Using live internet polling during teaching sessions to answer multiple-choice exam-style questions

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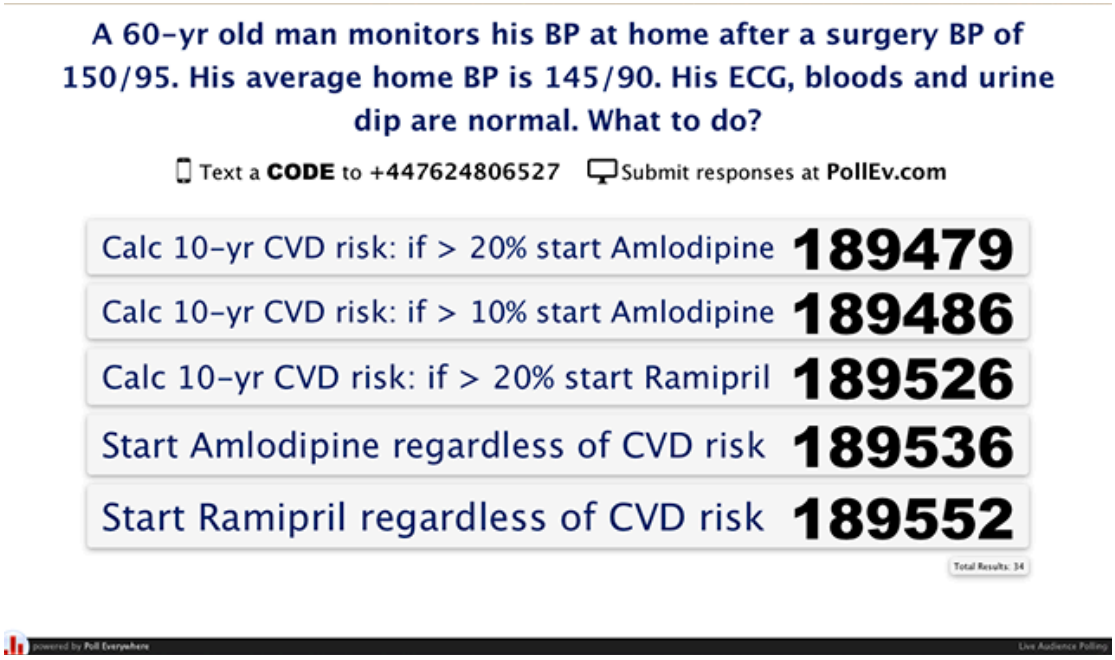
Background

The written component of the UK MRCGP examination, the Applied Knowledge Test, is a three-hour machine-marked test of 200 questions. The first-attempt failure rate is 22%. Many candidates feel inadequately prepared, yet simple tests fail to engage both the individual and the group. During revision tests, immediate expert-led discussion is desirable after each question. This is optimum if the facilitator is real-time aware of the answers to each question within that day's cohort. This project attempts to provide this optimum context for revision discussions.

Summary of Work

At each teaching session, live internet-served polls were run on two topics, with three to five questions on each. The image below shows an example of this.

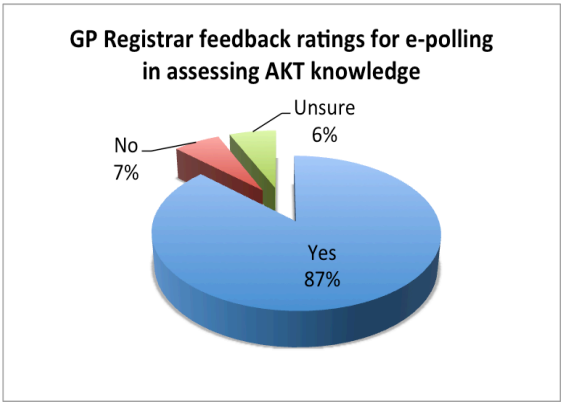


A code is shown against each answer. Each trainee then SMS texts his/her chosen code (see movie). No special hardware or software is needed. The server displays this live on-screen (hidden until they have answered). The expert instructor then steers teaching into areas of weakness and immediately integrates evidenced learning needs into the teaching. The individual trainee

can compare their answer anonymously with those of their peers and target their own learning.

Summary of Results

Polls were run for 31 trainees over 16 medical topics over a number of weeks. Anonymous feedback was taken midway through the project and again at its conclusion. **They liked it!**



Comments included that it made teaching relevant to exams and current practice, it focused minds and kept up interest and stimulation. They also liked that it highlighted areas needing work and that allowed them to compare their performance with their peers. It improved interaction and discussion within the group, it kept the sessions varied, it was easy to do and they liked the instant feedback.

Student-driven improvements included more questions at the start of the session and feedback incorporated into the discussion led by the expert resource. We increased the number of questions to 5. If the questions highlighted areas where knowledge was patchy or there was discussion surrounding the answers this could then be incorporated into the wish list and the talk by the expert resource. The majority of trainees thought the sessions were improved after this.

Negative themes that we were unable to change during the duration of the project centred around technology (mobile phone reception, costs of texts [on one network] and the speed of the internet connection), and the timing of the project within the GP training scheme (better to do with ST2s: the pre-Registrar year).

Here is an example of a live poll. **TRY IT NOW!** (Just click on the link to the left. It's running on the server at www.polleverywhere.com.)

Conclusion

This dynamic e-learning approach allows students to compare themselves to their peers anonymously, with instant feedback in an enjoyable environment, with increased engagement, allowing the teaching session to be steered live towards evidenced areas of need while the alternatives are fresh in the trainees' minds.

Take-Home Message

Live mobile-phone polling can provide the reactive rapid discussion and feedback that preparation for written medical examinations often requires.

Acknowledgements

The author acknowledges support from the NHS Wessex Deanery, Portsmouth GP VTS and the University of Winchester. The project uses the polleverywhere system. Scanning the QR code below provides a web link to this document.