

Improving the Understanding of Transgender-Specific Patient Needs in the Clinical Laboratory via Undergraduate Student Education

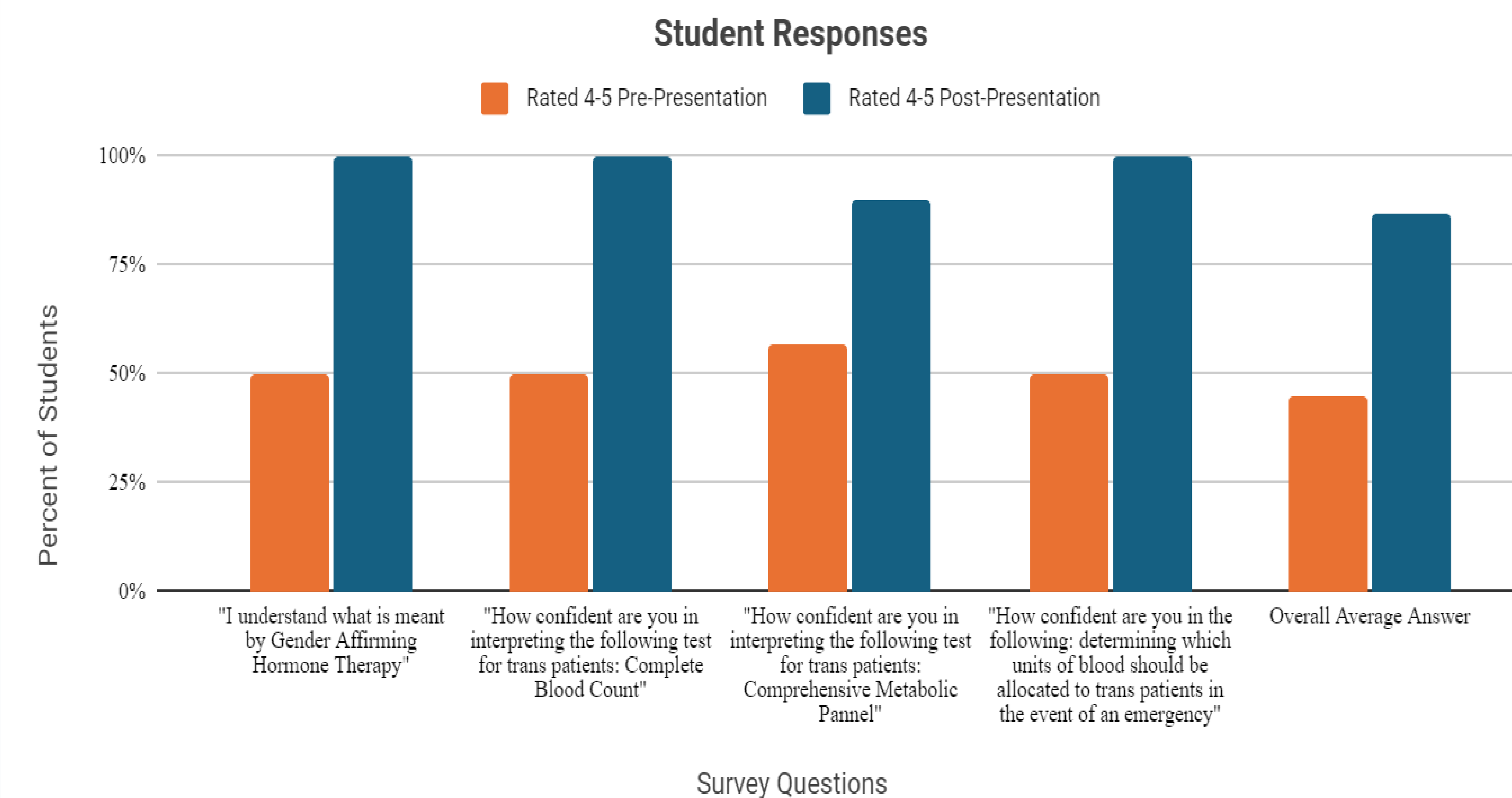
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Abstract

