



Short Communication

Interprofessional Education and Training to Expand the Geriatrics Workforce

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Abstract

Objective: To describe the collaborative processes that led to unique service-learning opportunities and experiential gerontology and geriatrics education for health professions students and family medicine residents.

Methods: An academic medical center collaborated with a county hospital, private university and Area Agency on Aging to create the only federally-awarded Geriatric Workforce Enhancement Program (WE HAIL) in Texas and expand interprofessional training models. Training enhancements focused on topics identified through a community needs assessment, including health literacy, falls prevention, medication management, chronic disease self-management and dementia.

Results: Trainee evaluations demonstrate improved knowledge, confidence and attitudes in providing geriatrics care and connecting older adults and caregivers to needed social supports.

Keywords: Interdisciplinary team; Interprofessional education; Workforce development

Introduction

By 2030, ages 65 and over in the U.S. will comprise nearly 24% of the total population [1]. Older adults have the highest utilization of healthcare, with three in four older adults having more than one chronic condition [2]. Health care professionals require medical expertise to address the medical needs of older adults, which are further complicated by social and environmental factors affecting health. Having a workforce capable of managing medical conditions of older

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patients is important to meet national goals for value-based health-care aimed to provide better care for individuals, improve population health and reduce healthcare costs. In 2015, the United States Department of Health and Human Services, Health Resources and Services Administration (HRSA) launched the Geriatric Workforce Enhancement Program (GWEP) to promote the integration of geriatrics education and primary care and to engage patients and families through community-based programs. Forty-four GWEP grantees in 29 states were awarded to develop geriatrics training and education programs aimed to increase the geriatrics workforce and improve healthcare and health outcomes for older adults. The Workforce Enhancements in Health Aging and Independent Living (WE HAIL) Program, which includes an academic health science center, the University of North Texas Health Science Center (UNTHSC) partnered with a private university, Texas Christian University (TCU), county hospital, John Peter Smith Health Network (JPS) and local government, the United Way and Area Agency on Aging (AAA), was the only GWEP grantee (2014-2019) in Texas.

Through a multipronged approach targeting different trainee groups, WE HAIL programs enhanced geriatric education for health professions students and family medicine residents. This article describes the collaborative processes that led to unique service-learning opportunities and experiential education for health professions students and family medicine residents, the training outcomes resulting from three years of implementation and lessons learned from cross-systems collaboration in geriatrics education.

Interprofessional education

Interdisciplinary team-based care has been recognized as an effective approach in geriatric patient care through the involvement of a variety of health disciplines working together in the care of a geriatric patient [3]. An interdisciplinary team with complimentary expertise can better address patient care issues, such as geriatric syndromes and patient safety concerns, which are complex and multifactorial. Broad interprofessional learning experiences over a continuum of professional development is essential for gaining knowledge and skills, such as communication, shared decision-making and familiarity with various roles and responsibilities that can continue throughout clinical practice and impact patient outcomes [4]. The University of North Texas Health Science Center in Fort Worth, Texas, has a history of collaborative activities aimed at providing to provide interprofessional education focused on geriatrics care for early learners and training for graduate-level and practicing health professionals. Through partnerships with private and public institutions supported by the GWEP grant, UNTHSC enhanced several education programs for health professions students and family medicine residents.

The Seniors Assisting in Geriatric Education, or SAGE Program, was established in 2008 with a grant from the Donald W Reynolds Foundation and includes more than 175 older adult volunteers and over 600 health profession students in medicine, pharmacy, physical therapy and physician assistant studies. Through a partnership with

a private university, Texas Christian University's Harris College of Nursing and Health Sciences, students in nursing, social work, dietetics and speech and language pathology are also involved with SAGE. The six SAGE in-home visits across two years provide a level of familiarity and confidence with evaluating and communicating with older adults, and an insight into the complex medical and social issues older adults face while maintaining their quality of life, dignity and independence. Interprofessional teams apply their knowledge to complete basic clinical activities at each visit. In another program, the Senior Health Education and Literacy Program (Senior HELP), health professions student teams learn health literacy principles to develop educational presentations for older adults with an emphasis on preventive medicine and health promotion based on medical evidence.

As part of the GWEP, clinical faculty and leadership of community organizations enhanced existing health professions in SAGE and Senior HELP curricula using the results of a community assessment conducted by the Area Agency on Aging to identify challenges of a growing population of older adults in the community. Applying the findings of these community needs to curriculum development, GWEP partners enhanced geriatrics education and training programs with a focus on five topics in geriatrics care: falls prevention, medication management, chronic disease self-management, Alzheimer's disease and related dementias, and health literacy.

