

# Improving Patient Outcomes One FHT Pharmacist at a Time

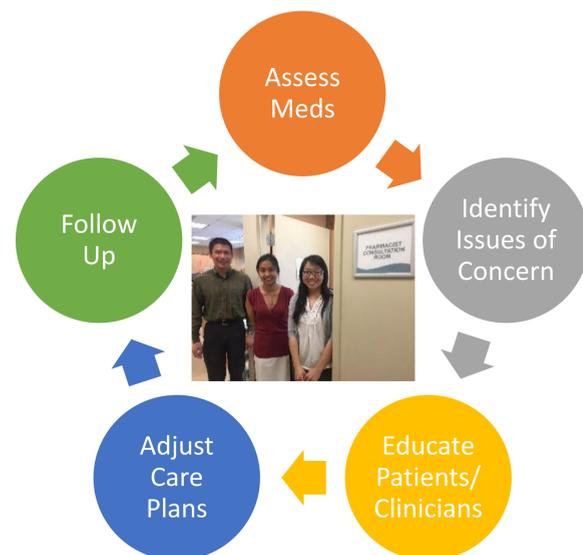
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## Objectives

- To demonstrate the impact of pharmacists in improving patient outcomes
- To collect data using the pharmaceutical care model to assess pharmacist services

## Background

- Pharmacist services currently vary widely from one FHT to another, and there is no standardized framework to assess pharmacy services in a primary care setting
- Pharmacists at North York FHT are consulted by physicians, nurses, allied health and patients via individual clinic appointments, formal referrals, or “hallway conversations”

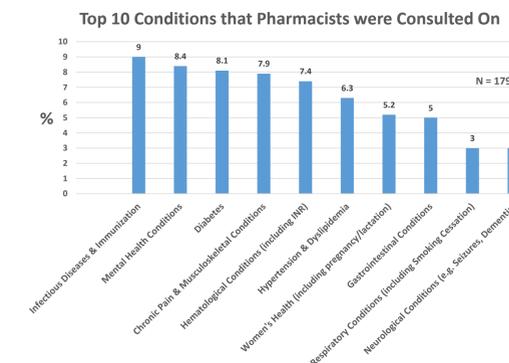
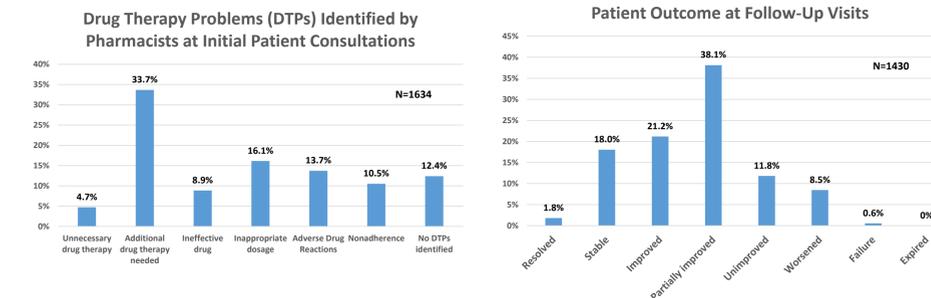


## Data Collection

- Data was collected over two years (Oct 2013 to Sep 2015), using an electronic online portal maintained by FHT Stats (<https://secure.fhtstats.net/>) with a pre-set form adapted from the pharmaceutical care practice model.
- Information collected included the disease conditions that pharmacists were consulted on, the category of drug therapy problems (DTPs) identified, the interventions taken by the pharmacist to address the DTPs, and the patient outcome at follow-up, as defined below:

Pharmacotherapy Outcome	Definitions	Examples: Imagine a patient with diabetes whose HbA1c was 9% (with a target of <7%) as an example
Resolved	Goals of therapy have been achieved. Drug therapy has been completed and can now be discontinued. Usually associated with therapy for acute disorders.	The pharmacist helped pick an antibiotic for a multi-resistant urinary tract infection, which is now completely cured.
Stable	Goals of therapy have been achieved. The same drug therapy will be continued with no changes. Usually associated with therapy with chronic disorders.	The pharmacist adjusted the diabetes medications at last visit, and the HbA1c at follow-up is 6.8%. No hypoglycemia. Therefore, no changes are made to current drug therapy.
Improved	Adequate progress is being made toward achieving the goals of therapy at this point in time. The same drug therapy will be continued with no changes.	The pharmacist adjusted the diabetes medications at last visit, and the HbA1c at follow-up is 7.5%. Patient is continuing to work on lifestyle modifications.
Partially improved	Some measurable progress is being made toward achieving the desired goals of therapy, but adjustments in drug therapy are required to better achieve the goals. Usually dosage changes or the addition of additive or synergistic therapies are required.	The pharmacist adjusted the diabetes medications at last visit, and the HbA1c at follow-up is 8.5%. Patient is already trying the best with lifestyle modifications. Therefore, the pharmacist decides to adjust the diabetes medications further.
Unimproved	No or only minimal progress in achieving goals of therapy can be demonstrated at this time. It is judged that more time is needed to evaluate the full response of this drug regimen. Therefore, the same drug therapy will be continued at this time.	The pharmacist adjusted the diabetes medications at last visit. However, the patient did not make the change until just about a week ago due to unforeseen circumstances. HbA1c at follow-up is 9%. Therefore, it was decided to continue with the current drug therapy for now.
Worsened	There has been a decline in the health status while receiving the current drug therapy. Some adjustments in drug regimen (product and/or dosage) are required.	HbA1c at follow-up is 10%. Patient was started on long-term corticosteroid due to a concomitant condition a month ago. Changes in diabetes medications are needed.
Failure	The goals of therapy have not been achieved despite adequate dosages and adequate duration of therapy. Discontinuation of the present medication and initiation of new drug therapy are required.	HbA1c at follow-up is 9%. The diabetes medication started at last visit did not seem to help. There have been no other changes in patient's life. The medication is discontinued, and a new medication is started.
Expired	The patient died while receiving drug therapy.	---

## Results



## Take Home Message

- Among patients who had been provided services by the FHT pharmacist, positive outcome (condition resolved, stable, improved, or partially improved) was seen in ~ 80% of patients at follow-up.

Further details can be found in the publication: Lui E, Ha R, Truong C. Applying the pharmaceutical care model to assess pharmacist services in a primary care setting. *Canadian Pharmacists Journal* 2017; 150(2): 90-93 (<http://journals.sagepub.com/doi/full/10.1177/1715163517690538>)