

# Perspectives of Hospital Pharmacists on Quality Improvement Initiatives

Ting-An Cheng, PharmD Candidate; Dillon Lee, PharmD, ACPR; Charles Au, BSc(Pharm), ACPR, PharmD;  
Tim T.Y. Lau, BSc(Pharm), PharmD, ACPR, FCSHP; Karen Dahri, BSc(Pharm), ACPR, PharmD, FCSHP

Pharmaceutical Sciences, Vancouver General Hospital, and Faculty of Pharmaceutical Sciences, The University of British Columbia, Vancouver, BC, Canada

## Background

- Quality improvement (QI) is any systematic process to improve patient safety, clinical effectiveness or patient experience in healthcare
- Hospital pharmacists play an important role in developing, implementing and evaluating healthcare QI initiatives
- There is limited information regarding Canadian hospital pharmacists' involvement with QI

## Objective

- Describe QI experiences (including attitudes, enablers and barriers) of hospital pharmacists employed by Lower Mainland Pharmacy Services (LMPS) in British Columbia

## Methods

- Cross-sectional electronic survey of 300 LMPS pharmacists from July 12 to August 31, 2021
- A 30-item online survey developed by team of hospital pharmacy researchers and QI experts
- Four sections: demographics, prior QI experiences, attitudes towards QI initiatives and perceived individual and organizational barriers to participating in QI

## Results

Table 1: Participant demographics (n=41)

Response Rate: 14%	
Highest Level of Education	Number (%)
Entry to Practice Degree (e.g. BSP, E2P PharmD)	5 (12)
Post-Baccalaureate Doctor of Pharmacy	20 (49)
Accredited Canadian Pharmacy Residency (Year 1)	12 (29)
Other (e.g. Fellowship training, Master's Degree)	4 (10)
Work Experience as a Pharmacist	
10 years or less	14 (34)
11-20 years	15 (37)
More than 20 years	12 (29)
Practice Setting	
Teaching Hospital	35 (76)
Community Hospital	5 (11)
Other (e.g. rehabilitation hospital, ambulatory clinic)	6 (13)

Table 2: Prior QI experiences

	Yes (n, %)	No (n, %)
Are you familiar with the concept of QI? (n=41)	38 (93)	3 (7)
Do you have previous experience leading a QI initiative? (n=41)	15 (37)	26 (63)
Do you have previous experience participating in a QI initiative but not leading it? (n=40)	29 (73)	11 (28)
Have you received any formal training in QI in the past? (n=41)	5 (12)	36 (88)

Figure 1: Attitudes towards QI initiatives

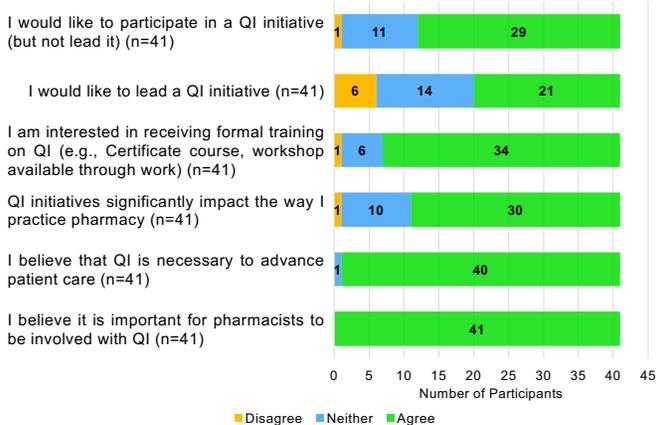


Table 3: Perceived individual and organizational enablers

Rank	Individual Enablers
1	Personal interest
2	Available opportunities
3	Previous positive experience
4	Career promotion opportunities
5	Publication opportunities
6	Others: Ability to provide better patient care, work with a supportive team
Rank	Organizational Enablers
1	QI training program available through work
2	Paid protected time to pursue QI initiatives
3	Sufficient budget for QI initiatives or access to grants and funding opportunities
4	Encouragement from pharmacy leadership team
5	Access to other healthcare professionals (e.g. opportunities to collaborate with interprofessional colleagues)
6	Others: Flexibility of organization to changes

Table 4: Perceived individual and organizational barriers

Rank	Individual Barriers
1	Unaware of QI opportunities
2	Lack of personal interest
3	Lack of career promotion opportunities tied to QI initiatives
4	Previous negative experience
5	Others: time constraints, lack of training, other competing priorities
6	Lack of publication opportunities
Rank	Organizational Barriers
1	No paid protected time (e.g. using personal free time to participate in QI initiatives)
2	No QI training available through work
3	Lack of financial support to pursue QI initiatives
4	Lack of encouragement from pharmacy leadership teams
5	Difficulty identifying committed interprofessional team members for QI initiatives

## Limitations

- Low survey response rate (14%) did not meet the estimated a priori sample size of 120 (40%)
- Non-response bias may exist: potential lack of generalizability to all hospital pharmacists, limited to pharmacists who work under one consolidated organization
- Ranking system may not imply a numerical equivalence between each rank

## Conclusions

- Hospital pharmacists employed by LMPS would like to be actively involved with QI initiatives
- Individual and organizational barriers may be addressed in order to facilitate widespread adoption of QI practices
- Future research may consist of further analysis on the level of familiarity of hospital pharmacists with QI concepts, and may focus on developing and implementing QI curriculum into the education programs