QUALITY RELATED EVENT REPORTING AND LEARNING IN SASKATCHEWAN COMMUNITY PHARMACIES



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Overview

The purpose of this study was to identify key factors impacting the reporting and learning from quality related events (QREs) in community pharmacies in Saskatchewan. Quality related events are defined as "known, alleged or suspected medication errors that reach the patient, as well as those that are intercepted prior to dispensing" (NSCP, 2014). Examples of QREs include, but are not limited to, incorrect drug, quantity, dose, or patient. These events can have a significant impact on patients and pharmacy team members. However, if QRE details are reported and shared in an open and blame free environment, pharmacies may be in a better position to learn from QREs and implement meaningful changes.

Key aspects of pharmacies, pharmacists, and pharmacy practice that may impact QRE reporting and learning were captured using mailed surveys to community pharmacy staff members across Saskatchewan in 2013 and 2014. The survey included eight constructs: (1) effort, (2) reward, (3) commitment, (4) self-efficacy, (5) working conditions, (6) blame culture, (7) safety focus, and (8) organizational learning, that support the importance of a safety culture and effort-reward balance as a precursor to improved reporting and learning from QREs (Phipps et al., 2012; Phipps, Malley & Ashcroft, 2012; Siegrist et al., 2009; Siegrist et al., 2004). Openended and 5-point Likert scale (i.e., 1 = strongly disagree; 5 = strongly agree) questions were used to obtain pharmacist perceptions of these constructs. Thematic analysis, descriptive statistics, and comparisons between groups were performed.

A total of 416 surveys were completed by pharmacy owners, managers, and staff pharmacists. Many pharmacies had no formal process/steps in place for reporting QREs (n=147; 35.3%). For those pharmacies that did have a process in place, the QRE process was most commonly an in-store, manual process (n=126; 30.3%) or a process focused on reporting QREs to "head office" only (n=29; 7.0%). Pharmacy owners had more positive view of pharmacy safety when compared to staff pharmacist views. Analysis of the open-ended questions revealed a number of pharmacy and personal-level characteristics that may influence the likelihood of a staff member engaging in QRE reporting and learning. Providing a formalized structure and feedback may help encourage participation as well.

PHARMACY VOICES

"No one wants to make an error. However, by communicating to other staff and colleagues, we can try to work together to prevent errors from happening. We follow a certain process/ workflow as a team and have very few QREs. We usually catch any QREs before reaching the patient."

"Just because you are uncomfortable about discussing errors doesn't mean you don't have to still. Making errors may embarrass hard working, caring staff. Creating an environment committed to learning and preventing a repeat will help open discussions. Everyone will make a mistake. How we handle it will make a big difference."

Respondent Demographics

A total of 1035 questionnaires were sent to Saskatchewan pharmacists in 2013 and 2014. Of the 1035 questionnaires sent, a total of 416 were returned at the time of writing this report, yielding a response rate of 40.2%. Pharmacist groups represented included pharmacy owners (n=68), pharmacy managers (n=83), and pharmacy staff (n=265) (Table 1). Of the 416 pharmacists who completed the survey, 129 (31.0%) were male and 286 (68.8%) were female¹. Most commonly, pharmacists indicated that they have worked in community pharmacy for less than 5 years (n=103; 24.8%) and have worked in their current pharmacy for less than 5 years (n=200; 48.1%) (Table 2). Nearly 60% of the sample reported working in community pharmacy for over 10 years. The average length of time working in community pharmacy reported by pharmacists was 15.4 years, with an average of 8.5 years spent at their current pharmacy.

Table 1. Respondent position

Position	N	%
Pharmacy Owner	68	16.3
Pharmacy Manager	83	20.0
Staff Pharmacists	265	63.7

Table 2. Respondent pharmacy experience

Years	_	rked in ty Pharmacy	_	ked in Pharmacy
	N	%	N	%
< 5	103	24.8	200	48.1
5-9	68	16.3	89	21.4
10-19	98	23.6	73	17.5
20-29	76	18.3	39	9.4
30-39	44	10.6	11	2.6
40+	23	5.5	2	0.5
No answer	4	1.0	2	0.5

Working in a city was reported more commonly (n=285; 68.5%) than in a town (n=68; 16.3%), or rural setting (n=58; 13.9%). Pharmacists were most likely to work for an independent pharmacy (n=105; 25.2%) and

PHARMACY VOICES

"If there were a complete overhaul of the blame culture in pharmacy at all levels, that would be an improvement. Nobody wishes to make an error but the entire issue is cloaked as if there is intent, therefore it is worthy of punishment. Errors can be devastating for all parties. It is needless to further the trauma by fining, public exposure, and censure."

