

Background

Value-based health care (VBHC) empowers physicians to provide patient-centered, evidence-based care, assessing and targeting outcomes that matter most to the patient. The VBHC framework minimizes healthcare inefficiencies that negatively impact patients, while maximizing patient outcomes. Despite increasing adoption of VBHC frameworks in medical organizations, VBHC curriculum in undergraduate medical education is variable across schools, and data regarding student knowledge, attitudes, and skills is minimal.

We sought to expose students to foundational concepts through an introductory lecture in the preclinical curriculum. The objective of this project is to analyze the results of the student feedback and its implications on VBHC education in preclinical curriculum.

Methods

We developed a 30-minute case-based interactive lecture on VBHC for second-year medical students as part of the Medicine, Behavior, and Society (MBS) course. Leadership for the lecture came from the VBHC student organization, faculty mentors for the organization, and course directors for the MBS course. At the end of the lecture, we provided students with information about our school's VBHC elective, the Dell Medical School VBHC modules, and the Choosing Wisely recommendations, such that interested students could seek out further info.

Students were asked to voluntarily complete a post-lecture survey using an anonymous Google Form. Responses were on a 5-point Likert scale.

The lecture objectives were:

- Reflect on the landscape of healthcare costs and outcomes in the US
- Define value, waste, inefficiency, outcomes of care, and costs of care
- Define costs of specific tests and procedures
- Describe how VBHC differs from current healthcare systems
- Apply VBHC frameworks to an example case

