**Title:** Necessary, but Insufficient: Health System Science Education Demands Professional Development

**Submission Type:** Sessions on Medical Education

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**Topic Short Description:** Health care transformation requires health system members to function and think differently, necessitating new skills. To align with these changes, undergraduate and graduate medical education are including new competencies in Health Systems Science, a discipline incorporating value and improvement in health care, safety, population health, and teamwork. A barrier to expanding this training is the lack of faculty expertise. Building upon innovations from several medical schools, we will explore the issue of faculty development.

**Presenters:** Jed Gonzalo MD MSc, Associate Professor of Medicine and Public Health and Associate Dean for Health Systems Education, Penn State College of Medicine
Elizabeth Baxley MD, Senior Associate Dean for Academic Affairs, Brody School of Medicine at East Carolina University
Isaac Kirstein DO, Dean, Heritage College Cleveland, Ohio University Heritage College of Osteopathic Medicine

**Facilitator:** Facilitator Anne Tomolo MD MPH, Section Chief and Associate Division Director, VA Quality and Primary Care and Associate Professor, Medicine, Emory University School of Medicine
Small Group Facilitators Luan Lawson, MD, MAEd, Associate Professor of Emergency Medicine and Assistant Dean for Curriculum, Assessment, and Clinical Academic Affairs, Brody School of Medicine at East Carolina University
Michael Dekhtyar, Research Associate, Medical Education Outcomes, American Medical Association
Maya Hammoud MD MBA, Director, Medical Education Innovation, American Medical Association

**Learning Objectives:** At the end of this session, participants will be able to:

1. Describe the gap in training and competencies of today’s faculty with respect to Health System Science related competencies
2. Develop ideas for faculty development that optimize the clinical learning environment to support trainee education in patient safety, quality improvement, interprofessionalism, social determinants of health, and population health
3. Engage faculty in systems-related competencies in UME and GME curricula

**Session Plan:** Health care transformation requires all members of the health system to function and think differently, which requires new skills for many current-day providers.[1] To align with these changes, undergraduate and graduate medical education are rapidly expanding the competency toolkit to include several competencies related to Health Systems Science domains, including concepts such as population and public health, clinical informatics, value-based care, and systems thinking.[2] A major barrier within this innovative shift in expanding training for today’s learners is the lack of faculty expertise critical for medical education programs that seek to incorporate this training into their curriculum. These new faculty competencies are also required for the informal curriculum – the requisite role modeling and supervision of trainees that helps them hardwire these skills and change their own future practice. Despite the growing mandate for helping develop faculty competencies,
professional development efforts have been slow to emerge within medical schools, attenuating the spread of educational transformation.[3-5] For widespread success of health care transformation, local Health Systems Science faculty development must align with the specific needs of the health system. Building upon local innovations from several US medical schools, in this session we will explore the specific challenges of implementing professional development programs in Health Systems Science. Leveraging the work of the AMA Consortium of medical schools, the session will be organized in three segments: Segment 1 (15 minutes) – Introduction of Health Systems Science Concept and Conceptual Framework Session leads will briefly define terms, and provide examples of different yet thematically-similar faculty development programs in their medical schools; presentations will specifically focus on the development and implementation aspects of the programs. Segment 2 (50 minutes) – Barriers and Facilitators to Implementation of Professional Development Programs Small-group breakout activities will allow participants to further explore their local barriers and facilitators with colleagues by: (1) discussing challenges in advancing systems education from the faculty perspective, (2) exploring opportunities at their schools for developing professional development efforts, particularly in regards to interprofessional providers, and, (3) outlining general suggestions for structured professional development programs around each Health System Science concept, including preferred methodologies. A “fillable” handout outlining the components of a professional development program including program evaluation will allow participants to begin creating these documents for their own institutions. The results of the small-group discussions will be reported out to the larger group, with a facilitated discussion by presenters. Session leaders will document the group discussion, articulating key themes and findings. Segment 3 (10 minutes) – Summary and Wrap-Up of Group Finding The session leaders will summarize key findings from the session, and articulate the group’s consensus of challenges, opportunities and suggestions for professional development programs. They will also provide insights from their own experiences for participants in their local efforts. Results from participants’ work will seek to be disseminated in scholarly form following the conference.