"Workload is so heavy - and we're always working behind schedule that no one has time to dedicate to discussion as a group to QREs during store hours. There is a need for company paid time separate from store operation hours."

¹ One pharmacist chose not to answer this question.

least likely to work within a franchise setting (n=59; 14.3%) (Table 3). The mean number of staff pharmacists per pharmacy was 3.5, with a mean of 3.0 pharmacy technicians on staff. Weekly prescription volumes were estimated at an average of 1,224.

Table 3. Pharmacy type

Pharmacy Type	N	%
Independent	105	25.5
Banner	80	19.4
Chain	79	19.2
Franchise	59	14.3
Mass merchandiser	89	21.6
No answer	4	1.0

Many respondents reported that they had a formal process or steps in place for reporting QREs (n=263; 63.2%), although there was variety in the types of processes used. Manual processes (n=126; 30.3%) were more common than computerized mechanisms (n=82; 19.7%). A small proportion reported QREs to their head office only (n=29; 7.0%). Over a third of respondents indicated that no formal processes for reporting QREs were in place at their pharmacy (n=147; 35.3%).

Table 4. QRE reporting process

Reporting Process	N	%	N	%
Formal process/steps in place			263	63.2
QREs only reported to head office	29	7.0		
Mostly/entirely manual process	126	30.3		
Mostly/entirely computerized process	82	19.7		
Other	26	6.3		
No formal process/steps in place			147	35.3
No answer			6	1.4

Effort and Reward

Previous research has shown that job characteristics, including effort—reward imbalance, can significantly contribute to the organizational safety culture within community pharmacies (Phipps, Malley & Ashcroft, 2012). Therefore, identifying perceptions of these job characteristics may help to understand how well reporting and learning

PHARMACY VOICES

"We fill out an incident report and discuss how/why the error occurred but we don't ever discuss how to change things so the problem doesn't happen again - errors always get blamed on 'staff shortages, being too busy'".

"When an error report is made, we have never sat down as a team to discuss all/any errors in the last little while. I think we should meet, review the errors over the last 3 months (or whatever time frame we chose) to see where errors are happening, if the same error keeps happening, whether the steps we put in place to avoid error have been made successful, etc."

can take place following a QRE. In order to ascertain perceived effort and reward related to pharmacy practice, a number of statements were presented to pharmacists in the survey. Pharmacists were asked to rate the extent to which they agreed with each statement, with answers captured on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5) (Tables 5 and 6).

Table 5. Effort

Item	Mean	Between Group Differences Pharmacy Type*
I have constant time pressure due to a heavy work load	3.65	
I have many interruptions and disturbances while performing my job	4.25	
Over the past few years, my job has become more and more demanding	4.07	Differences found between chain (4.37) and independent (3.89)

^{*}p< 0.05

Table 6. Reward

Item	Mean	Between Group Differences Pharmacy Type*	Between Group Differences Staff Position*
I receive the respect I deserve from my superior	3.90	Differences found between independent (4.09) and chain (3.64)	
My job promotion prospects are poor	3.10		
I have experienced or I expect to experience an undesirable change in my work situation	2.67	Differences found between mass merchandise (3.19) and independent (2.21) Differences found between mass merchandise (3.19) and banner (2.62) Differences found between mass merchandise (3.19) and franchise (2.41)	
My job security is poor	2.00	Differences found between mass merchandise (2.49) and independent (1.74) Differences found between mass merchandise (2.49) and banner (1.80) Differences found between mass merchandise (2.49) and franchise (1.86)	
Considering all my efforts and achievements, my job promotion prospects are adequate	3.35		Differences found between pharmacists (3.24) and managers (3.55)

Considering all my efforts and achievements, my salary/income is adequate	3.58		Differences found between owners (4.06) and managers (3.51) Differences found between owners (4.06) and pharmacists (3.49)
Considering all my efforts and achievements, I receive the respect and prestige I deserve at work	3.57	Differences found between independent (3.81) and chain (3.28) Difference found between independent (3.81) and mass merchandise (3.39)	Differences found between owners (4.00) and managers (3.53) Differences found between owners (4.00) and pharmacists (3.47)

^{*}p< 0.05

Most respondents indicated interruptions and disturbances while performing their job (85.4%). Responses also indicate that many pharmacists agreed that their job has become more demanding (70.9%) and responses differed by pharmacy type (chain mean = 4.37; banner mean = 3.89).

