



Lessons from the Trenches: Implementation of Smoking Cessation Services at an Outpatient Pharmacy in Ontario

Joyce Chan PharmD, MSc, BCPS(AQ Cardiology), CDE, ACPR^{1,2}; Andrew Cornacchia BScPhm¹; Rick Fung BScPhm¹; Lillian Gavura BScPhm¹; Jessica Mak BScPhm¹; Peter Nguyen BScPhm¹; Anna Lee BScPhm, ACPR, CCPE¹; Karen Chuk MBA, BScPhm¹; Esther Fung BScPhm, MScPhm^{1,2}

¹Department of Pharmacy - University Health Network, ²Leslie Dan Faculty of Pharmacy - University of Toronto

Background

- Tobacco use is the number one cause of preventable disease and death in Canada
- More than 2.1 million Ontarians smoke tobacco, with prevalence estimates ranging from 16% (female) to 22% (male) of residents aged 12 or more years
- An estimate of 13,000 Ontarians die of tobacco-related diseases annually
- Tobacco-related diseases contribute an estimated \$1.6 billion in direct health care costs annually in Ontario
- Smoking cessation interventions such as nicotine replacement therapy, physician's advice, individual behavioural counselling and increasing taxes on tobacco sales are estimated to save the Canadian health care system 33,307 acute care hospital days and \$37 million annually
- Since 2011, new policies have been added to help smokers quit:
 - Prescription smoking cessation medications added to the provincial formulary (August 2011)
 - Pharmacy Smoking Cessation Program initiated (September 2011)
 - Expanded scope of practice for Ontario pharmacists to prescribe prescription smoking cessation medications (varenicline or bupropion) (October 2012)

•Pharmacists are front-line health care professionals who serve local communities and play an important role in educating patients about their health. They are regarded by Canadians as one of the most trusted professions and, to the benefit of smokers, are among the most easily accessible health care professionals

•Pharmacists are well-placed to advise smokers on the appropriate use of smoking cessation pharmacotherapy and to regularly monitor their cessation progress

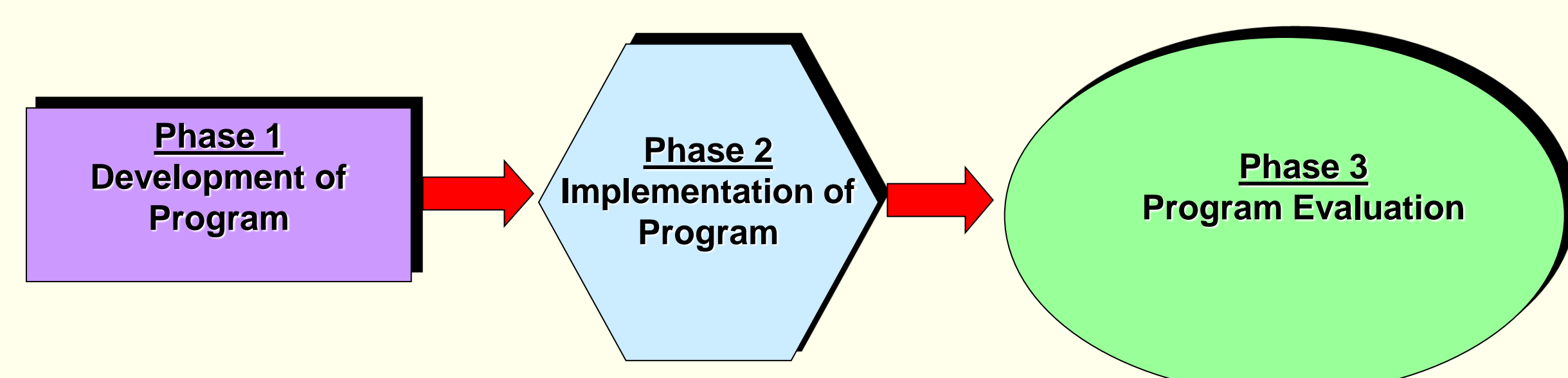
• Toronto General Hospital Outpatient Pharmacy (TGHOP) is an outpatient pharmacy in Ontario that is part of a tertiary care academic hospital network, offering pharmacy services for patients, staff and families

Objectives

- To describe the development and implementation of a smoking cessation program with a Certified Smoking Cessation Pharmacist in the setting of an outpatient pharmacy in Ontario (TGHOP)
- To characterize and evaluate the feasibility and success of the outpatient smoking cessation program
- To determine pharmacist utilization of expanded scope of practice in prescribing prescription smoking cessation medications in the smoking cessation program

