A Comprehensive Case-Based Intro to Radiology for Improved Imaging Skills and Appropriate Utilization

University of Florida Department of Radiology

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Disclosures

- University of Florida Innovate Licensed Technology – WIDI Medical Student Modules (T18942)

Background

- Imaging over-utilization can harm patients and add to the burden on the already overstressed radiology workforce.
- Students in the health professions receive too little radiology education.
- Therefore, it is essential to train current and aspiring health professionals in:
  - imaging interpretation
  - appropriate utilization

Project Overview

- Case-based section on WIDI e-learning platform; ~140 modules encompassing all major organ systems and several imaging modalities
- Its purpose is to teach:
  - how imaging is used in the workflow of medical decision-making.
  - basic imaging interpretation skills.
  - imaging findings that are tested on licensing exams (USMLE, COMLEX).
- Target audience
  - Medical students
  - PA students
  - First-year radiology residents
  - Non-radiologist clinicians

UF WIDI CBIR e-learning modules

Case Components

- Patient history
- Physical exam
- Relevant labs
- ACR appropriateness criteria
- Key images & full Visage DICOM sets
- Video explanations
- Radiology reports
- Learning points & socioeconomic factors

Learning Process

- Make provisional diagnosis
- Select appropriate imaging
- Assess imaging findings
- Determine acuity & need for further imaging
- Make final diagnosis
- Devise assessment & plan

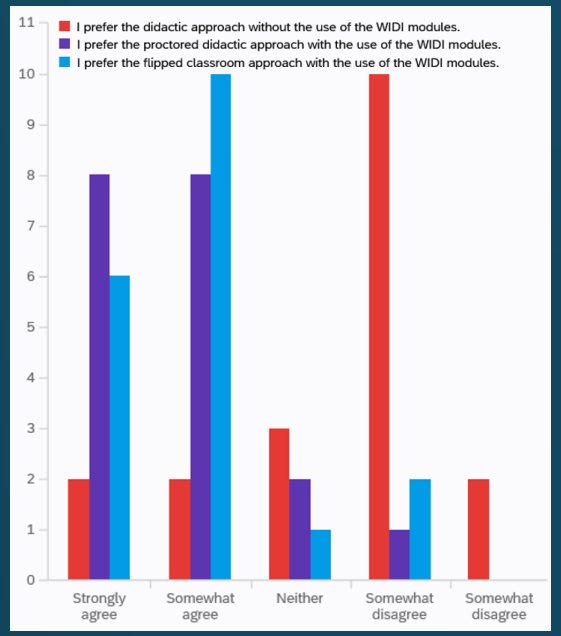
- An educator guide is available to help with case selection

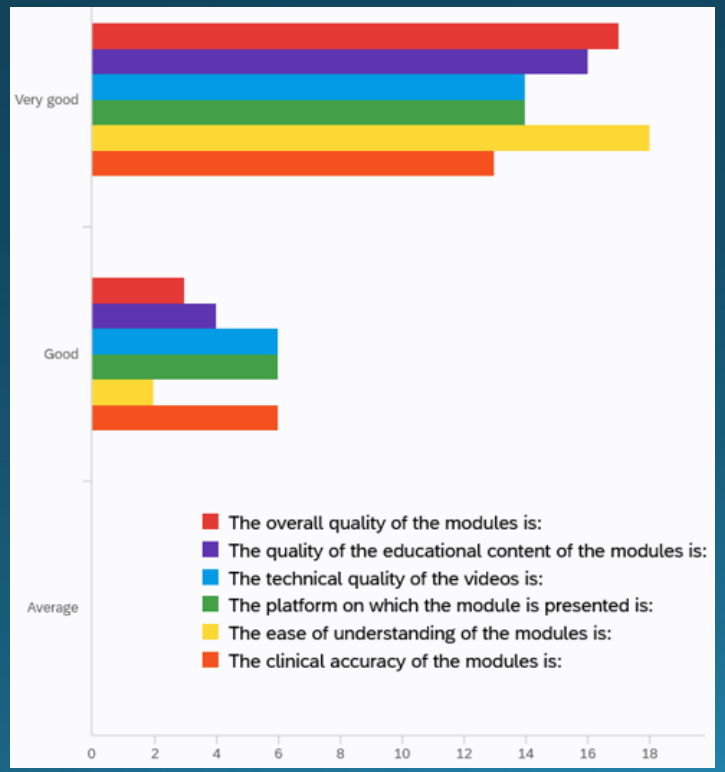
Try it!

