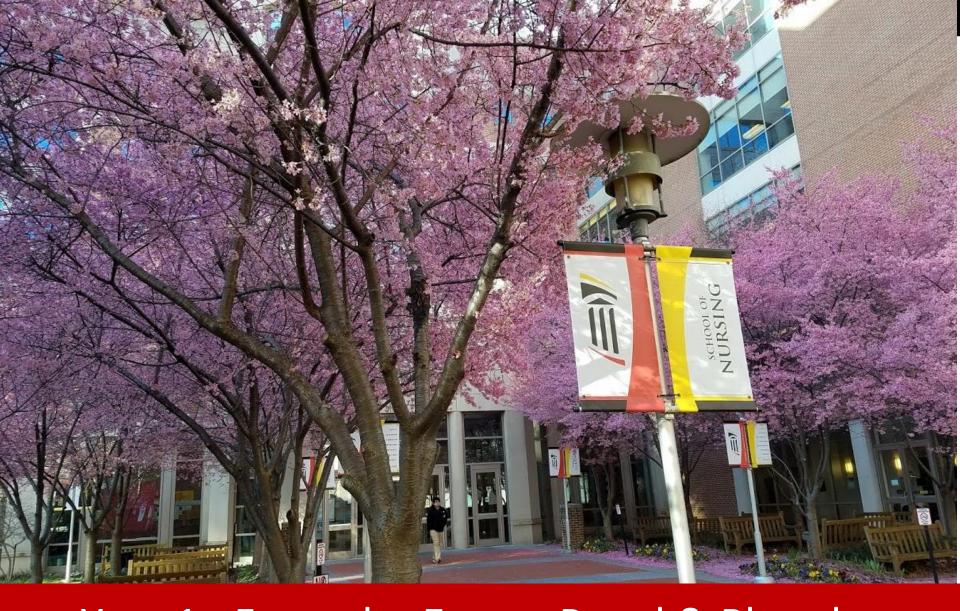
Mary Dolansky, PhD, RN, FAAN

- Director, QSEN Institute
- Assistant Professor, Frances Payne Bolton School of Nursing & School of Medicine
- Senior Faculty Scholar, VA Quality Scholars Program



Donald Goldmann, MD

- Chief Medical and Scientific Officer, Institute for Healthcare Improvement
- Professor, Department of Immunology and Infectious Diseases
- Professor of Epidemiology, Harvard. T. H. Chan School of Public Health
- Clinical Professor of Pediatrics, Harvard Medical School



Year 1: Form the Expert Panel & Plan the Summit



3. Form Expert Panel



Bryan Weiner, PhD

- Professor, Department of Global Health and Department of Health Services, University of Washington
- Author: Theory of Organizational Readiness for Change (2009)



Laura Damschroder, MS, MPh

- Lead author of the Consolidated Framework for Implementation Research (CFIR)
- Research Investigator with the Veterans Affairs (VA) Ann Arbor Center for Clinical Management Research
- Project Principle Investigator with the PrOVE (PeRsonalizing Options through Veteran Engagement) Quality Enhancement Research Initiative (QUERI)



Anne Sales, PhD, RN

- Associate Chair for Health System Innovation PhD, University of Michigan
- Professor, Division of Learning and Knowledge Systems
- Director of the Health Infrastructures and Learning Systems (HILS) program
- Research Scientist, Center for Clinical Management Research, VA Ann Arbor Healthcare System
- co-Editor-in-Chief of Implementation Science Journal



Jeannie S. Garber, DNP, RN, NEA-BC

 DNP Program Coordinator at James Madison University

Dissemination Activities Year 1 & 2

- Summit on September 24, 2019
- State-wide Webinars
- Video summary of the summit
- Presentations
 - State
 - National

Major Question for the Summit

- What implementation science knowledge and what quality improvement knowledge, tools, and skills do doctoral prepared graduates need to be proficient in so they can more effectively translate research into action?
 - Implementation Science
 - Quality Improvement

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A Few Examples of DNP Student Projects:

Community:

 Reduce preventable fetal and infant morbidity and mortality in collaboration with the Montgomery Health Department to increase prenatal kick counts

Outpatient:

- Work in clinics to increase oral health screening and referral patterns among diverse populations
- Increase the number of individuals in Maryland who get flu vaccines

Inpatient:

 Increase prophylactic use of protective skin barriers to reduce hospital acquired skin breakdown



Questions? dbingham@umaryland.edu