Methods

Figure 1. Program Design



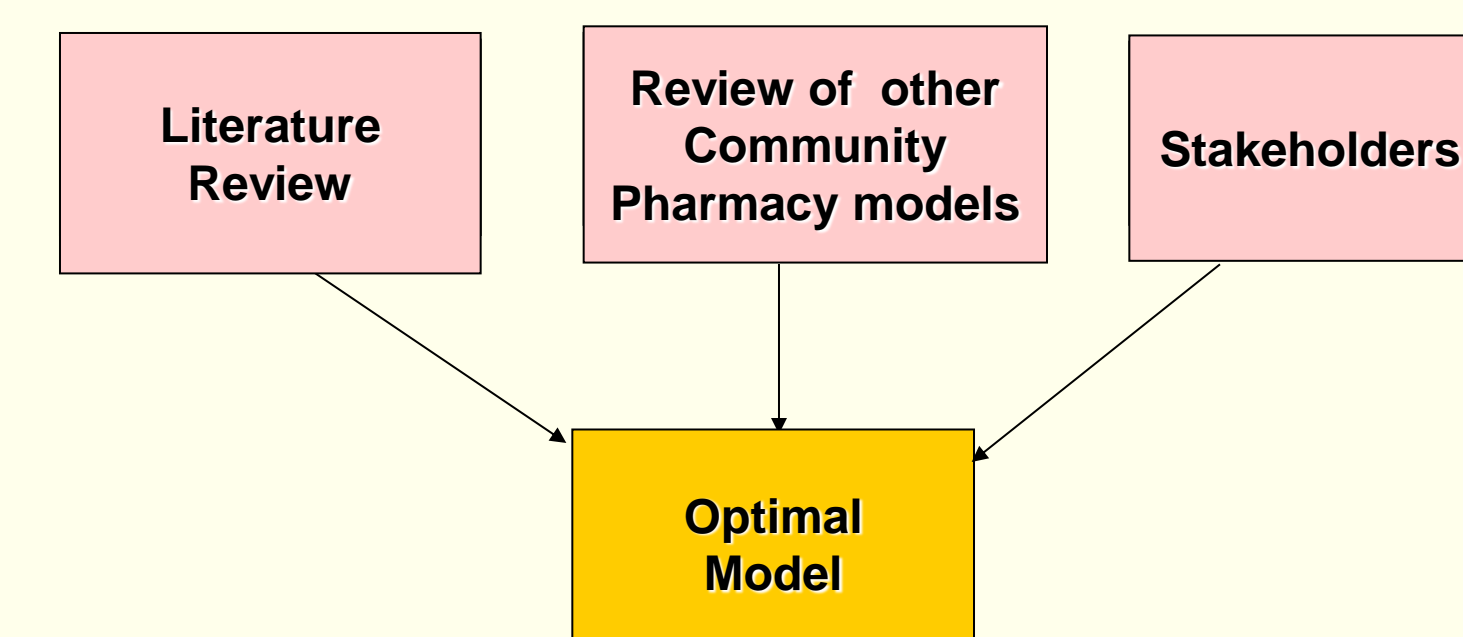
Methods (continued)

Phase 1: Development of Program

Phase 1
Development of Program

1. Established the optimal practice model

Figure 2. Components Used to Establish the Optimal Practice Model



2. Designed Referral Form & Provider Communication Template, Confidentiality Forms

- Developed preprinted forms (Referral and Confidentiality Forms)
- Developed template for documentation to physician or providers
- Adapted Documentation Form from provincial Pharmacists Association (to conform to provincial public plan criteria) and private payer reimbursement program (Green Shield)
- Utilized existing Patient Education Tools

3. Training of Pharmacists

- All pharmacists completed Certification or training program that supports Smoking Cessation Algorithm recommended by provincial and private payer

4. Established Referral Process (multiple sources)

- Established a telephone QUIT (7848) line
- Created Email account (quitsmoking email)
- Self Referral (in-person or telephone or email)
- Provider in-person, telephone or FAX referral Form
- Automatic Fax Referral (part of screening questionnaire)

Phase 2: Implementation of Program

Phase 2
Implementation of Program

1. Designed and provided education and additional training of certified pharmacists:

- Training pharmacists on how the program will be run (logistics)
- Specific patient documentation follow-up with providers
- Orientation to Confidentiality Forms
- Hospital specific resources
- Ensure all new pharmacists are trained and certified (ongoing)

2. Designed and provided in-services for Toronto General Hospital clinics, inpatient units, Wellness Program, Senior Executives (including posters, brochures and forms package)