Overall, respondents indicated agreement that they have adequate job promotion prospects (mean=3.35), that their income is adequate (mean=3.58), and that they receive the respect that they deserve (mean=3.57) given their efforts. Responses differed regarding job security depending on store type. Those in mass merchandisers were more likely agree that their job security is poor (2.49) than pharmacists from independent (1.74), banner (1.80), and franchise (1.86) pharmacies. Pharmacists from mass merchandisers were also significantly more likely to agree (mean=3.19) that they have or expect to experience an undesirable work change as compared to pharmacists from independent (mean=2.21), banner (mean=2.62), and franchise pharmacies (mean=2.41). Owners were significantly more likely than other pharmacy staff to agree that their income is adequate.

Over Commitment

In addition to effort and reward, the survey included a number of items aimed at eliciting pharmacist perceptions of commitment regarding their work. The model of effort-reward-commitment assumes that effort spent at work is reciprocal to the expected reward, such as income and esteem (Siegrest et al., 2004). Commitment to work in the context of this study relates to how well pharmacy staff may be committed to ensuring safety within the workplace and how staff can be motivated through rewards such as income, respect, and promotion. This section also aims at measuring pharmacy staff burnout and the ability to cope when there are work stressors. Pharmacists were asked to indicate their agreement on a 5-point Likert scale, ranging from (1) strongly disagree to (5) strongly agree (Table 7).

Table 7. Over Commitment

ltem	Mean	Between Group Differences Staff Position*	Between Group Differences Gender*
I get easily overwhelmed by time pressures at work	2.49		
As soon as I get up in the morning, I start thinking about work problems	2.57	Differences found between owners (2.93) and pharmacists (2.45)	
When I get home, I can easily relax and 'switch off' work	3.31		
People close to me say I sacrifice too much for my job	2.78	Differences found between pharmacists (2.61) and managers (3.09) Differences found between pharmacists (2.61) and owners (3.07)	Differences found between male (2.98) and female (2.70) respondents
Work rarely lets me go, it is still on my mind when I go to bed	2.58		
If I postpone something I was supposed to do today I'll have trouble sleeping at night	2.77		

^{*}p< 0.05

Responses indicate that pharmacists are able to deal with the stress they encounter at work, with many usually able to "let go" of work issues when they go to bed (mean=2.58) and not think of work problems when the get up in the morning (mean=2.57). However, there were some significant differences in pharmacists perceptions of the sacrifice they make for their job, with pharmacists who identified as managers (mean=3.09) and owners (mean= 3.07) more likely to agree that people close to them say they sacrifice too much for their job than staff pharmacists (mean=2.61). Furthermore, male respondents were more likely to agree they sacrifice too much for the job (mean=2.98) than female respondents (mean=2.70), which could be a result of gender differences in pharmacy management roles.

KEY POINTS

Interruptions and disturbances reported by pharmacists can negatively affect the safety of care provided.

Factors like these in the work environment that have been shown through evidence (e.g., published literature, local pharmacy staff knowledge) to contribute to QREs should be identified.

Strategies to overcome barriers should be considered and those appropriate to the pharmacy context should be implemented and evaluated. Example may include making changes to workflow, number and skill-mix of staff, noise, lighting, space, and technology.

Self-Efficacy

Pharmacists were asked to indicate how in control they are of their work and how well they are able to problem solve when problems do arise. Self-efficacy refers to one's ability to successfully execute and manage prospective situations (Bandura, 1986). Understanding the impact of self-efficacy (Table 8) and how well pharmacy staff perceive that they can make changes in their work environment and adopt new ways of providing safe care is useful in the context of reporting and learning from QREs. Pharmacists were asked to indicate their level of agreement on a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree (Table 8).