Transgender patients represent an underserved minority within the healthcare system. The clinical laboratory stands as a pivotal platform to address this imbalance by delivering clear and informative results that contribute to enhanced patient care. Research has shown that an estimated 1-2% of adults in the United States self-identify as transgender, and 72% of transgender adults receive gender-affirming hormone therapy (GAHT)¹. The use of GAHT necessitates routine laboratory testing, which further emphasizes the need for CLSs to understand the impact of GAHT on laboratory values. To improve the background knowledge of CLS professionals on this topic, this study implemented a presentation for undergraduate students spec to transgender healthcare in the lab. Students were taught the basics of GAHT as well as its impact on hematology and chemistry lab values. Additionally, students were provided with a case study demonstrating emergency transfusion protocols for transgender patients. Finally, students were provided with a critical thinking exercise involving microbiology workups for transgender patients. In conjunction with this presentation, students completed a set of pre and post-presentation surveys designed to test their knowledge of transgender healthcare in the lab setting. Survey results were then quantitatively analyzed to determine the efficacy of the presentation.

Results



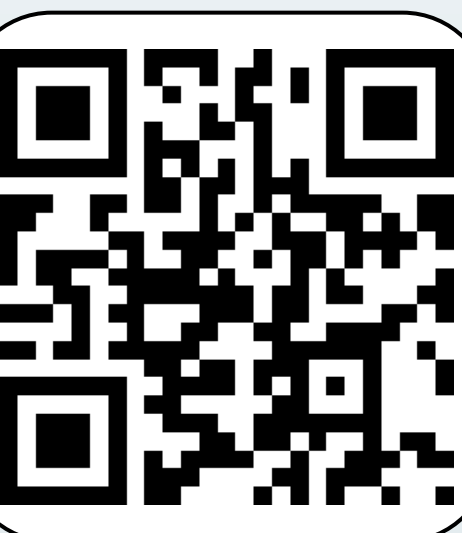
References

1. The Williams Institute at UCLA School of Law. (2023, July 10). *How many adults and youth identify as transgender in the United States?* - Williams Institute. Williams Institute.
2. Laboratory monitoring in transgender people | MyADLM.org. (n.d.).
3. National LGBTQIA+ Health Education Center. (2019, October 29). *Clinical Care for Transgender and Gender Non-conforming Patients* » LGBTQIA+ Health Education Center. LGBTQIA+ Health Education Center.

