Title: Teach More about Teams: A Clinician-Educator Development Program to Promote Interprofessional Education for Learners

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Focused Question: What is the impact of a professional development program on interprofessional clinical education strategies on clinical preceptors' knowledge, skills, and attitudes? What instructional and assessment strategies do clinical preceptors utilize most frequently? What instructional/assessment strategies do clinical preceptors perceive as most useful?

Background: Interprofessional education (IPE) is a major priority for health professions education programs preparing learners to be members in the team-based model of health care delivery (Stone, 2010). Despite several years of IPE research efforts across the health professions, a recent Cochrane review concluded that there are a low number of well-designed IPE studies and the learning outcomes have been mixed (Reeves, Perrior, Goldman, Freeth, & Zwarenstein, 2013). Although the study of IPE has focused more on educational activities in the context of classrooms and simulations, clinical settings have been recognized as ideal for students' development of interprofessional attitudes and competencies (Thistlethwaite, 2012). Duke Health is an academic medical center and health system with several undergraduate, graduate, and postgraduate health professions education programs within its School of Medicine and School of Nursing. Interprofessional education and practice (IPEP) efforts have been increasingly prioritized for several years and are now part of Duke Health's strategic plan to "dramatically increase interprofessional education, research and practice" (Duke Health, 2016, p. 13). Most formal IPE occurs in classroom settings, such as the IPE primer in which all health professions students participate during the first few months of their respective programs. IPE initiatives have been piloted in some clinical settings, such as interdisciplinary rounds and quality improvement projects. Clinical preceptors of Duke physician assistant students have reported significant numbers of interprofessional interactions between both students and health professionals across a variety clinical settings (Hudak & Melcher, 2016). In a follow-up qualitative study (Hudak, Melcher, & Strand de Oliveira, 2017), a major theme of interviews with clinical preceptors revealed various strategies that preceptors utilize to promote IPE in clinical settings, such as involving students on the team, making introductions, and role-modeling effective team communication. While Duke health professions students must obtain team communication skills during their education, their clinical supervisors do not routinely receive standardized training to facilitate and evaluate development of these skills. A recent IPE practice guideline for interprofessional teaching concludes that "faculty development to enhance existing skills is desirable and should combine a handson workshop with demonstration and feedback involving different professions" (Lie, Forest, Kysh, & Sinclair, 2016, p. 328). Another IPE practice guideline recognizes the need to "link IPE faculty development efforts with practicing interprofessional care teams" (Hall & Zierler, 2015, p. 6). Based upon these recommendations and the gap in formal IPE training opportunities at Duke, we propose

establishing a continuing professional development program for clinical preceptors who supervise health professions learners. Through this program, we aim to equip clinical preceptors with knowledge, skills, and attitudes to more effectively facilitate IPE in clinical settings. This program would foster development of rich interprofessional relationships among the interprofessional participants enrolled in the program. We plan to use this pilot program to revise and scale future similar initiatives to reach a greater number of clinical preceptors in the future.

Specific Aims: The ultimate impact of this program is that learners will be better prepared to function on health care teams. The learning objectives for program participants are to: 1) Define interprofessional education (IPE) and practice (IPEP); 2) Describe the four interprofessional education core competency domains of the Interprofessional Education Collaborative; 3) Demonstrate strategies to promote learners' development of IPEP attitudes and competencies in clinical settings; 4) Assess and evaluate learners IPEP attitudes and competencies in clinical settings; 5) Reflect on knowledge, skills, and attitudes related to IPEP.

Methods: Educational Intervention Program activities will consist of (1) four one-hour, in-person training sessions, (2) reading assignments prior to each session, and (3) deliberate application of instructional and assessment skills with learners in clinical settings between program sessions. The program will last approximately eight weeks, with in-person sessions occurring every two weeks. Each session will include brief content presentations by program instructors, structured group discussion, and time for individual reflection and how the content will be applied in practice. Each session will be highly participatory in nature, with focus on understanding challenges of IPEP while striving for solutions. Participants will create transfer of learning plans to guide their application of new knowledge and skills with learners in clinical settings. For each session, there will be a required reading related IPEP from the health professions education literature with prompts for participant reflection. Team communication skills will be based on four IPE core competency domains defined by Interprofessional Education Collaborative (Panel, I.E.C.E., 2016) which are endorsed by multiple national organizations representing various health professions. Participant Recruitment Recruitment will be open to any licensed health care provider who is currently a clinician educator with supervisory responsibilities for health professions students. Target participants include clinician educators from multiple professions, including dieticians, nurse educators, occupational therapists, physical therapists, physicians, physician assistants, psychologists, social workers, and speech language pathologists. A maximum of 25 participants will be accepted to participate in the entire program on a first-come basis. Timeline Planning for the program will occur between September-December 2018. Recruitment of participants will occur between October-November 2018. The program will be implemented in January-February of 2019. Program evaluation will be conducted throughout the course of the program with additional evaluation and analysis from March-June 2019 so that the shortterm (i.e. immediate post-program) and medium-term (i.e. three months post-program) outcomes can be included in a preliminary program report to be submitted to the program sponsor in July, 2019. Outcomes and measures Each participant will have a unique identifier assigned for pre and post-test analysis to assess for change in IPE knowledge and attitudes as well as perception of change in IPEP skills. This mixed-methods evaluation will consist of pre- and post-tests as well as a series of surveys to assess short-, medium-, and long-term learning and application outcomes. Each assessment will be conducted using an online survey platform that is available at the institution (Duke Qualtrics or REDCAP). Evaluation items will include open-ended response and Likert-type questions. Evaluation will also assess program implementation with focus on attendance, completion of program activities, and a survey of the participant experience. Implementation evaluation will also assess the perspectives of the program planning team at the end of the program, with emphasis on the program planning process as well as program strengths and areas for improvement. Data Management and Analysis All data will be stored on a secure server within the institution and in accordance with IRB guidelines. Data will be de-identified prior to analysis and aggregate data will be reported with descriptive statistics. Data should not include sensitive information regarding participants, health professions students, or patients. Analysis will be conducted by the evaluation specialist in consultation with the principal investigator and program instructors. Program outcomes will be reported to the program sponsor and will be disseminated through scholarly

presentation and publication. IRB Status Pro00100630 has been initiated and remains in a presubmission stage for an expedited review as an educational research project pending proposal for funding.

IRB Status: IRB Status Pro00100630 (presubmission for expedited review)

Challenges: One challenge will be recruitment of participants, which we will address through use of multiple available communication channels, including Duke AHEAD, and targeted recruitment from educational programs to their clinical preceptors. Another challenge will be ensuring participants' full attendance and participation in the program, which we will address by scheduling sessions every two weeks during the noon hour and in a lunch and learn format; meals will be provided. We will emphasize the importance of regular attendance at the time of sign-up due to the iterative nature of the curriculum. Another challenge will be providing participants with sufficient time to apply new knowledge and skills with students in clinical settings. We will address this challenge by spacing program sessions every two weeks, while providing support and time to check in with other participants and program instructors.

Budget: \$5170

PI effort	<1% effort	1250
Consultant		
Equipment		
Computer		
Supplies	Printed materials	100
Travel	Presentation at Health Professions Education Conference	3820

Works Cited: Duke Health (2016). Advancing Health Together: 2016-2020 Strategic planning framework. Retrieved from

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