

BACKGROUND

- Active learning (AL) improves academic performance and is the primary preclinical pedagogy at LCOM.
- Data are lacking regarding feasibility and efficacy of AL for clinical-level medical students.

PROJECT

- Evaluate AL for teaching pediatric ECG competency.
- LCOM medical students, faculty, and active learning team developed the 31-case module for learners enrolled in the LCOM pediatric cardiology elective (Figures 1 & 2).
- Study Aims:**
 - Evaluate change in student ECG competency after using the PACE module.
 - Assess learner satisfaction.

METHODS

- 4th-year medical students and residents enrolled in pediatric cardiology (Aug 2020-Jul 2021) invited to participate (study design, Figure 3).
- Immediate ECG competency and sustained retention tested using 25 pediatric ECGs.
- Repeated-measures ANOVA and Wilcoxon rank-sum tests will assess ECG competency and user satisfaction, respectively.

PRELIMINARY RESULTS

- Enrolled students (n=4) and residents (n=5).
- Students demonstrate module completion during elective time (1-4hrs).
- Students positively review the module, consistently would recommend it to peers, and report case examples with interactive, real-time feedback as module strengths.

DISCUSSION

- Adapting AL to remote learning has become increasingly important during COVID-19 related educational disruptions.
- Study findings may offer insights about broader integration of web-based AL into clinical training.

The PACE module offers online and asynchronous active learning experiences during a pediatric cardiology elective and will help evaluate student pediatric ECG competency.

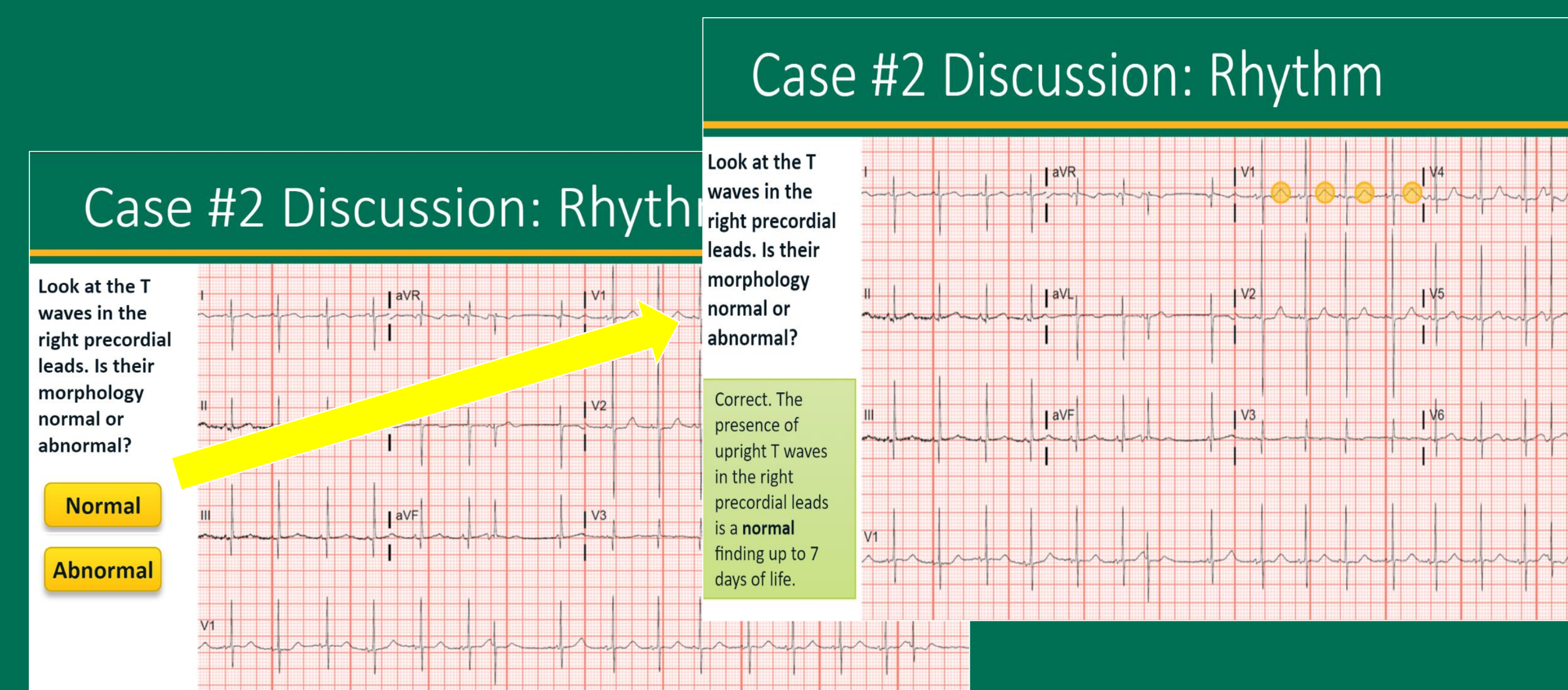


FIGURE 1. PACE Module Case #2: Example of a multiple-choice question with immediate feedback and instruction.

