Objectives

- Current pharmacy practice management systems screen drug-drug interactions and generate alerts pertaining to potential QT prolongation. However, pharmacists have found these alerts to be unspecific for patient risk factors, causing confusion and alert fatigue.
- The objective of this study was to create ToolQit, an evidence-based communication and decision-guiding tool to:
  - Consolidate evidence-based risk factors of QT prolongation into a user-friendly and easily accessible medium
  - Educate pharmacists on evidence-based risk factors of QT prolongation
  - Facilitate interprofessional communication and collaboration between pharmacists and prescribers with respect to clinical decision-making on QT prolongation-related patient care concerns.

Methodology

- We performed a comprehensive literature review and prepared a draft version of ToolQit.
- We invited frontline pharmacists to try using ToolQit in practice and then participate in our in-person focus group sessions or complete an online questionnaire to provide us with their feedback and recommendations to ToolQit. Qualitative data, that is, focus group data, were de-identified, transcribed, coded, and analyzed for themathical analysis.

Results

- We hosted a total of 4 focus groups in fall 2017 with a total of 9 pharmacy professionals. In addition, 8 pharmacy professionals (who were not able to attend our focus groups in-person or via teleconference) responded to our online questionnaire and provided feedback and comments to our draft version of ToolQit.
- Distribution of the primary practice setting of the participants included community practice, long-term care, family health teams, and specialty hospital practice.
- Based on the feedback and commentary received from the focus group participants, ToolQit was revised and re-designed to further support the needs of pharmacists in different practice settings. The final version of ToolQit (Figure 1) is available upon request via email at qt@ismp-canada.org or from the ISMP Canada website at https://www.ismp-canada.org/ToolQit_QTprolongation/.

Conclusion

- ToolQit is a one-page fillable PDF form. It is designed to increase pharmacist and prescriber awareness of factors that may increase QT prolongation risk and facilitate a standardized information-gathering process when documenting QT-prolonging medications and/or drug-drug interactions.
- Our study participants enjoyed using ToolQit as a standardized supportive tool in pharmacy practice to assess individual patient risk factors for QT prolongation. They found that ToolQit was a “good self-check” even if it was not sent over to the prescriber. The evidence-based content of ToolQit was generally well received.
- Overall, participants did not report any significant challenges in incorporating ToolQit into their daily practice and workflow. They all stated that they would recommend ToolQit to their colleagues.
- Participants recommended the following future development or next steps for this project:
  - Integration of ToolQit into pharmacy practice management systems, so that it would be readily available when a QT prolongation interaction is flagged.
  - Development and validation of a stratification or risk score associated with the risk factors listed on ToolQit; this will be helpful for practitioners to determine the severity of risk upon completing the assessment.