Development of the family medicine medication use processes matrix
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Background: Successful integration of pharmacists into family medicine practice requires the development of a shared understanding of team members’ expertise and roles.

Objectives: To design and validate a tool to assist health professionals in assessing how they view their own and other’s roles in carrying out family practice medication related processes.

Methods: Pharmacist and physician investigators developed a list of medication related processes occurring in primary care and team members who may play a role in each process. Research team members assessed the clinical appropriateness of the resulting matrix using a sensibility questionnaire and provided feedback in a consensus team meeting. Practising pharmacists and physicians reviewed a revised version and completed the sensibility questionnaire.

Data from the completed matrices were analyzed and mean scores calculated for each task and associated occupation. Practicing physicians and pharmacists completed a third version of the matrix and provided feedback. Investigators participated in a simulated exercise to generate a principle components factor analysis to group tasks in order to simplify scoring and interpretation.

Results: Eight research team members completed the matrix and sensibility questionnaire, agreeing the matrix was feasible to complete in 10-20 minutes. Several main changes were made: scale descriptors changed to reflect ‘contribution’ rather than ‘responsibility’, items reworded for clarity and missing items added. Seven pharmacists and physicians assessed the second version (6 sensibility questionnaires completed) and four assessed the third version. Minor changes were made. The final matrix is composed of 22 rows of medication processes that occur in family practice with 5 columns of team members who may contribute. Results of sensibility questionnaire assessments and the ongoing factor analysis will be presented.

Conclusions: Explicit description of medication related processes in primary care can delineate the pharmacist’s and other’s contribution and encourage discussion of improvements in these processes.

Key Words: Pharmacists (or pharmacy), family medicine, medication, primary care, questionnaire validation

What interventions should pharmacist employ to impact physician-prescribing practices?
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Background: Multiple gaps exist between evidence and clinical practice. Many interventions have been developed to reduce these gaps. It is incumbent upon pharmacists to understand which interventions work in order to focus their efforts for impacting change.

Objectives: To determine which interventions work to influence physician-prescribing practices. Secondarily, to explore differences in: a) effectiveness of multifaceted versus single interventions, b) effectiveness of interventions in the community versus the institutional setting, c) sustainability of various interventions, d) cost-effectiveness of alternative strategies, and e) impact on patient outcomes.

Methods: A systematic search for English systematic reviews was performed in MEDLINE, CINAHL, EMBASE and the Cochrane Library from the date of inception to May 2004 using search terms in accordance with Cochrane recommendations. Included reviews were required to clearly report a search strategy, inclusion and exclusion criteria, literature assessment criteria, methods for synthesizing information, and references. Two reviewers independently identified abstracts and studies for inclusion, assessed study quality, and extracted relevant information. Interventions were defined as consistently effective, inconsistently effective, and ineffective.

Results: Thirty-two of 4225 titles reviewed met the inclusion criteria and were included in our systematic review. Quality scores ranged from 70% to 100%. Consistently effective interventions included reminders (manual and computerized), audit and feedback, educational outreach visits, and patient mediated interventions. Inconsistently effective interventions included passive dissemination of information and didactic lectures. Simple multi-faceted interventions were consistently shown to be more efficacious than single interventions. Most interventions were delivered in the community setting, and no comparison of relative impact across different settings was possible. Similarly, a paucity of data informed the sustainability, cost-effectiveness, and impact on patient outcomes. Limited data precluded exploration of the effects of interventions in different settings, sustainability of effect, cost-effectiveness, and patient outcomes.

Conclusions: Interventions that effectively impact prescribing practice include: audit and feedback, reminders, educational outreach visits, and patient mediated interventions. Pharmacists should focus on these interventions, rather than on didactic sessions and passive dissemination of information. The low quantity of relevant and valid studies in this field suggest that more resources should be devoted to research in this area.

Key Words: Systematic review, prescribing practice, pharmacists, audit and feedback, knowledge translation