

Evaluating Online Learning:

Focus on Patient/Medication Safety for Healthcare Professionals

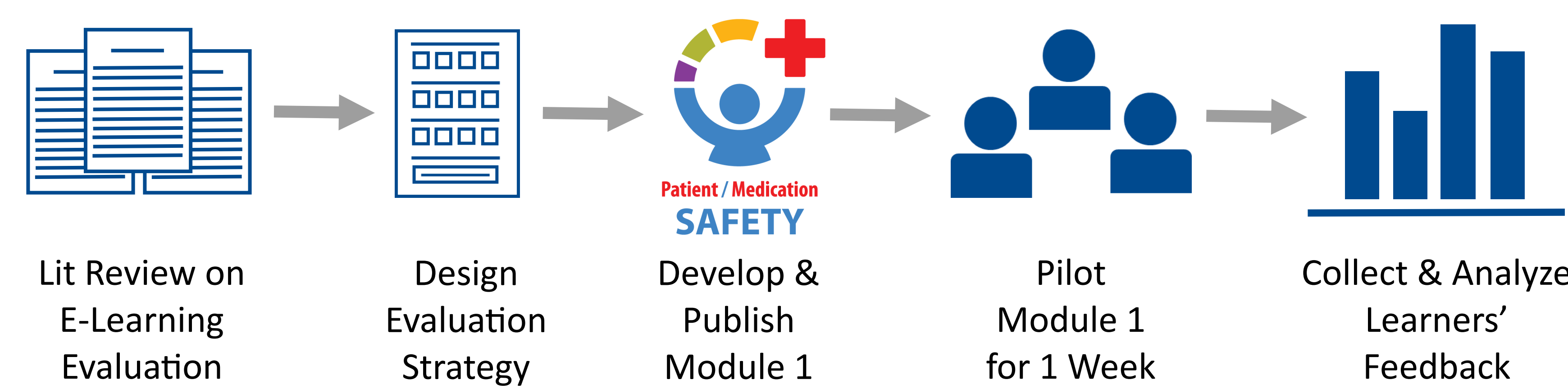
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Introduction

- Background:**
 - Optimizing patient/medication safety education can enhance a culture of patient safety
 - Best practices in online learning were applied in the storyboarding of online modules to improve learner engagement, satisfaction, & knowledge acquisition on the topic of patient/medication safety
- Objective:** Design a strategy to evaluate online training modules on patient/medication safety with respect to learner engagement, satisfaction, and knowledge acquisition
- Deliverables:**
 - Develop & publish Module 1, “Introduction to Patient/Medication Safety”, using Adobe® Articulate Storyline 3
 - Implement an evaluation strategy for Module 1
 - Collect & analyze learners’ feedback through a 1-week pilot test