In a parallel project, these topics as well as evidence-based geriatric practices and unique learning experiences utilizing local programs were integrated into family medicine residency programs through another GWEP partner, John Peter Smith Health Network (JPS). JPS has the largest family medicine residency program in the United States with a Level 1 Trauma Center and an acute care-oriented curriculum. In 2000, the JPS Family Medicine Residency program was the first County Hospital-based program to start a Geriatrics Fellowship, developed in collaboration with the UNTHSC Geriatrics Division, to include at least 100 hours of didactic and experiential learning dedicated to team-based care of older patients across the care continuum during three years of specialized geriatrics training. Through the GWEP funding, this program was expanded to include geriatrics training with all family medicine residents (whether or not they were included in the Geriatric Fellowship).

Methods

Clinical experts in geriatric medicine, pharmacy, physical therapy, social work, nursing and dietetics across the GWEP partners identified evidence-based tools and strategies related to the five focus areas in geriatrics care. GWEP faculty integrated these tools and strategies into SAGE Program curricula for multidisciplinary health students paired with a senior mentor in three training sessions over two years (Session 1, n=472; Session 2, n=671; Session 3, n=662) and medical and pharmacy students (n=93) presenting health promotion information at senior centers and other community locations as a part of Senior HELP.

To expand the Family Physician's understanding and collaboration with community partners in geriatrics care, JPS Health Network enhanced curricular content in years two and three of the GWEP grant for family medicine residents (n=40). Program Directors, GWEP faculty and representatives from community organizations identified community programs providing experiential opportunities for residents, including nationally-recognized evidence-based programs provided through the Area Agency on Aging, such as A Matter of

Balance fall prevention program, Resources for Enhancing Alzheimer's Caregiver Health (REACH II) and the Home meds medication management program. The enhanced curricula was developed to include a four-hour home visit with a Meals on Wheels client receiving home-delivered meals and case management; a 4-hour home visit with a Alzheimer's Association patient and caregiver; a 1-hour group session for A Matter of Balance fall prevention program; and a 1-hour Virtual Dementia Tour simulation. Residents were also provided the option of completing additional training in quality improvement processes, with an introduction to resources from the Institute for Healthcare Improvement and concepts in the Lean Six Sigma collaborative method for process improvement.

Applying a Plan-Do-Study-Act (PDSA) cycle throughout program development and implementation, GWEP partners worked with organizational faculty to implement curricular enhancements fall 2016 through spring 2018. Trainee evaluation of knowledge, attitudes and confidence in applying principles and strategies included a Likert scale survey delivered electronically. Open-ended responses were examined using qualitative thematic analysis.

Results

Trainee feedback for the training programs demonstrates improved knowledge, skills and confidence in communicating with older adults, providing geriatric care and connecting older adults and caregivers to needed social supports. Findings showed that students in IP teams paired with senior mentors in the SAGE Program agreed that the training increased their knowledge of health care needs of older adults (78% to 84%), including environmental and safety concerns (89%), medication challenges (78%) and nutritional needs (76%). Ninety-one percent of Senior HELP students presenting in interprofessional groups to seniors in senior centers reported improved confidence when talking with older adults about healthcare needs and instructions. Nineteen Family Medicine Residents completed home visits and the Virtual Dementia Tour implemented July 2016 through June 2017. Residents reported improved knowledge about healthcare services (78%) and in talking with older adults (75%) and caregivers (73%) about healthcare services. Themes from qualitative feedback included students increased their knowledge about specific geriatric patient needs and how to communicate with elder patients and other health professions. In addition, family medicine residents reported an increased awareness of patient care considerations, caregiver roles, and community resources, and greater appreciation for working with older adults. The training was useful in that it changed how residents would approach the care and prescribing practices when working with older patients, in addition to it improving their confidence, empathy and respect for older adults.

Feedback about the training identified opportunities for program improvement, including logistical support for coordinating and maximizing time during off-campus visits; supplemental materials and didactic sessions; and role clarification among health professionals.

Discussion

Results suggest that health professions students and family medicine residents benefit from collaborative, interprofessional models of geriatrics training. Such innovative, cross-sector approaches to geriatrics education and training increased trainees' knowledge, skills and confidence in communicating with older adults and caregivers

about health issues and community supports. Moreover, they provided unique service-learning opportunities exposing trainees to diverse environments and older adults of various abilities and needs. Integrating such experiences requires attention to logistical details of already crowded schedules and adequate support to prepare trainees for their time with older adult mentors and community service providers.

Collaborative interprofessional training models have the potential to broaden understanding of best practices and collaborative approaches to geriatrics care. However, it is crucial to engage all partners in quality improvement processes to meet inevitable challenges of implementing training across systems of care and measuring the impact of such collaborative ventures. Evaluation of this four-year initiative demonstrates the challenges and rewards of the evolution and expansion of training programs through partnerships with health professional training programs, healthcare systems, and community organizations. It is important to continue support for transformational training opportunities in geriatrics care that are greatly needed to respond to the growing population of older adults.

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