Contact Information

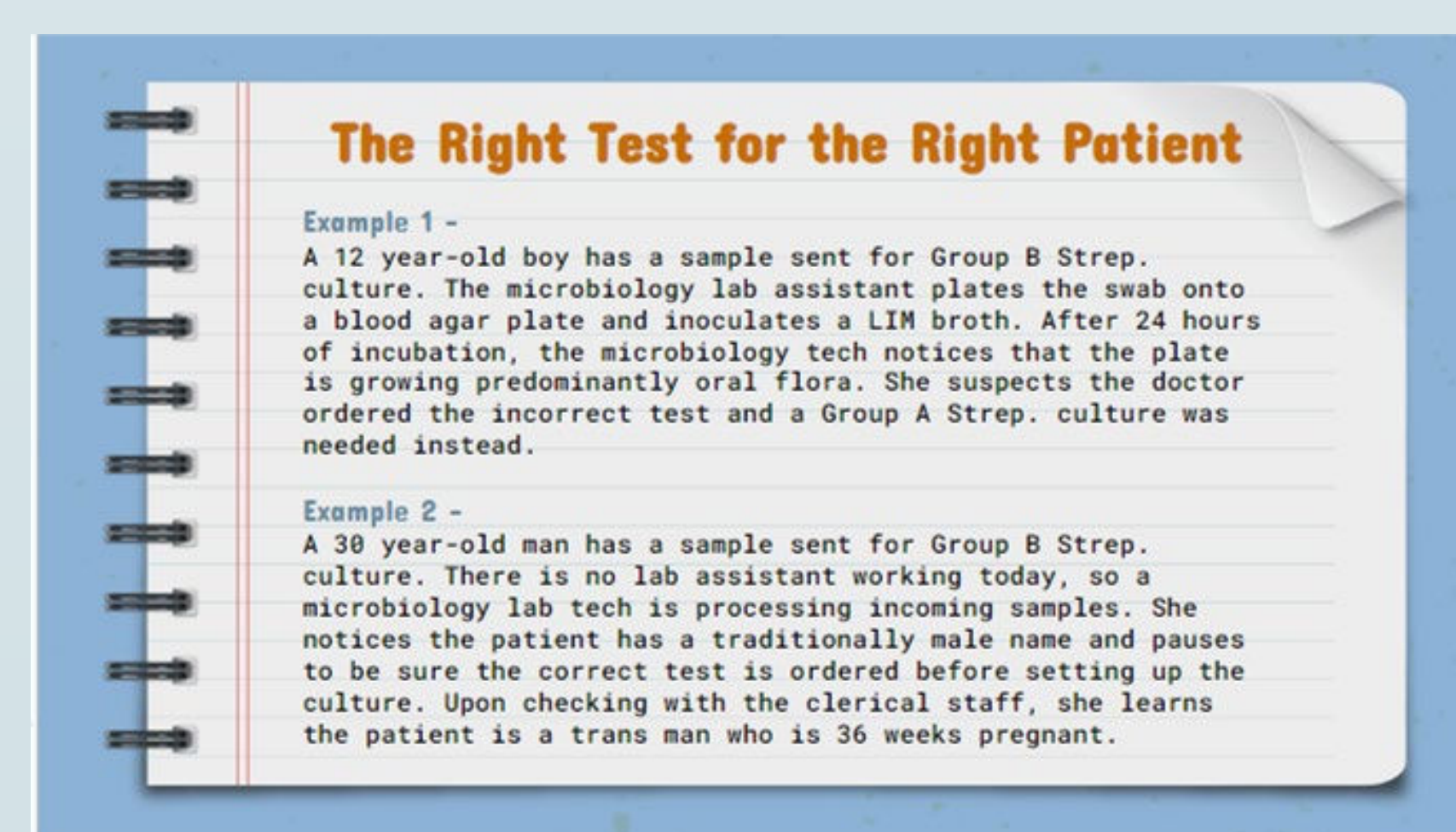
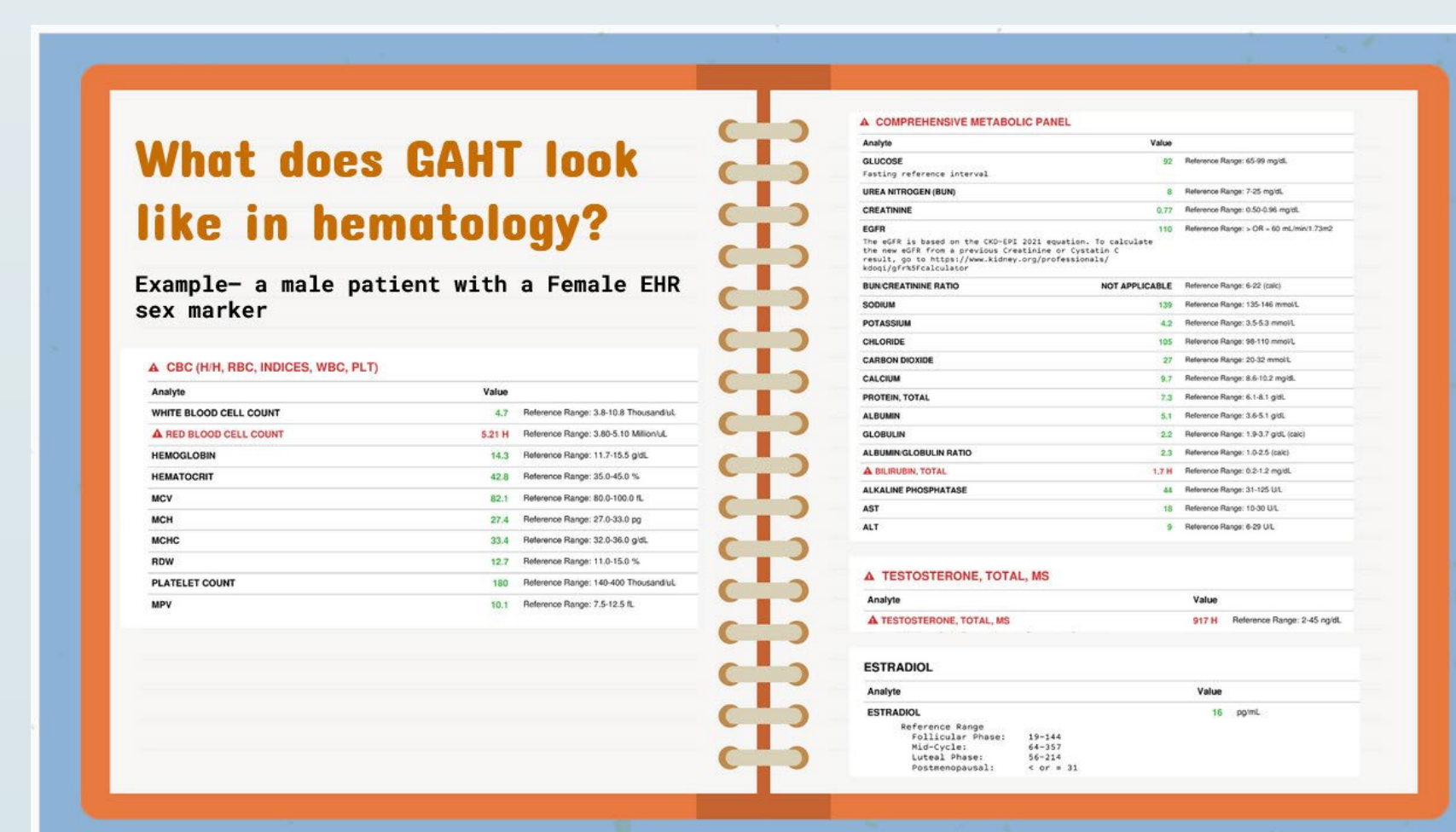
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- Available through QR code:
- Full resolution copy of this poster
 - "Trans Healthcare in the Lab" quick guide
 - Full results of this study



