

ABSTRACT: 2017 ELAM Institutional Action Project Symposium

Project Title: Creating a Primary Care Fellowship in the Science of Health Care Delivery

Name and Institution: Myra Muramoto, MD, MPH; University of Arizona

Collaborators: Deb Dahl

Background, Challenge and Opportunity: The Department of Family and Community Medicine (FCM) has a long history of conducting clinical and community health research, funded by the NIH and other federal, state and private foundation sponsors. Despite this success, research has not been well-integrated with clinical care and there is no clear path for FCM trainees to develop the knowledge and skills to become successful primary care clinician-investigators. The University of Arizona's (UA) new academic medicine partnership with Banner Health provides the opportunity to develop a primary care research fellowship on the science of healthcare delivery that integrates research with clinical care.

Purpose/Objectives: To develop a 1 to 2-year primary care research fellowship that provides education, training, and experience in mentored research projects to prepare family physicians and other primary care clinicians for careers as clinician-investigators in academic medicine or large health systems.

The goals of the FCM Fellowship Program are to:

- Provide fellows with education and training in population health and health services research methods, focusing on primary care populations of high-cost/high need and/or health disparities.
- Provide fellows with experiential learning in implementing research projects.
- Prepare fellows for careers as clinician-investigators in academic or large healthcare organizations.
- Strategically position the program to utilize existing institutional infrastructure and resources, and engage a wide range of faculty and healthcare system stakeholders.

Methods/Approach:

- (1) Review recent published literature on primary care research fellowships, background/work to date on national initiatives to develop research capacity in family medicine departments, and a FM board-sanctioned residency research track
- (2) Review websites of existing FM research fellowships, communication with fellowship directors to confirm/clarify website information
- (3) Exploratory discussion with Banner and UA collaborators and stakeholders, and assessment of institutional resources for including formal degree or certificate program as part of fellowship.
- (4) Design program with collaborators and stakeholder input (e.g. curriculum, didactic education and experiential training, program faculty, feasibility of including formal degree or certificate program, alignment with institutional initiatives)
- (5) Develop financial proforma for program start-up, and sustainability.

Outcomes and Evaluation Strategy:

- Program launch, fellow recruitment: Number of fellows who apply to the program
- Successful Training program/health system synergy:
 - Number of completed project that provide value for fellows' career and the health system
 - Number of manuscripts/scholarly presentations on fellows' projects
 - Number of fellows go on to clinician-investigator positions in academic or healthcare organizations

Overall Evaluation: We will use a functional mentoring evaluation approach (Thorndyke, 2008) to assess multi-level outcomes including: Participation, program satisfaction, skill development, project success, impact of the program on the individual and beyond. We will collect data at program baseline, intermittently during the program, and longitudinally after completion of the program.

"The science of health care delivery focuses on how patients actually receive care... this discipline's aim is to enhance the patient's experience with health care by improving quality, outcomes and cost".¹



Background, Challenge and Opportunity The Department of Family and Community Medicine has a long history of conducting clinical and community health research, funded by NIH, other federal, state and private foundation sponsors. Despite this success, research has not been well-integrated with clinical care and there is no clear path for FCM trainees to develop the knowledge and skills to become successful primary care (PC) clinician-investigators. The University of Arizona's (UA) new academic medicine partnership with Banner Health provides an opportunity to develop a PC research fellowship in the science of healthcare delivery that integrates research with clinical care.



Purpose/Objectives To develop a 2-year PC research fellowship that prepares family physicians and other PC clinicians for careers as clinician-researchers in academic medicine, healthcare systems and/or agencies.

