

Implementing a Lecture and Standardized Patient Encounter to Introduce Resource Stewardship and Cost-of-Care Conversations to First-Year Medical Students

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Introduction

Medical students lack sufficient understanding of the United States health insurance system, the importance of resource stewardship, and how to respond to patients with concerns about the cost of their healthcare. Additionally, the Liaison Committee on Medical Education (LCME) has determined that healthcare delivery is an important medical education topic, and the social determinants of health include both economic stability and healthcare access. Within this context, it is vital that medical students gain knowledge and skill in these areas in order to promote principles of high-value care among the next generation of physicians.

Objectives

To provide first-year medical students with a working knowledge of the basics of health insurance and resource stewardship, and to provide an opportunity to practice cost-of-care conversation skills with a standardized patient (SP).

Methods

We created a didactic video podcast and written curriculum for educating students on health insurance, resource stewardship, and discussing cost concerns with patients. Following the didactic podcast, a random subset of students participated in an SP encounter with an SP who had no health insurance and was concerned about the cost of their care. We used pre- and post-podcast quizzes to evaluate student understanding of the didactic material, and we used a checklist evaluation with qualitative comments to evaluate student ability to respond appropriately to the SP with cost concerns.

Comparisons were made with Student's t-test.

Results

One hundred eighteen first-year medical students watched the podcast and completed the pre- and post-podcast quizzes. Average quiz scores improved from 56% [52-60%] to 88% [86-92%] after viewing the podcast and written material ($p < 0.01$). Students that were randomly assigned to the SP with cost concerns encounter demonstrated competence in addressing those concerns through both quantitative scores (average: 94% [89-99%]) and qualitative assessments.

Discussion

In recent national surveys, over 70% of patients report wanting to have conversations with their physician about the cost of their healthcare, but less than 30% report doing so. By teaching medical students the principles of health insurance and resource stewardship, we prepare them to improve the patient experience by addressing cost concerns, decreasing unnecessary utilization of healthcare resources, and taking a more empathetic understanding of patients' financial situations. This podcast and SP case provided medical students with appropriate material for understanding health insurance and resource stewardship, and it gave students an opportunity to practice addressing patient cost concerns. Through quizzes and SP evaluations, the curriculum was demonstrated to be effective in achieving its objectives.

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	Pre-Quiz	Post-Quiz	p-value
Question 1	49% (40-58)	85% (78-91)	<0.01
Question 2	66% (57-75)	96% (92-99)	<0.01
Question 3	36% (28-45)	93% (89-98)	<0.01
Question 4	35% (26-43)	73% (65-81)	<0.01
Question 5	97% (95-100)	95% (91-99)	0.32
Total Score	2.8 (2.6-3.0)	4.4 (4.3-4.6)	<0.01

	Cost Concerns Group (n = 46)	Other Groups (n = 189)	p-value
Special Communication Skills	94% (89-99)	76% (70-81)	<0.01
All Other Skills	88% (86-90)	87% (85-88)	0.24
Total Score	89% (87-91)	86% (85-87)	0.04