

Evaluation of Online Patient Safety Certification Program



1 Background

The seminal 2001 IOM Report, "Crossing the Quality Chasm," cites training clinicians to deliver safer care as one of its "first steps" to preventing hospital-based medical errors and improving health care in the U.S. (IOM, 2001)

Distance learning, from free Massive Open Online Courses like Coursera to paid courses such as Institute for Healthcare Improvement training modules, have experienced strong, steady enrollment growth in recent years. (Ambient, 2009)

The Armstrong Institute's (AI) online program uses distance learning to train clinicians in how to deliver safer care. (AI, 2013)

The goal of my project was to evaluate, through beta-testing, the effectiveness of AI's program in imparting key concepts on the science of patient safety to practicing clinicians (i.e. physicians, nurses and allied health professionals).

2 Methods

I developed and applied a 3-phased evaluation methodology requiring me to: beta-test AI's online patient safety certification program (Phase 1), provide the program development team input in the form of 3 categories of feedback (Phase 2), and conduct a series of meetings to assess other team members impressions of the program development process (Phase 3).

Phase 1: I beta-tested the program exhaustively going through each module, and each feature of each module, from the perspective of: (1) a clinician-in-training, and (2) a former deputy editor of a leading health policy journal. My clinical background enabled me to simulate the experience of an intended end-user of the program. My editorial background equipped me to design the 3 categories of feedback that I would use to analyze the program and convey my findings to the team.

Phase 2: The 3 main categories of feedback provided to the team that guided my analysis of the program are: (1) content-specific (how effectively did the content in each module convey key concepts to front-line clinicians); (2) overall presentation (how effective were the teaching modalities used in imparting the content); and (3) site navigation and technology (how easy was it for users to navigate through each module, and how effective was the technology platform used).

3 Results

Key Evaluation Findings By Category:

(1) Content-Specific Challenges:

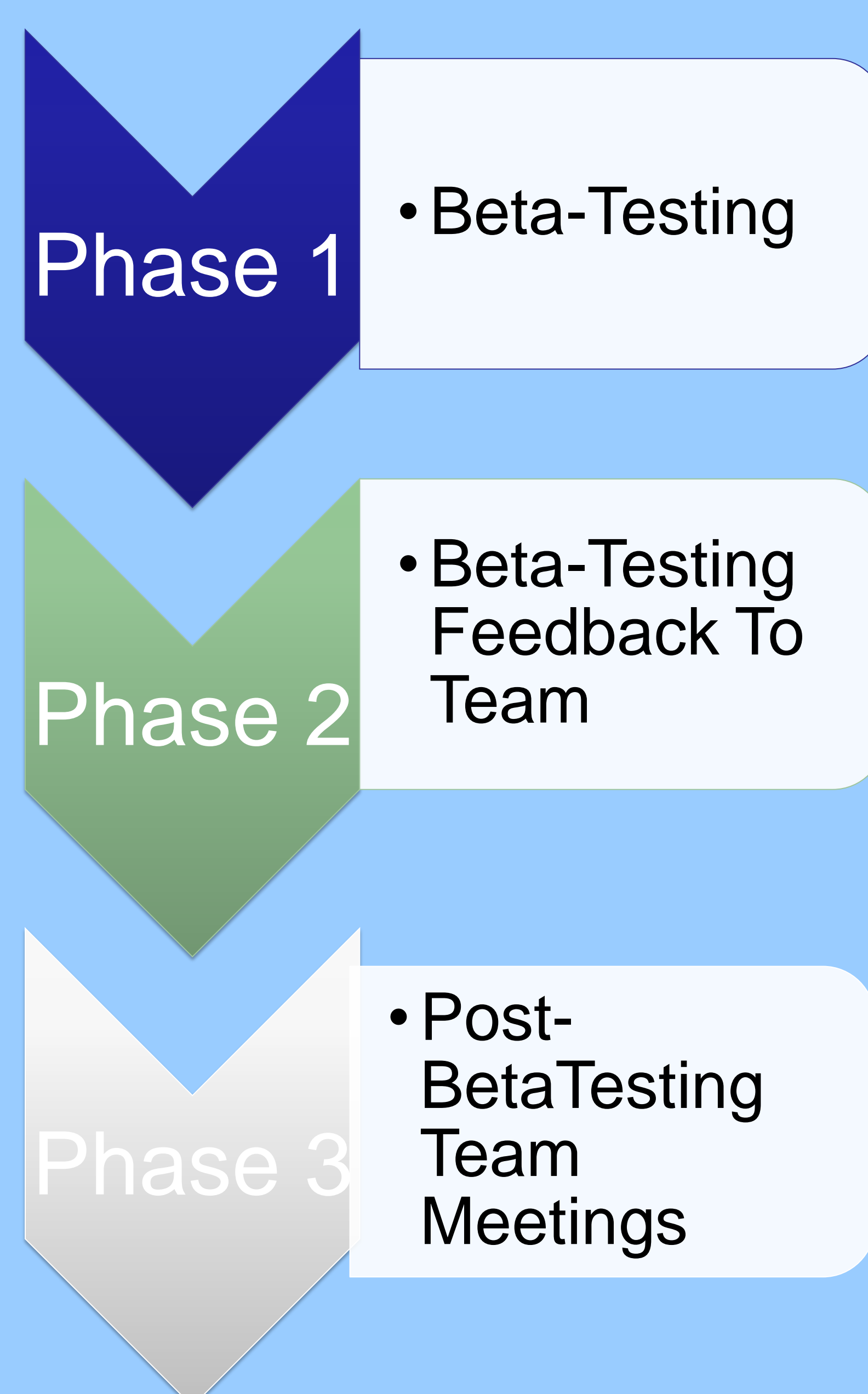
- The content was not fully calibrated to be inclusive of the perspective of front-line clinicians other than physicians.
- The content and assessment questions in each module were not always calibrated to the right skill-level for front-line clinicians.
- The substantive lexicon used to explain key concepts was not fully understandable to both domestic and global audiences.

(2) Overall Presentation Challenges:

- The teaching modalities did not always impart content in engaging ways in an asynchronous learning environment.
- The characters used in learning scenarios were not always culturally competent and relatable to both domestic and global audiences.

(3) Navigation/Technology Challenges:

- Some users had difficulty navigating seamlessly and efficiently from one module to the next.
- The development team experienced a steep learning curve in understanding the limitations of the MedConcert technology platform in presenting the content in each module.



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4 Conclusions / Lessons

- (1) Compromises had to be made in making revisions to the online program given it was envisioned as an adaptation of AI's in-person patient safety training classes, and time and resource constraints precluded major content changes.
- (2) AI online program development staff had to recalibrate expectations of the number of staff hours and creativity (of both subject matter and development experts) required to adapt in-person class content to create an engaging online program in an asynchronous learning environment.
- (3) Despite constraints, while all issues could not be resolved, enough revisions were made to address the three categories of challenges noted in the results section to ensure that AI's online program effectively imparted key patient safety concepts to practicing clinicians.

5 Future Directions

- (1) Develop future online programs at more advanced content levels, and also stratified according to the roles of users (i.e. front-line clinicians vs. executives—those implementing quality/safety standards.)
- (2) Develop a hybrid teaching module where users are given online modules with formative patient safety content to complete prior to attending in-person classes.

6 References

- (1) Ambient Institute (2009). *The U.S. market for self-paced elearning products and services: 2009-2014 forecast and analysis*. Retrieved from <http://www.ambientinsight.com/Resources/Documents/Ambient-Insight-2009-US-Academic-eLearning-Market.pdf>.
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