Goals:

- Provide fellows with:
 - Education, training leading in science of healthcare delivery
 - Experiential learning through mentored research projects
- Strategically position program to:
 - Effectively utilize/partner with existing infrastructure/resources
 - Engage a wide range of faculty and health system partners
- Develop strategies for recruitment of women and minorities

Methods/Approach

- Review recent literature on family medicine (FM)/primary care (PC) research fellowships, national initiatives to develop FM research capacity
- Inventory existing FM research fellowships and their characteristics
- Exploratory discussions with Banner, UA, other partners/stakeholders
- Assess potential for degree or certificate program as part of fellowship
- Design program with collaborators and stakeholder input
- Develop financial proforma for program start-up, and sustainability
- Obtain institutional approvals to launch program

Outcomes to date

Published literature emphasizes:

- Federal research awards concentrated in few FM departments.
- Importance of PC research with population health, value-based reimbursement
- Growing interest in PC research from: patients, providers, health systems, payers, employers, policymakers
- Expand FM/PC research infrastructure and radically shift how PC research is conducted:
 - Increased relevance and pace
 - Reconceive research workforce to include new partners and participants
 - Get research findings into hands of those who can use them

National Initiatives:

- Building Research Capacity (BRC) though Assoc. of Depts. of FM(ADFM), North American PC Research Group (NAPCRG) and FM residency research track: modeled after ABIM research track

Survey of Existing FM research fellowships (n=13) Web sites often not current, incomplete info. For more complete data, email survey in progress

Characteristic*	% (n)	Comments
2 Fellows/year	55.6% (5)	8 missing info
Duration ≥ 24 months	46.1% (6)	5 with 24-36 months,
Physicians only	23.0% (3)	Primary care: FM, GIM, Peds
Physicians, PhD, other	38.5% (5)	PhDs nursing, basic science, social sciences, public health
Degree offered	53.9% (7)	MPH, MSPH, MSc
Federal funds	69.2% (9)	T32, NRSA, HRSA
Institutional funds	15.4% (2)	Transition after lost federal funds, Dept. contributions
Co-sponsoring unit	22.2% (2)	GIM, Peds, EM, PH, Nursing, Soc. work
FM Research institute	22.2% (2)	1 in other research center

*Missing some data from nearly all sites

Stakeholder/Partner input:

- FM Chairs/Senior leaders re: challenges
 - Lack of institutional research infrastructure
 - Balance between patient care/research training time
 - Models for funding/sustainability
 - Different phenotypes for clinician-investigator/institutional goals
- Banner Health:
 - Aligned with the vision behind the UA-Banner Health partnership
 - Clinician input needed in population health management units
 - Can drive innovation in new models of care
 - Can support "PC Innovation Practices"
- Other potential partners/stakeholders:
 - Regional behavioral health authority
 - Medicaid health plans division
 - Federally qualified health centers
 - Large private practice PC group



Potential UA degrees/certificates

- MPH
- MS, Clinical Translational Sciences
- PhD, Clinical Translational Sciences
- Graduate Certificate, Clinical and Translational Research

Planned Evaluation Strategy:

- Overall: We will use a functional mentoring evaluation approach² to assess multi-level outcomes including: participation, program satisfaction, skill development, project success, impact of the program on the individual and beyond.
- Program launch, fellow recruitment: Number of fellows who apply to the program.
- Successful training program/health system synergy - Number of:
 - Completed projects that provide value for fellows' career and the health system partner
 - Manuscripts/scholarly presentations on fellows' projects
 - Fellows that go on to clinician-investigator positions in academic or healthcare organizations



Discussion There is a growing need for PC research to help achieve the "triple aim". Family medicine is the largest producer of US primary care, yet has only 13 research fellowships. They are heterogeneous, some are interprofessional, most offer graduate degrees, and majority are federally funded.

Impact: A PC research fellowship in the science of healthcare delivery would help address the growing need for PC researchers, and strengthen the UA academic medicine value for Banner Health.

Summary/Conclusion A PC research fellowship appears to be feasible and welcomed by Banner. Progress has been slowed due to on-going cultural merger/transformation work in UA-Banner partnership.

Next Steps:

- Continue gathering input and building collaborative relationships with key Banner and other health system collaborators
- Engage other UA faculty with research training expertise to help design/develop program with collaborator input
- Develop financial proforma and seek institutional approvals
- Launch fellowship program



¹ <http://www.mayo.edu/research/centers-programs/robert-d-patricia-e-kern-center-science-health-care-delivery/about/about-science-of-health-care-delivery> (accessed April 15, 2017)

²Thorndyke LE, Gusic ME, Milner RJ. Functional mentoring: a practical approach with multilevel outcomes. J Contin Educ Health Prof. 2008 Summer;28(3):157-64.