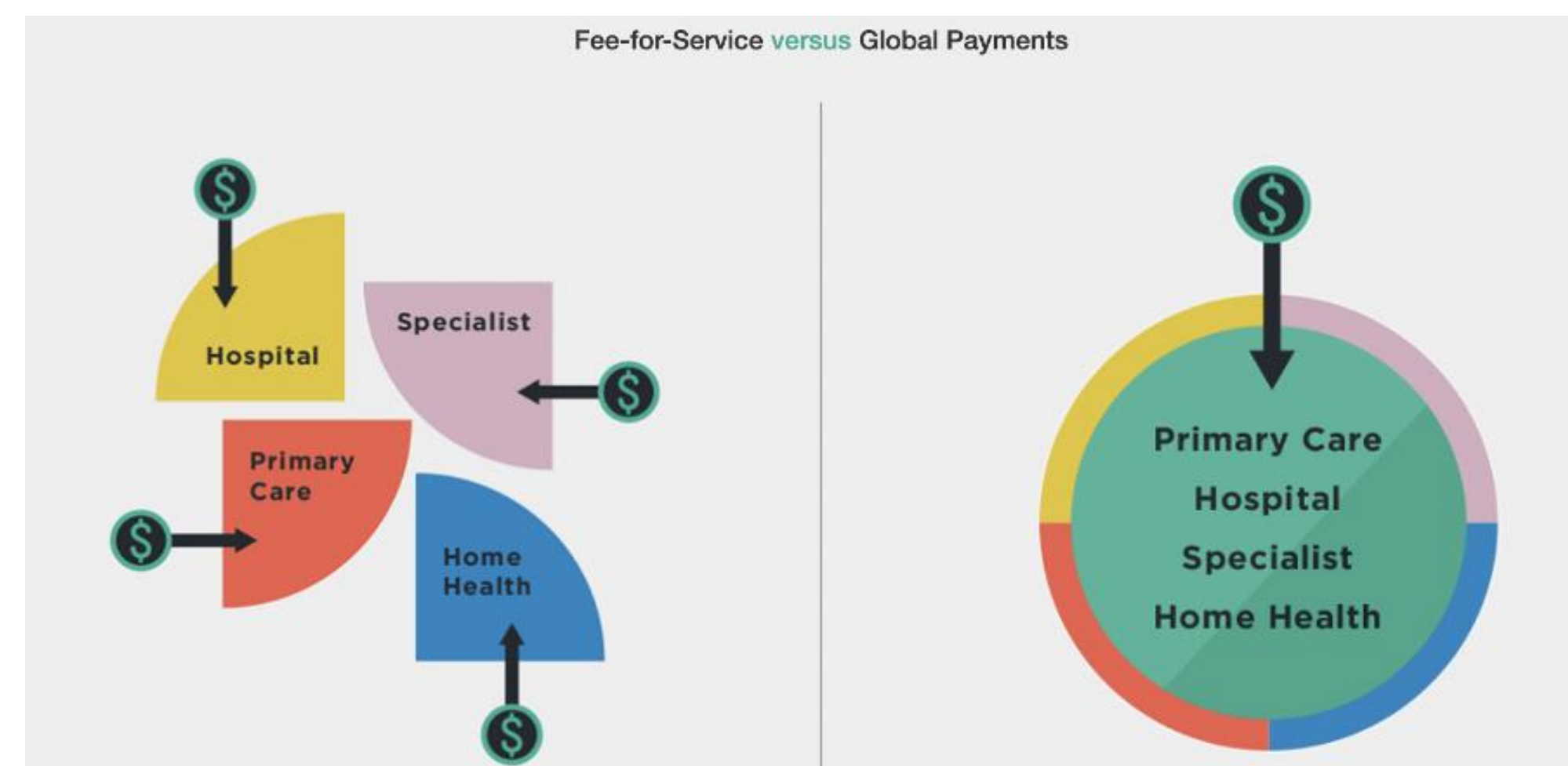


Fig 1: Example graphic included in the presentation (taken from Dell Medical School VBHC Modules)