Table 8. Self-Efficacy

Item	Mean	Between Group Differences Gender*	Between Group Differences Staff Type*
I can always manage to solve difficult problems if I try hard enough	4.26	Differences found between male (4.45) and female (4.18) respondents	Differences found between owners (4.52) and pharmacists (4.17) Differences found between managers (4.37) and pharmacists (4.17)
If someone opposes me, I can find means and ways to get what I want	3.00		
It is easy for me to stick to my aims and accomplish my goals	3.84		
I am confident that I could deal efficiently with unexpected events	4.07	Differences found between male (4.19) and female (4.03) respondents	Differences found between owners (4.22) and pharmacists (4.02)
Thanks to my resourcefulness, I know how to handle unforeseen situations	4.00		Differences found between owners (4.18) and pharmacists (3.94)
I can solve most problems if I invest the necessary effort	4.29		
I can remain calm when facing difficulties because I can rely on my coping abilities	3.97		
When I am confronted with a problem, I can usually find several solutions	3.93		Differences found between owners (4.13) and managers (4.05) Differences found between owners (4.13) and pharmacists (3.85) Differences found between managers (4.05) and pharmacists (3.85)

If I am in trouble, I can usually think of something to do	4.00	
No matter what comes my way, I am usually able to handle it	4.05	Differences found between owners (4.19) and managers (4.24) Differences found between owners (4.19) and pharmacists (3.96) Differences found between managers (4.24) and pharmacists (3.96)

^{*}p< 0.05

Overall, pharmacists' agreement with several statements indicated high levels of self-efficacy. For example, with problem solving if they try hard enough (mean=4.26) and if they invest the necessary effort (mean= 4.29). Pharmacists had a lower level of agreement when asked if they could find ways to get what they want when someone opposes them (mean=3.00). No significant differences were found between pharmacist position types (e.g., manager, staff) or between pharmacists with varying levels of work experience. However, male pharmacists indicated significantly greater agreement that they can confidently deal with unexpected events than female pharmacists (means= 4.19 and 4.03, respectively) and that they can manage to solve problems if they try hard enough (means= 4.45 and 4.18, respectively). Differences were also found between staff type, with managers and owners overall having more positive perceptions of self-efficacy than staff pharmacists.

Working Conditions

Pharmacists were asked to indicate their agreement with the following statements regarding working conditions. Working conditions relate to staffing levels and working hours that might impact the level of safety at a pharmacy. Pharmacists were asked to indicate their level of agreement on a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree (Table 9).

Table 9. Working conditions

Item	Mean	Between Group Differences Staff Position*	Between Group Differences Pharmacy Type*
Staff work in "crisis mode" trying to do too much, too quickly	2.83	Differences found between owners (2.46) and pharmacists (2.91)	Differences found between independent (2.61) and chain (3.12) Differences found between independent (2.61) and mass merchandiser (3.06)
It is by luck that more serious mistakes don't happen in the pharmacy	2.22	Differences found between pharmacists (2.43) and managers (1.97) Differences found between pharmacists (2.43) and owners (1.80)	Differences between chain (2.53) and franchise (2.00)
Staff work longer hours than is sensible for patient care	2.16	Differences found between owners (1.64) and managers (2.13) Differences found between owners (1.64) and pharmacists (2.30)	Differences found between independent (1.86) and chain (2.52) Differences found between independent (1.86) and mass merchandiser (2.46)
There are enough staff to handle workload	3.34	Differences found between owners (3.83) and managers (3.32) Differences found between owners (3.83) and pharmacists (3.20)	Differences found between independent (3.65) and chain (2.83) Differences found between independent (3.65) and mass merchandiser (3.12)

^{*}p< 0.05

Owners disagreed that staff worked longer hours than in sensible (mean = 1.64) when compared to pharmacists (mean=2.30). Owner pharmacists were also significantly more likely to agree that there are enough staff to handle the workload (mean=3.83) than staff pharmacists (mean=3.20). Pharmacists from independent pharmacies were significantly more likely to agree that there are enough staff to handle the workload (mean=3.65) compared to pharmacists from chain pharmacies (mean=2.83) and mass

KEY POINTS

High self-efficacy was found amongst all staff types indicating that pharmacy staff members have the necessary resources to handle unforeseen situations, solve problems when they arise, and remain calm during difficult times in the pharmacy.