3.Designed and provided in-services to Inpatient Pharmacists

4. Automatic Fax referrals (“tablet” screening questionnaire)

5. Set up hospital specific QUIT telephone line and Email

6. Set up Computer Billing

7. First patient enrolled in May 2014

8. Continuous Public Relations projects

- National Stop Smoking Week (booth, hospital Intranet, Hospital-wide Grand Rounds, newsletter, Youtube videos)
- Pharmacy Awareness Month (booth)

Methods (continued)

- Renumeration model is based on the Ontario Pharmacy Smoking Cessation Program
- It provides remuneration to community pharmacies for smoking cessation assessment and follow-up visits for provincial drug plan beneficiaries
- Up to 8 points of contact over 1 year using a fee-for-service scheme:
 - Reassessment and first consultation (and target Quit date)
 - Up to 7 follow-up counselling sessions:
 - 3 primary within 3 weeks of enrollment
 - 4 secondary within 30 to 365 days of enrollment
- Patients must provide consent to share health information
- First consultation is completed in person at the pharmacy via appointment
- Follow-up counselling sessions may occur in person, over the phone, by e-mail or by other means, as agreed by the patient
- Private payer plan is similar in setup and criteria

- Although many community pharmacies in Ontario limits clients to billable clients that meet reimbursement criteria for the provincial program or a private payer, this program is offered as a complementary service at our outpatient pharmacy *regardless of ability to bill to provincial program or private drug plans*
- The philosophy is to offer as much access to smoking cessation services as possible for discharge patients, pharmacy clients, families as well as workplace staff members

Phase 3: Program Evaluation

Phase 3
Program Evaluation

Inclusion Criteria

All patients who had readiness assessment and signed enrollment form at Toronto General Hospital between May 2014 to December 31, 2015

Exclusion Criteria

Patient who withdrew from the program before completion

- Analysis of data at 1 year program completion (and 6 months)
- Evaluation of quit success based on patient self-report

Results

Phase 3: Program Evaluation

Phase 3
Program Evaluation

Table 1. Baseline Characteristics

Baseline Characteristic	Intervention (N=32)
Age	
Over 65	11 (34%)
Under 21	0 (0%)
Gender	
Male	20(62.5%)
Female	12(37.5%)
Number of Quit Attempts	
Median	4
Billable to Provincial Plan	15(47%)
Billable to Private Payer	0 (0%)
Referral Source	
Self Referral	12 (37.5%)

Results (continued)

- 32 clients enrolled from May 2014 to December 31, 2015
- 9 have quit from the 14 patients who completed the 1 year program
- 3 did not quit; 2 wanted to restart program
- 2 were lost to follow up
- For the 6 patients who completed 6 months of the program, 5 out of 6 patients reported completely quit smoking or significantly reduced the number of cigarettes
- 11 out of 12 prescription medications for smoking cessation used (varenicline or bupropion) were recommended or prescribed by the pharmacist utilizing expanded scope of practice

Discussion/Limitations

- Pharmacist-led tobacco interventions have been proven to help smokers quit
- Cochrane Database Evidence shows that pharmacist-led cessation programs can lead to quit rates that are five to 11 per cent higher than rates among those attempting to quit without a structured program
 - In the UK, pharmacists are credited with facilitating at least 100,000 of the NHS's 500,000 quit attempts
- Our results confirm the feasibility and benefit with respect to outpatient pharmacists' direct involvement in a structured smoking cessation program to expand access for smoking cessation
- Although a Canadian study indicates that smoking status based on self-report closely approximates estimates based on urinary cotinine concentration, the high quit rates or reduction in cigarettes may be higher in this study due to self-report system
- Other Limitations currently include:
 - Pilot evaluation phase (only May 2014 to December 2015)
 - Descriptive study
 - Patient satisfaction surveyed based on telephone only
 - English only participants

- Potential future plans:
 - Free nicotine replacement therapy (May increase enrollment)
 - Online post-program survey
 - To capture characteristics/reasons for non-enrollment
 - Economic evaluation of impact

Impact/Conclusion

- First known descriptive report of an outpatient pharmacy experience on smoking cessation services reimbursement for public and private drug plan beneficiaries in Ontario
- Innovative Advertising include Youtube videos, Grand Rounds, Wellness Program, Hospital Clinic presentations, Automatic Fax Referrals, Hospital Intranet, booths at various event opportunities
- Pharmacist-managed smoking cessation program in an outpatient setting promotes inter-professional communication, educates staff about the pharmacist's expanded scope, provides seamless transition of smoking cessation after hospital discharge
- Improves accessibility to smoking cessation program for workplace smokers (with no restrictions for non-billable clients)
- Increases access to prescription smoking cessation medications
- An example of successful utilization of cognitive services reimbursement in Ontario to improve patients' outcomes
- Could be used as support for other provinces in Canada to provide Pharmacist-led Smoking Cessation programs