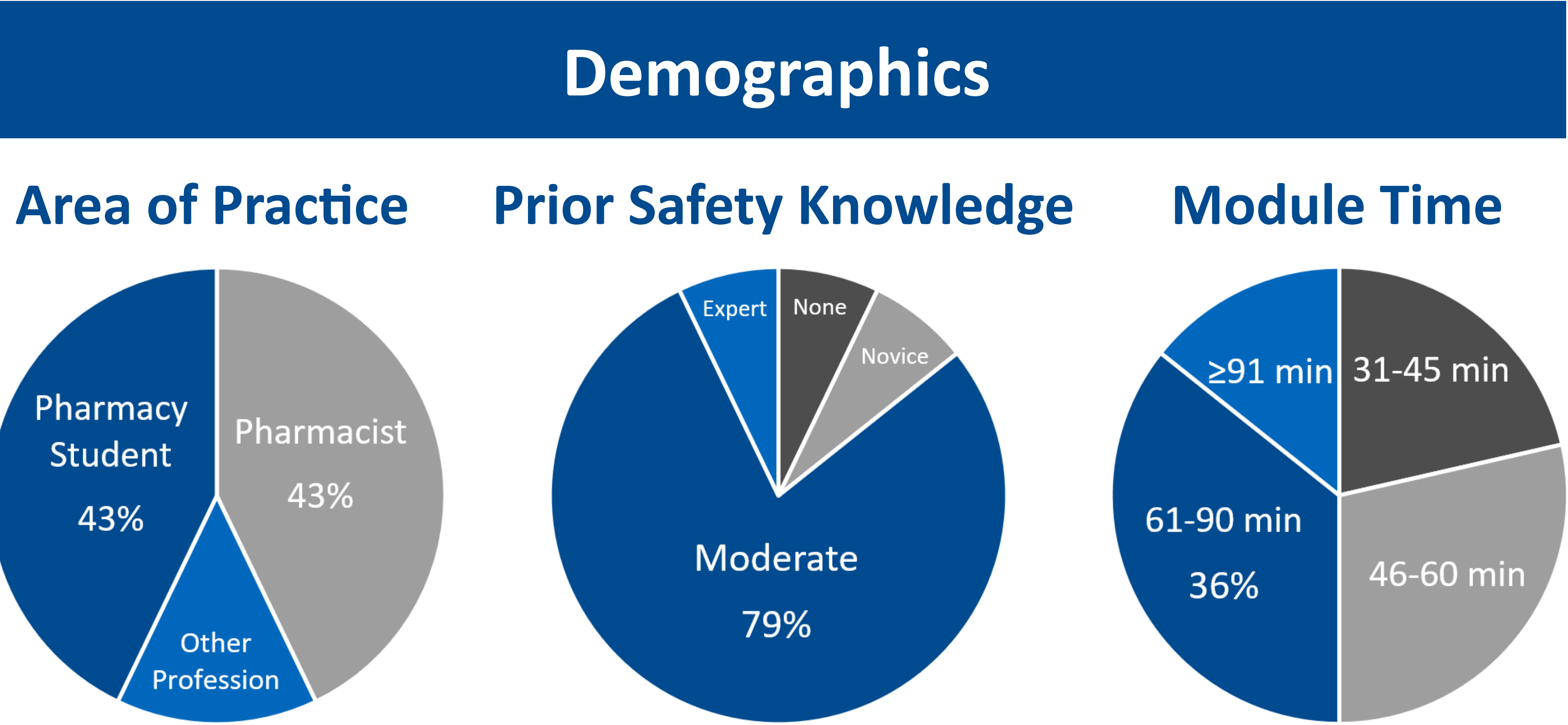
Methods



Conclusion & Future Directions

- Module 1 was developed and published using Adobe® Articulate Storyline 3**
- Module 1 was pilot tested with an evaluation strategy that included the following key elements:**
 - Learners’ demographics & self-reported prior patient/medication safety knowledge
 - Quiz questions for knowledge acquisition assessment
 - Likert scale questions to assess learner engagement, satisfaction, and potential behavioural changes
 - Open-ended questions to collect module strengths and areas of improvement for Module 1
- Our 1-week pilot provided information to guide revisions and modelling of future modules**
 - Pharmacists, pharmacy students, and e-learning experts participated in our pilot
 - Quiz questions reflected a fair amount of knowledge acquisition
 - Lack of visual-aids and navigation options impacted learner satisfaction
- Future Directions:**
 - Revise Module 1 according to collected feedback and apply learnings to the other modules
 - Apply iterative cycles of pilot testing and revise modules accordingly
 - Launch modules on Learning Management System (LMS) for healthcare professionals &/or students

Results - Evaluation Form Responses (n=14)



Knowledge Acquisition Assessment

Module Topic Quiz Question	Correct Response Rate
Complexity of Healthcare Environments	93%
Patient Safety Culture	71%
System-Based Approach to Errors	71%
Types of Behaviour	71%
Human Factors Engineering	79%

- #### Strengths

 - Content is clear, presented in an organized manner, and is the appropriate complexity
 - “Check-In” application activities are frequent, well-written, and provide adequate feedback
 - Simple design
 - Variety of examples provided
- #### Areas of Improvement

 - Lack of visual aids and animations
 - Navigation within clickable “tiles” portions is repetitive, difficult to understand, and overused
 - Module lacks a player control bar with a play/pause/rewind/fast-forward button
 - Narration recording is fuzzy and lacks inflection

Learner Engagement & Satisfaction

Satisfaction	The module provides an overall satisfying learning experience.	3.6
	The module represents the academic rigour of a significant learning experience.	3.6
Behaviour	This module will impact my behaviour and attitude towards patient/medication safety in the future.	4.0
Make it Easy to Learn	Multiple learning styles were utilized to portray the content (writing, graphics, audio, application).	3.4
	Graphic or media elements illustrate, clarify, or enhance information presented in the text.	3.1
	Content and activities are logically organized and clearly identified.	4.1
Engagement is Key	The design and layout of the module is interactive to maintain the attention and interest of learner.	3.2
	Activities in the module reflected the content and enhanced learning.	3.9
Content Matters	The information in the module was applicable to my practice.	3.9
	Learning objectives and instructional activities are closely aligned.	4.2



Acknowledgements & References

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References available upon request

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