Pharmacy staff responses indicated agreement with having the skills to overcome problems, which indicates a high level of resiliency. This ultimately improves staff ability to adapt to practice changes and identify and implement improvement plans in the workplace.

merchandise pharmacies (mean=3.12). As well, pharmacists from chain and mass merchandise pharmacies were more likely to agree (means=3.12 and 3.06) that staff work in crisis mode than pharmacists from independent pharmacies (mean=2.61).

Blame Culture and Safety Focus

Pharmacists were asked to assess the extent of a blame culture and safety focus within the pharmacy. Organizational safety culture has been defined as "the product of individual and group values, attitudes, perceptions, competencies, and patterns of behaviour that determine commitment to, and the style and proficiency of, an organization's health and safety management" (ACSNI, 1993). As such, safety culture helps to explain why certain things are done within an organization and how much value is placed on doing things in a way that upholds safety. For the purposes of this research, safety culture and safety focus characteristics that may impact QRE reporting and learning are captured, with pharmacists indicating their level of agreement using a 5-point Likert scale from (1) strongly disagree to (5) strongly agree (Tables 10 and 11).

Table 10. Blame Culture

Item	Mean	Between Group Differences Staff Position*	Between Group Differences Pharmacy Type*
When a QRE is reported, it feels like the person is being reported, not the problem	2.88	Differences found between owners (2.42) and managers (2.94) Differences found between owners (2.42) and pharmacists (2.94)	Differences found between franchise (2.51) and chain (3.17)
Staff feel their mistakes are held against them	2.27	Differences found between owners (1.78) and pharmacists (2.42)	Differences found between chain (2.59) and independent (2.12) Differences found between chain (2.59) and banner (1.99) Differences found between chain (2.59) and

KEY POINTS

Although pharmacists agree that the purpose of QRE discussions is not to assign blame to individuals, there is some concern that the person is being reported rather than the problem.

Greater stakeholder input into patient safety practices and buy-in from pharmacy staff may be needed in order to improve overall organizational safety culture and perceptions of safety climate.

Owners and staff
pharmacists may differ in
their perceptions of
safety culture. Further
understanding of these
differences may
encourage better
informed strategies that
can bring the groups
closer together in
building a better safety
culture.

			franchise (1.96)
QRE discussions aim to assign blame to individuals	1.92	Differences found between owners (1.71) and pharmacists (2.08) Differences found between managers (1.68) and pharmacists (2.08)	Differences found between franchise (1.63) and mass merchandise (2.19)
There is a blame culture, so staff are reluctant to report QREs	2.16	Differences found between owners (1.75) and pharmacists (2.22)	

^{*}p< 0.05

Responses suggest that the culture in pharmacies provides some support for QRE reporting and learning, with the majority of pharmacists disagreeing that QRE discussions assign blame to individuals (mean= 1.92), and that there is a blame culture present (mean=2.16). Pharmacists from chain pharmacies were significantly more likely to agree that mistakes are held against them (mean= 2.59) than pharmacists from franchise pharmacies (mean=1.96), banner pharmacies (1.99), and independent pharmacies (mean= 2.12).

Respondents who identified as owners and managers had an overall more positive perception of the organizational culture than staff pharmacists. For example, while owner pharmacists indicated strong disagreement that QRE discussions assign blame (mean=1.71), staff pharmacists indicated more agreement (mean=2.08). Likewise, owners were less likely to agree that staff feel their mistakes are held against them (mean= 1.78) than staff pharmacists (mean= 2.42).

