Title: Building Towards Competence: Utilizing Self-Regulated Learning in Undergraduate Medical Education

Submission Type: Sessions on Medical Education

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Topic Short Description: Self-regulated learning (SRL) can develop skills needed for Practice-Based Learning and Improvement (PBL&I). Cultivating SRL skills during classroom-based UME education has been described; however deliberate development of SRL skills in UME clinical learning environments, including preclerkship clinical experiences and clerkships, warrants further exploration. We will discuss how to utilize a SRL framework applied to clinical learning environments in UME to promote foundational skills in PBL&I that can be employed throughout UME, GME and professional practice.

Presenters: Samara Ginzburg, Larry Gruppen, Richard Schwarzstein

Facilitator: Sally Santen

Learning Objectives: At the conclusion of this session participants will be able to:

1. Define the components of a framework for Self-Regulated Learning (SRL) as it relates to UME clinical learning environments.
2. Apply a SRL framework to medical students’ activities to facilitate learning from patients in UME clinical learning environments.
3. Apply a SRL framework to faculty roles in supporting medical students’ learning from patients in UME clinical learning environments.

Session Plan: The Accreditation Council for Graduate Medical Education has defined Practice-Based Learning and Improvement (PBL&I) as one of the core competencies that residents and physicians in practice must demonstrate. PBL&I requires a commitment to intentional practice, performance assessment and improvement, and self-regulated learning (SRL) to develop these skills. A model for SRL, derived from research in educational psychology, includes four steps that comprise the cycle of SRL (White, Gruppen, Fantone): planning, learning, feedback/assessment, and adjustment. Planning includes goal setting, self-efficacy and motivation; learning includes learning styles, strategies and methods; feedback/assessment includes self-monitoring/self-assessment and external feedback; adjustment includes reflection and attribution. SRL is a major component of the Master Adaptive Learner model as well (Cutrer et al.). Development of SRL skills is dependent upon personal attributes but is also amenable to educational interventions. SRL can be promoted in settings which foster curiosity and inquisitiveness, support development of internal motivation, and provide role modeling and mentoring. Attention has recently been given to developing SRL skills during classroom-based learning in Undergraduate Medical Education (UME); however less work has focused on deliberate development of SRL skills in the clinical learning environments of UME, including preclerkship clinical experiences and clerkships. Compared with the classroom, clinical experiences during UME are more frequent and diverse in nature. Students are being exposed to patient care earlier in medical school through participation in ambulatory practices, Emergency Medical Technician training programs, and others. Similarly, innovative clerkship models, such as longitudinal integrated clerkships, are becoming more prevalent. With an increased
focus on students’ time spent in the UME clinical learning environment, and with a greater diversity of clinical experiences, it is important for educators to explicitly cultivate students’ habits of SRL to provide them with a foundation for PBL&I and learning through patient care experiences. Without deliberate attention to this goal, students are at risk of becoming accustomed to “seeing” patients without learning from them; a practice antithetical to PBL&I. SRL provides a framework through which learners can routinize learning from patients, providing them a skill set and habits of practice to utilize for PBL&I throughout Graduate Medical Education (GME) and professional practice. The factors that promote as well as challenge the fostering of SRL in clinical UME settings may vary from those in classroom-based settings, but should build upon related skills acquired in pre-clerkship courses. In addition, articulating the characteristics of the various UME clinical learning settings and consideration of the application of the four stages of SRL to both learners and educators in these settings merits exploration and discussion. The question that guides our discussion is how to utilize a framework for SRL in the clinical learning environments in UME to promote PBL&I from patients to establish foundational skills that can then be utilized throughout the continuum of UME, GME and professional practice. The session will begin with an overview of SRL by Dr. Larry Gruppen, followed by examples of application of this framework to preclerkship and clerkship experiences. Subsequently, there will be guided discussion of small working groups focused on developing a shared understanding of learners’ and educators’ behaviors that will support the development of SRL in UME clinical learning environments. These groups will be facilitated by faculty from six institutions, all of whom are actively engaged in supporting, conducting and/or researching SRL in UME, and will keep record of the ideas and examples discussed.

15 min Overview of four step model for SRL (Gruppen); Example of application in pre clerkship (Ginzburg) and clerkship (Schwartzstein)
30 min Facilitated table-top discussions of examples of SRL skills utilized by learners during pre-clerkship and clerkship clinical experiences, followed by discussions of examples of faculty role-modeling use of SRL skills and supporting learners’ use of SRL skills during pre-clerkship and clerkship clinical experiences
10 min Report out at microphone by emissary from groups to full audience
15 min Wrap-up, pull together themes/shared fundamental principles, share “best practices” handout (Ginzburg, Santen)