Methods

Students completed a set of anonymous pre and post-presentation surveys composed of Likert-like questions. Survey questions addressed the tests most commonly ordered to assess GAHT regimens, the implementation of emergency transfusion protocols, and the potential microbiology-based tests requested for transgender patients. Questions were formulated as self-evaluations of the students' confidence performing testing for transgender patients receiving GAHT. These surveys were then quantitatively analyzed to determine the impact of the learning module on students' functional knowledge of transgender-specific patient needs. The graph above demonstrates the percentage of students rating themselves as "very confident" or "somewhat confident" with the topics covered by the presentation and includes both pre- and post-presentation results.



Discussion & Implications

To evaluate the impact of a presentation on transgender-specific healthcare topics in the clinical lab, undergraduate students were asked to complete anonymous pre- and post- presentation surveys. Questions focused on the working knowledge needed to serve transgender patients via lab testing. A total of 17 students took part in this presentation. All students showed some basic understanding of terms like "transgender woman" and "transgender man", and several students were familiar with the term "GAHT" (Gender Affirming Hormone Therapy) prior to the presentation. However, the average response across all questions demonstrated that only 45% of students felt "very confident" or "somewhat confident" understanding the lab testing performed for transgender patients. Following the presentation, this average response improved to 87% of students feeling "very confident" or "somewhat confident" handling these tests. The most commonly employed tests in monitoring GAHT regimens include the Complete Blood Count and Comprehensive Metabolic Panel. The average student confidence in performing these tests improved from 50% prior to the presentation to 100% following the presentation.

Laboratory testing is critical to the care of transgender patients receiving GAHT and it is imperative that CLSs understand how GAHT may impact test results. GAHT may flag results as "high" based on the reference range used or with a delta change as GAHT is initiated, which must be evaluated by the CLS. These survey results suggest that including transgender healthcare in the CLS undergraduate curriculum can improve students' confidence performing routine tests for transgender patients in the lab.