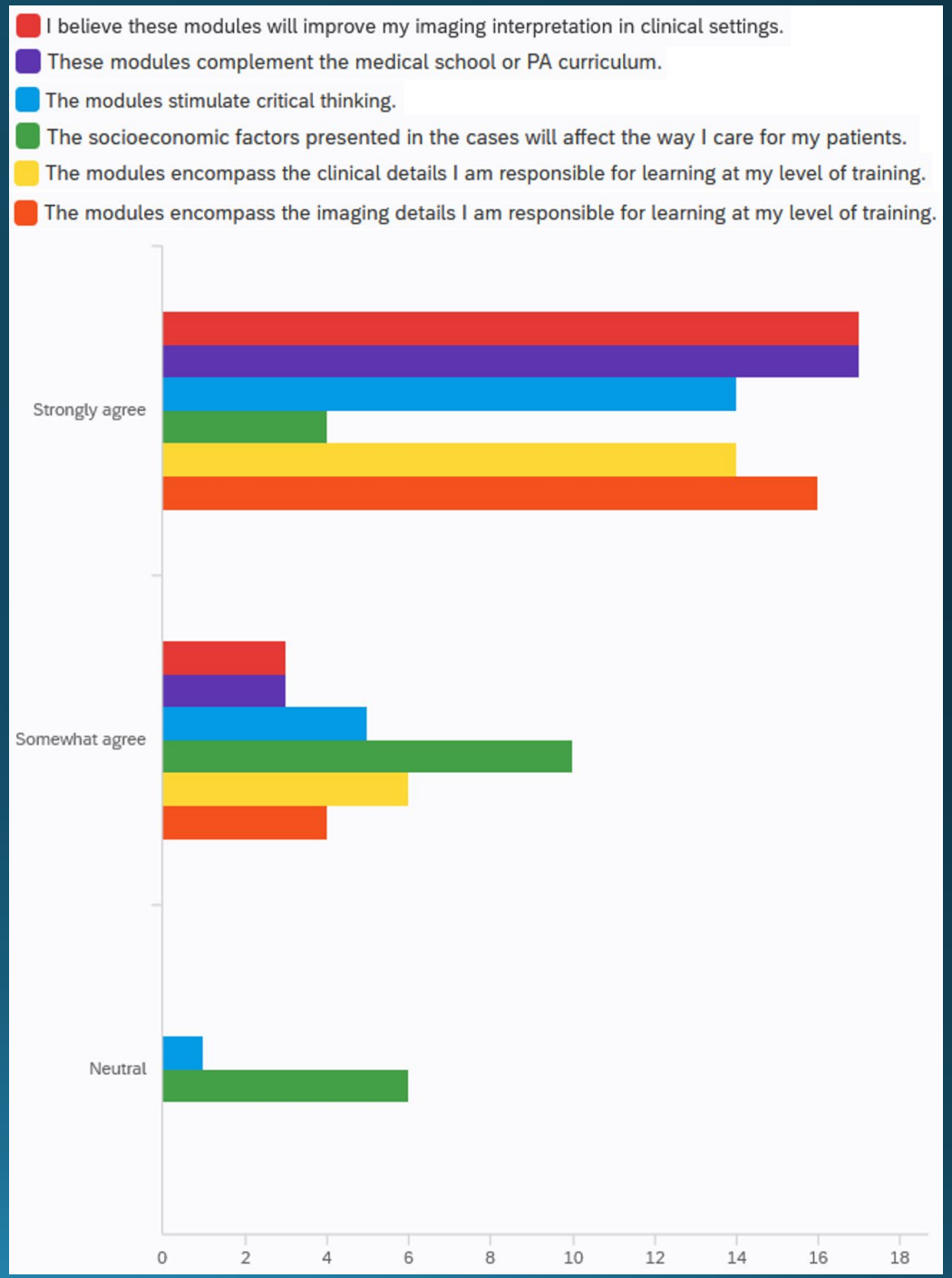
https://widionline.xray.ufl.edu/learn/case-based-intro-to-radiology

Focus group results

- Surveyed: 20 MD, PA, PhD, undergraduate students.
- Positive feedback:
  - Enhanced imaging interpretation skills.
  - Complemented existing curricula.
  - Fostered critical thinking.
  - Detailed clinical and imaging content.
- Rated:
  - High module quality and content.
  - Videos and understanding as very good.
  - Modules' length and information as appropriate.
- Preference: Flipped classroom/proctored didactic over traditional methods.







Next steps

- Implement external peer review.
- Collaborate with UF PA school for outcomes studies.
  - Note: They have integrated our modules into their curriculum.

References

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Thank you