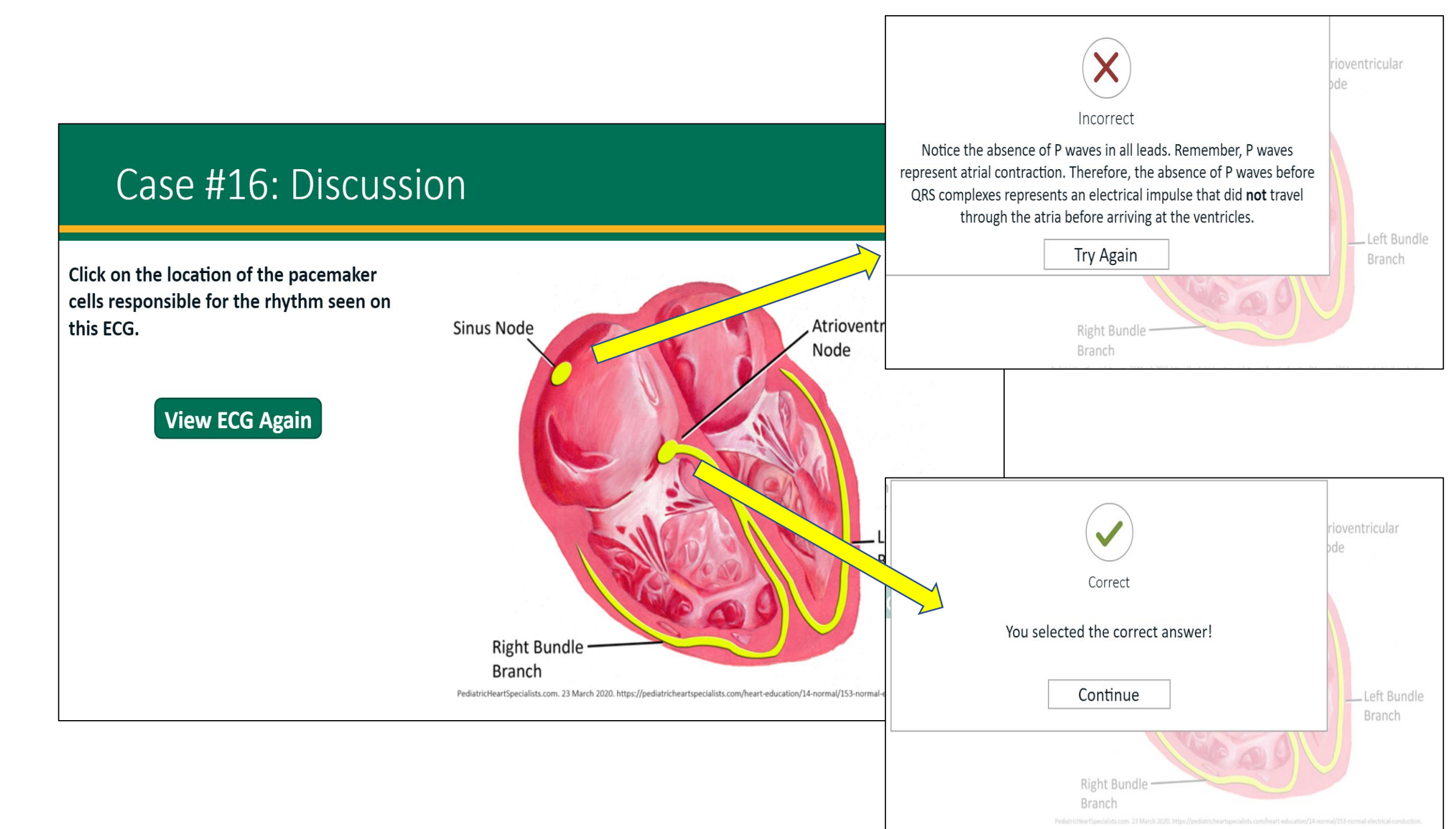


FIGURE 2. PACE Module Case #16: Example of a formative question to test learner knowledge and provide immediate feedback.