Outcomes

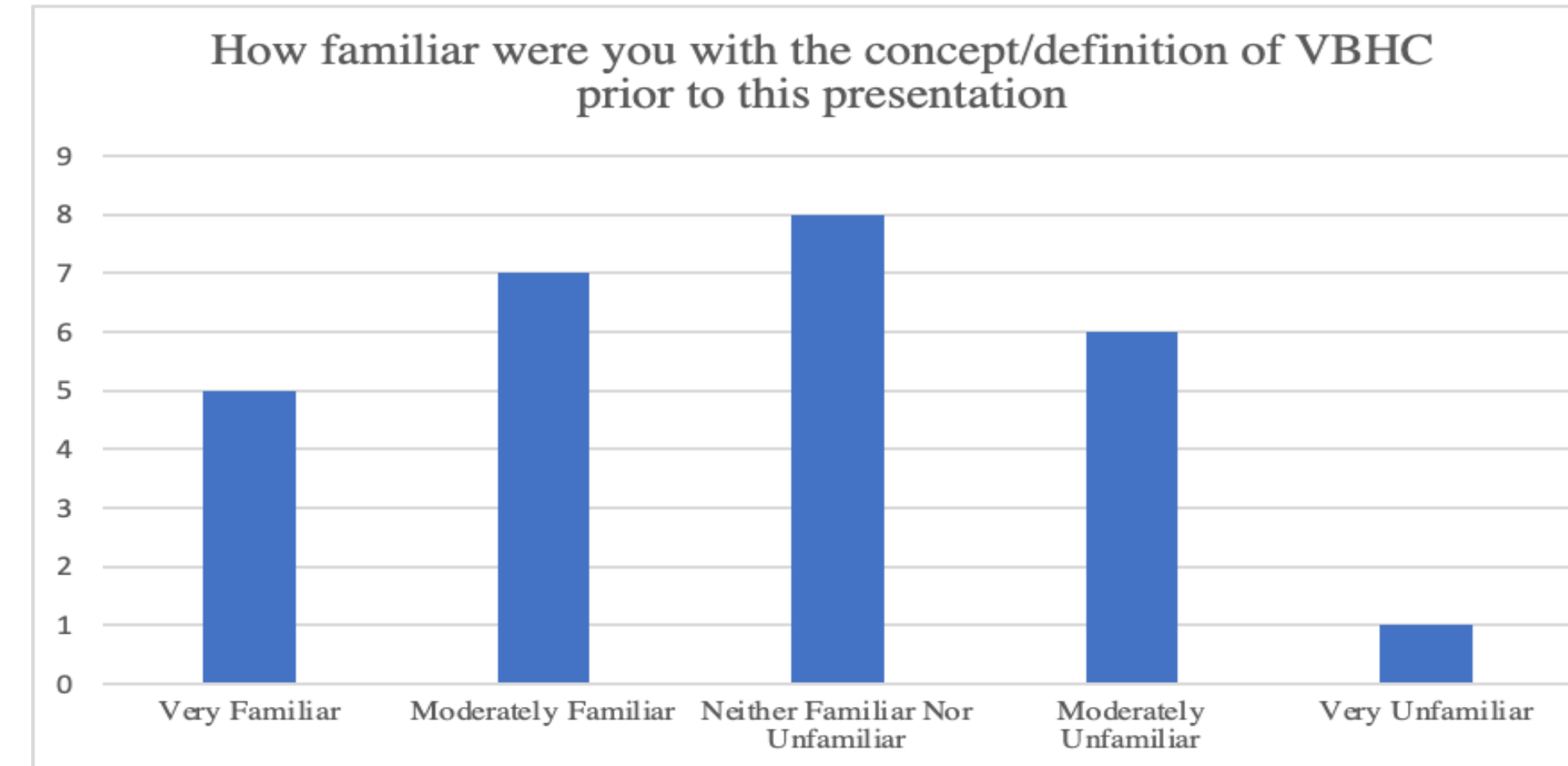


Fig 2: Student Familiarity with VBHC

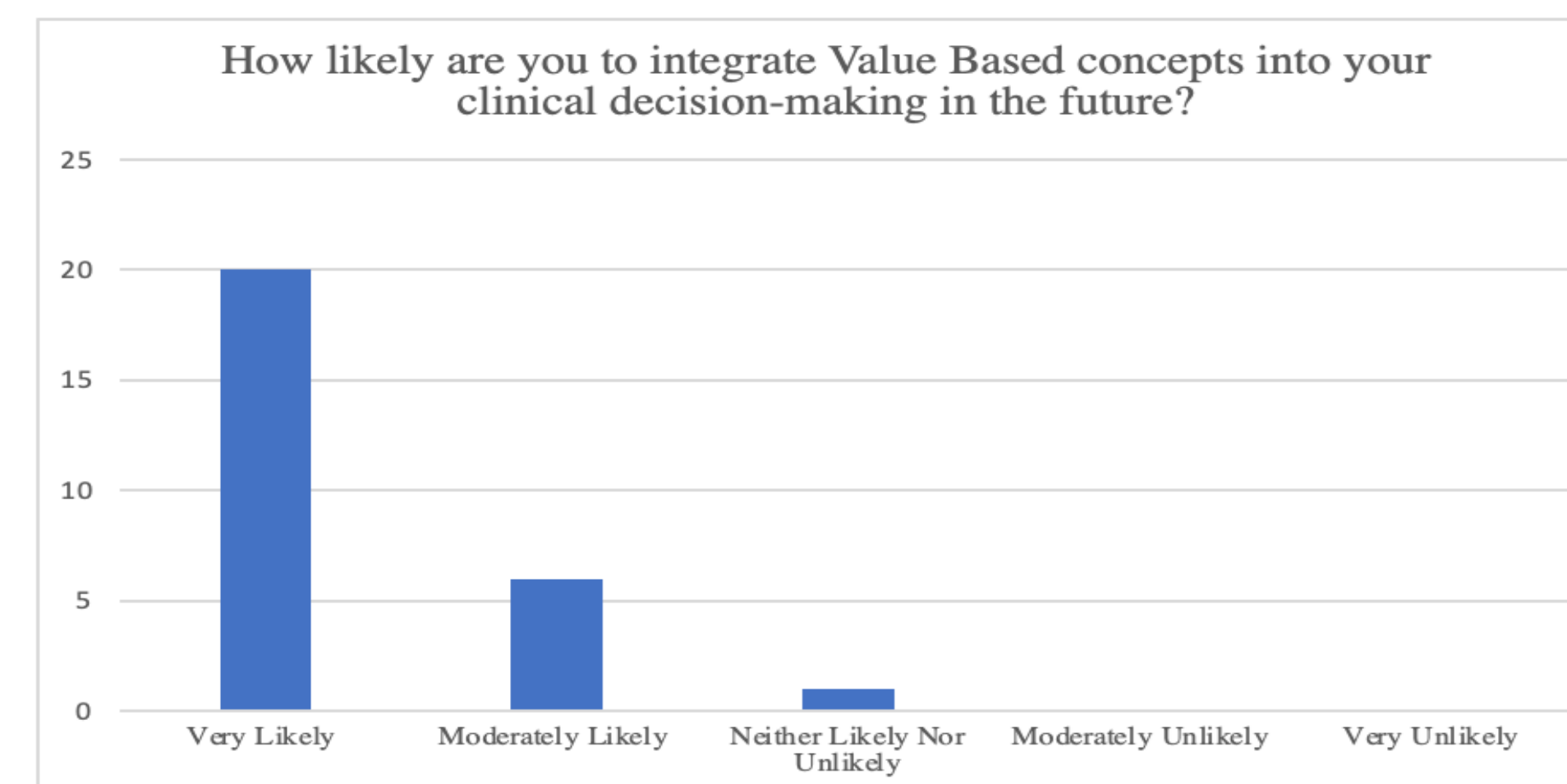


Fig 3: Future VBHC Use

Approximately 60 students attended the lecture and 27 completed the survey.