Table 11. Safety Focus

Item	Mean	Between Group Differences Staff Position*	Between Group Differences Pharmacy Type*
"Lip service" is paid to patient safety until an actual safety incident occurs	2.34	Differences found between pharmacists (2.56) and managers (2.15) Differences found between pharmacists (2.56) and owners (1.83)	Differences found between independent (2.05) and mass merchandise (2.53)
Staff are seen as already trained to do their job, so why would they need more training	2.40		

Training in safety has a low	2.34	Differences found
priority and is seen as		between owners
irritating, time consuming		(2.12) and
and costly		pharmacists (2.50)

^{*}p< 0.05

The overall scores indicate that pharmacies have a good safety focus, with disagreement that staff are already trained and do not require further training (mean= 2.40), that training is seen as a low priority (mean= 2.34), and that "lip service" is being paid to patient safety (mean=2.34). However, staff pharmacists (mean=2.56) were significantly more likely to agree that "lip service" is paid to patient safety until an actual incident occurs, versus pharmacy owners (mean=1.83) and managers (mean= 2.15).

Organizational Learning

Organizational learning refers to a pharmacy's ability and willingness to proactively develop and maintain a safe working environment (Phipps et al., 2012). Pharmacists were asked to indicate their agreement on a number of items relating to how well their pharmacy is able to train staff on safety issues, report and discuss QREs as they come up, and develop improvement plans to put into action. This section also highlights how well pharmacies encourage open discussion of near misses and errors and share lessons learned. Pharmacists were asked to indicate their agreement on a 5-point scale from (1) strongly disagree to (5) strongly agree (Table 12).

Table 12. Organizational learning

Item	Mean	Between Group Differences Staff Position*	Between Group Differences Pharmacy Type*
All staff are constantly assessing risks and looking for improvements	3.24	Differences found between owners (3.64) and pharmacists (3.16)	
The pharmacy manager/owner seriously considers staff suggestions for improving patient safety	3.87	Differences found between pharmacists (3.73) and managers (4.19) Differences found between pharmacists (3.73) and owners (4.43)	
All staff have education and training in safety	3.33		
Staff will freely speak up if they see something that may negatively affect patient care	3.92	Differences found between owners (4.30) and pharmacists (3.83)	Differences found between independent (4.10) and chain (3.64)

The pharmacy learns and shares information about safety with staff and other pharmacits (3.37) and owners (3.91) and pharmacists (3.43) Staff routinely discuss ways to prevent QREs from happening again The effectiveness of any changes made following a QRE are evaluated QRE discussions aim to learn from QREs and communicate the findings widely The team has a shared understanding and vision about safety issues; everyone is equally valued and feels free to contribute Staff are routinely informed about QREs that happen in the pharmacy Pollowing a QRE, there is a real commitment to change throughout the pharmacy QRE discussions are seen as learning opportunities 3.43 Differences found between owners (3.91) and pharmacists (3.43) Differences found between managers (3.57) and managers (3.57) and managers (3.57) and managers (3.59) Differences found between owners (3.99) Differences found between owners (3.99) Differences found between owners (3.99) Differences found between owners (3.96) Difference				
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pharmacists (3.57)and owners (4.00)	learning opportunities	3.71	pharmacists (3.57) and managers (3.96) Differences found between pharmacists (3.57)and	

^{*}p< 0.05

Overall, pharmacy owners and managers had a more positive outlook on organizational culture than staff pharmacists. For example, owner pharmacists indicated greater agreement (mean=4.30) that staff will speak up freely if they see something negative compared to staff pharmacists (mean=3.83). Owner pharmacists also had significantly more positive perceptions of having a culture of continuous improvement (mean=3.91) compared to staff pharmacists (mean=3.43). Owners were also significantly more likely to agree (mean= 4.09) that there is a shared vision of safety than staff pharmacists (mean= 3.59) and that QRE discussions are seen as learning opportunities (means= 4.00 and 3.57, respectively). Pharmacists from independent pharmacies indicated significantly higher agreement that staff will freely speak up if something may negatively affect patient care (mean=4.10) compared to pharmacists from chain pharmacies (mean= 3.64).

Open-Ended Questions

Pharmacists were also asked a number of open-ended questions aimed at better understanding perceptions and expectations regarding QRE reporting and learning. The first open-ended question asked pharmacists to describe any changes that they would like to see made with how their pharmacy reports and learns from QREs. After analyzing pharmacist comments using content analysis, three major themes were identified with regards to improving QRE reporting and learning: (1) use of a formal procedure, (2) improved discussion, and (3) need for follow-up/feedback.