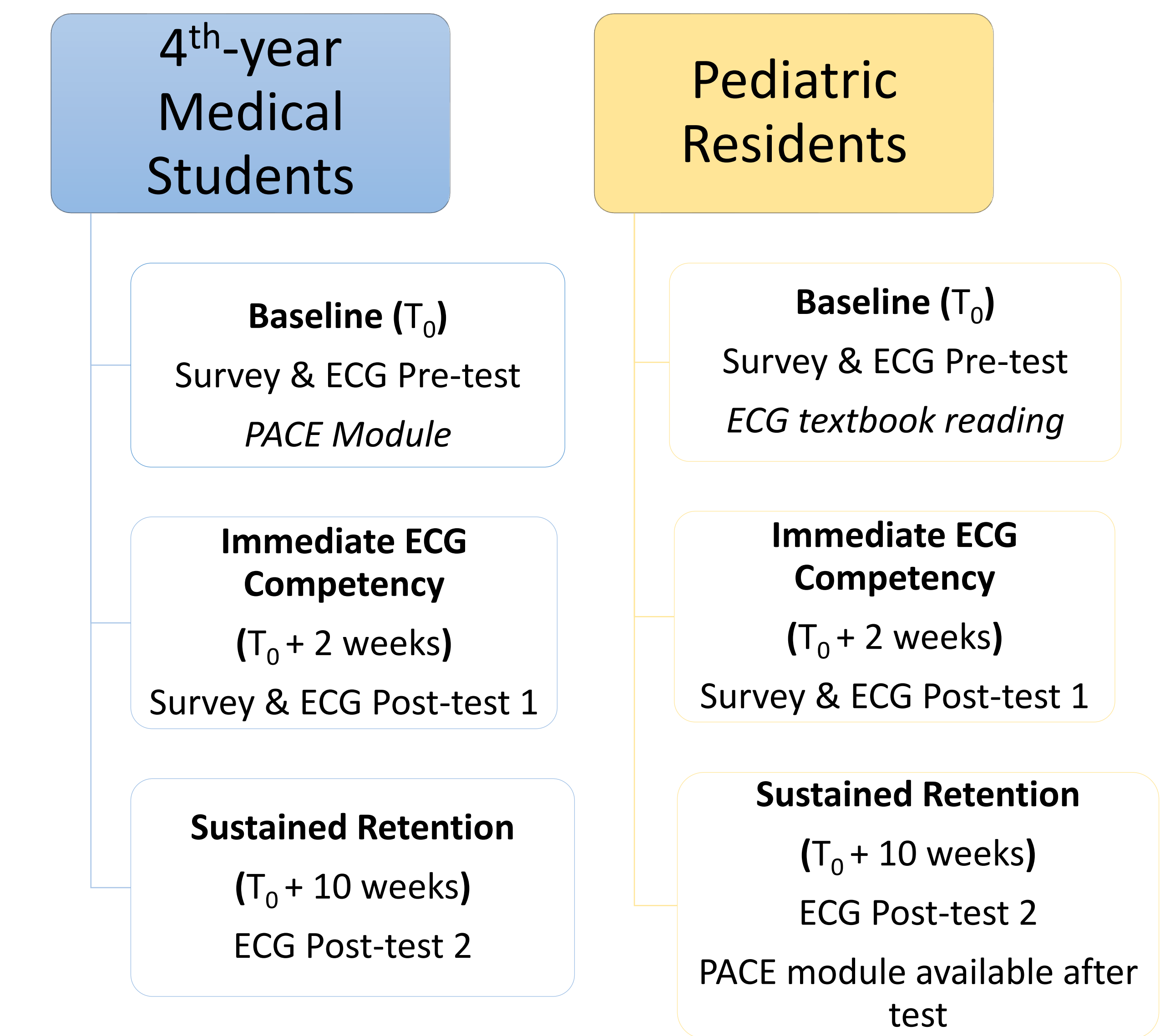


FIGURE 3. PACE Module Study Design: Participants complete 25-question ECG test at three time points, and LCOM students provide qualitative module feedback.

DISCLOSURES

This study was deemed exempt by the UVM IRB. This project is funded by a Teaching Academy Curriculum Development and Educational Scholarship Award, authors have no further disclosures.