14 students left text feedback regarding the presentation. These included:

- “I really enjoyed how you pointed out that certain tests may not be helpful in making decisions depending on history, symptoms, etc. This helps me see how to approach patients more realistically.”
- “I think the most eye-opening things were the costs because you never hear what they are. I think including more real-life costs of healthcare would be very helpful.”
- “The system of healthcare has many issues but teaching aspiring physicians how to do their part in improving it is wonderful.”

Students stated they would like to see additional clinical scenarios, comparisons with alternate healthcare models, and the logistics and potential pitfalls of implementation of VBHC frameworks. Finally, students stated they would like to see further integration of VBHC in the preclinical curriculum.

Discussion

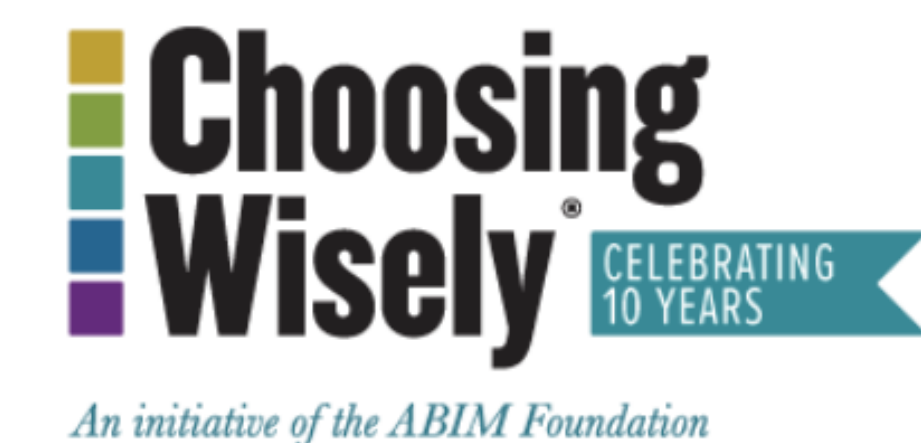
Students described varying levels of prior knowledge regarding VBHC, with a majority (56%) indicating that they were neither moderately nor very familiar. Our goal was to expose students with less prior knowledge about VBHC to basic concepts/frameworks. The lecture effectively targeted students who were unfamiliar with VBHC and students after the fact were likely (96%) to consider integrating VBHC frameworks into their clinical decision-making.

Our findings indicate that VBHC curriculum in undergraduate medical education is an effective method to expose students to VBHC concepts. Students demonstrated an interest in integrating VBHC into their future clinical decision-making. In feedback, they expressed a greater understanding of VBHC concepts, as well as interest in more VBHC curriculum throughout their undergraduate medical education.

A potential limitation of this analysis is the small sample size. Although approximately 60 students attended the lecture, only 27 completed the survey. There could be self-selection bias: those who were most interested in the content may have been more likely to complete the survey. Additionally, students may have overstated their understanding of VBHC before the lecture in the post-lecture survey.

Introducing VBHC concepts at the undergraduate medical education level enables students to develop the necessary skills and problem-solving frameworks more fully. By considering clinical problems within a VBHC model during undergraduate training, students are better equipped to provide VBHC when they enter the physician workforce.

In the future, we plan to continue the lecture and incorporate changes based on written student feedback. These changes include adding additional case-based clinical scenarios and real-world costs of healthcare, as well as a more comprehensive comparison of VBHC with other healthcare delivery models. We hope to eventually expand the lecture into an hour-long lesson to allow for a more interactive session and inclusion of more content based on feedback.



References

Curriculum is based on the Dell Medical School Value Based Health Care Modules: Dell Medical School, University of Texas at Austin. Discovering Value-Based Health Care: Interactive learning modules from Dell Medical School. <http://vbhc.dellmed.utexas.edu>.