

The Use of Financial Case Studies in PA Education as learning tools using Breast Cancer as a Model

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Introduction

Background

In our Fall 2023 semester we were assigned a project that used a case-based vignette of an archetypal breast cancer patient designed by my faculty. This graded class project established specific parameters and was established to:

- illustrate step-by-step costs at each stage in the patient's journey
- Highlight actual out-of-pocket costs for cancer-related healthcare
- Evaluate insurance coverage nuances like co-pays, co-insurance, and deductibles
- Consider additional indirect costs of cancer care

After we presented the vignette to our cohort of George Washington University PA students we discovered many aspects of this process are often unknown to both patients and providers. We then decided to follow up with our classmates to gauge knowledge of out-of-pocket costs and desire to include this kind of information in PA school curricula.

Purpose

The purpose of this project is to encourage inclusion of easy-to-understand archetypal case based projects in program curricula as a learning tool to help PA students become more empathetic, resourceful, and cost-effective healthcare professionals.

Methods

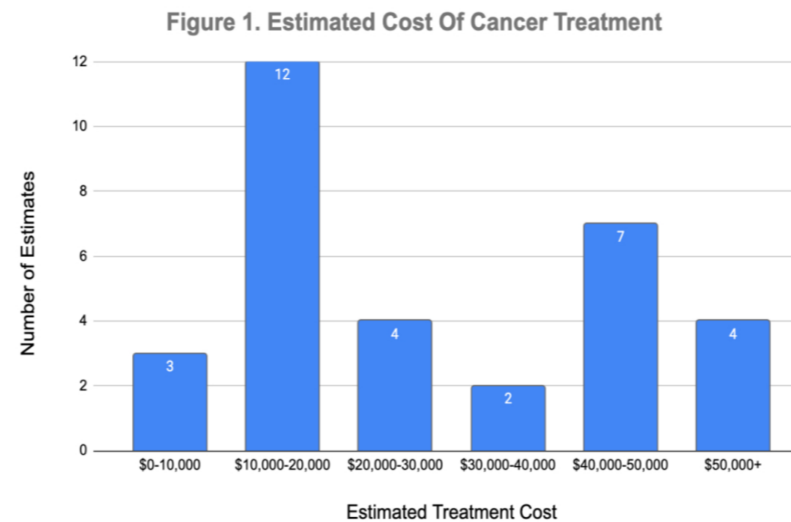
Class Project Parameters

- Utilized the Kaiser Permanente: PK DC Standard Bronze 7500/45/Vision Summary of Benefits and Coverage
- Identified potential complications of breast cancer treatment, including but not limited to hair loss and infertility
- Used national, local, and other organizations' resources to estimate the costs of subsequent measures to contend with adverse outcomes.
- Direct out-of-pocket medical expenses were \$9,500, and ancillary costs were \$43,380, totaling \$52,880.

Follow Up Survey

- Surveyed classmates who attended the original presentation with 4 questions
- Survey was administered on Google Forms and distributed through email. Statistical analysis was done using Excel.

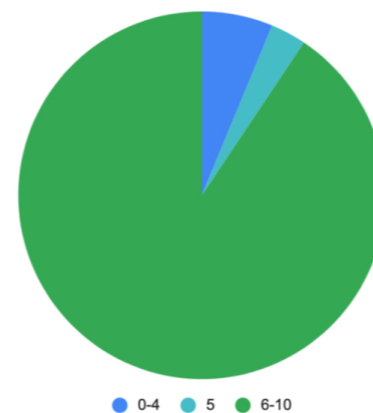
Results



The amounts estimated by students for the total out-of-pocket costs of the patient's breast cancer treatment ranged from \$2,000-\$330,000, with a mean of \$44,344 and median of \$25,000. Students' confidence in their estimate was low with a mean score of 3.8 and median of 3 (1 = no confidence, 10 = high confidence).

Figure 2. Should Information on Out-of-Pocket Cancer Costs be Included in PA Programs?

1= strongly disagree, 10 = strongly agree



The majority of students also agreed that education on out-of-pocket costs should be included in PA program curricula. With 0 being completely disagree and 10 being completely agree, the mean score for this question was 8.3, and the median 9.

Conclusion

Discussion

Using designated parameters assigned in our class project, we presented the direct out-of-pocket costs for a patient newly diagnosed with breast cancer. In doing so we discovered a gap in knowledge for PA student regarding the burdens out-of-pocket costs for patients with chronic disease. From this preliminary data, we feel the implementation of similar projects in program curricula can be an advantageous tool to improve cost-effectiveness of future PAs.

Limitations

The extended length of time between the original presentation in December 2022 and the follow-up survey sent March 2023 must be taken into account as it may have affected students' estimated cost responses. In the future, pre- & post-surveys can provide further insight into PA student knowledge. In regards to the example vignette, the insurance policy used as reference for this project was an HMO, therefore does not take into account the out of pocket costs for someone on Medicare/Medicaid, for example. Thus, price estimates will vary depending on the vignette diagnosis and details.

Acknowledgements

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