

# **Design, Implementation, and Analysis of a Healthcare Economics Curriculum for Pediatric Residents**

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## **Proposal and Rationale**

An understanding of healthcare economics is part of an important milestone for the Accreditation Council for Graduate Medical Education (ACGME). According to the ACGME, there are six core competences that Graduate Medical Education (GME) programs should use to evaluate their residents. These include: patient care; medical knowledge; practice-based learning and improvement; interpersonal and communication skills; professionalism; and systems-based practice. Competency in systems-based practice is described as follows: “Residents must be able to demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value”.<sup>1</sup> A curriculum in healthcare economics would help residents build a framework to understand the healthcare system. It would further help residents understand the economic forces that underlie the way the hospital functions and ultimately how it affects the way they practice medicine. As the ACGME core competencies indicate, the ultimate goal of a curriculum in healthcare economics is to help pediatric residents become better advocates for themselves and their patients. This will be accomplished through three project aims, as follows:

1. Perform a needs assessment of current pediatric residents in healthcare economics
2. Design and implement a Develop a healthcare economics curriculum for pediatric residents to address those needs
3. Measure the impact of participation in the curriculum on resident knowledge and comfort with healthcare economics

The curriculum will potentially include small-group seminars, large group lectures, discussion, podcasts, and online training materials.

## **Design and Analysis**

The research methods used for this analysis will be primarily survey-based. Residents will be surveyed before and after the curriculum intervention. Surveys will include Likert self-rating scales to assess knowledge and attitudes towards healthcare economics.

Curriculum Development will be based on David E. Kern’s method for curriculum development; a six step approach<sup>2</sup>:

1. Problem Identification and General Needs Assessment
2. Needs Assessment of Targeted Learners
3. Goals and Objectives
4. Educational Strategies
5. Implementation
6. Evaluation and Feedback

To measure the impact of the curriculum, a battery of knowledge-based questions will be given to participants before and after being exposed to the curriculum. These questions will be validated using a control group of graduating pediatric residents who have not been exposed to the curriculum. Paired and unpaired T tests will be performed to help measure the difference the curriculum has made in resident knowledge.

### **Potential Benefits**

Participation will lead to knowledge of the field of Healthcare economics. It will provide residents with a foundation to understand the system in which they work and better advocate for themselves and their patients. It will also directly help residents to achieve one of the ACGME's core competencies.

### **Potential Risks**

This is a minimal-risk study. This is an educational session intended to introduce pediatric residents to healthcare economics and the opportunity to learn how that field affects their practice.

### **Alternatives**

Participation in this study is voluntary. The alternative is to not participate in this study.

### **Costs to Subjects**

Subjects will not incur any monetary costs related to this study.

### **Compensation**

Participants will not be compensated beyond whatever knowledge and satisfaction they gain from participating in the curriculum.

### **Confidentiality and Consent**

Participants will be provided with an information sheet and agreement regarding the research at their first session. It will contain a statement of voluntary status, including the choice not to participate in the curriculum and ability to stop at any time. It will also include a statement of confidentiality. No identifying information will be included in any presentation of the research or findings.

### **References**

1. ECFMG, "ACGME Core Competencies", Last updated 07/05/12, Accessed 07/18/17, <http://www.ecfmg.org/echo/acgme-core-competencies.html>
2. Kern, David E. and Patricia A. Thomas, Donna M. Howard, Eric B. Bass. Curriculum Development For Medical Education: A Six-Step Approach. Johns Hopkins University Press: Baltimore and London, 2006.