The most prominent theme regarding the way the pharmacy should report and learn from QREs is by having a formal procedure. Some pharmacists suggested an electronic reporting system so that records are more organized and easily accessed. Pharmacists also reported that if there was a standardized reporting system all pharmacies could easily learn from each other's mistakes. The formal procedure should also be updated frequently with new policies and procedures to help everything run smoothly. However, some pharmacists were not even aware that there are QREs occurring in their pharmacy, as they never hear about them. Pharmacists indicated the need to provide a set time for a paid

KEY POINTS

The results suggest a disconnection between owner and manager perceptions compared to staff pharmacist perceptions. This may be due to poor communication between staff and management regarding expectations or due to a lack of buy-in by staff during implementation of patient safety practice.

While most pharmacists saw opportunities for further staff training and better communication regarding QREs, a disconnect between owner/manager and staff pharmacists exists regarding having a shared vision of improvement and not assigning blame to individuals. This once again speaks to the need to ensure that safety practices promote open sharing of errors and near misses and promote a systems perspective.

More emphasis on safety training may be needed in independent/banner pharmacies that have less of a corporate structure for required training in place.

staff meeting where all staff are required to attend and discuss QREs. Having a discussion about the QRE will help make staff aware of the error and help staff learn ways to avoid making the same QRE in the future. Finally, when QREs are reported some pharmacists never hear about them again. Pharmacists felt that if there was a follow-up on the QRE, information about what the solution was and how to prevent it from recurring, this may allow them to better learn from the QRE.

Pharmacists were also asked to describe things in their pharmacy that impacts their comfort level with talking about QREs. Responses indicated that there are a number of factors associated with pharmacist staff comfort level in reporting, including (1) the origin of the error, (2) the level of patient harm, (3) fear of judgment/embarrassment, (4) support from superiors, and (5) fear of blame. Many pharmacists indicated that their comfort level depended on where the error originated. Pharmacists were least comfortable discussing QREs when they were deliberately ignoring procedures and were more comfortable discussing QREs when they were following all procedures and the error occurred due to another reason (e.g., lack of time, large workload, outside work issues, honest mistake). Pharmacists stated they would feel personal embarrassment and shame if they made an error due to negligence. Level of patient harm affects the pharmacist's comfort level with discussing QREs. The more the error affects the patient, the less comfortable the pharmacists are discussing the error they made. If there is little or no harm to the patient at all, then the pharmacists are more comfortable discussing the QRE.

Some pharmacists also indicated that when they reported or openly discussed a QRE they felt their fellow colleagues and superiors would judge them. These pharmacists feel incompetent and believe that their colleagues and superiors will feel the same way about them. Pharmacists lose confidence in themselves and their ability to perform well in their job and feel embarrassed. Some pharmacists, however, did not feel this way as their colleagues and superiors are supportive and understanding. A formal procedure may help with reporting if pharmacists are required to report, and therefore may feel less judged if all staff members are expected to report.

Pharmacists are less comfortable discussing QREs with unsupportive superiors as they are scared of disciplinary action or consequences. Some

KEY POINTS

A number of strategies may be successful in improving QRE learning, including (1) the use of a formal procedure, (2) improved discussion when a QRE occurs, and (3) improved followup/feedback to pharmacy staff. The promotion of mandated reporting and strategies to improve the open discussion of QREs amongst staff could increase pharmacy uptake.

Pharmacy staff may be less willing to discuss errors when harm occurs and when there is a fear of blame or embarrassment. Having support from their superiors and being able to report anonymously may help to overcome these fears. Fears may also dissipate over time as staff members gain experience with QRE reporting and learning in a safe environment.

are even scared of losing their job. Participants do not want to admit they made a QRE even for the greater good if they feel like they will be punished. Blame culture is another aspect that affects participant's comfort level with discussing QREs. Some participants have no fear of being blamed and are made to feel comfortable by colleagues and superiors. Other participants are very concerned with being blamed for errors and therefore leading to feelings of incompetence and embarrassment. The higher the fear of blame, the lower the comfort level with discussing QREs.

Conclusion

This report provides a summary of findings from a survey of key factors impacting QRE reporting and learning in community pharmacies in Saskatchewan. These findings provide a benchmark for understanding pharmacy staff perceptions of QRE reporting and learning and the necessary structures, processes, and supports needed for the successful uptake of QRE reporting and learning in Saskatchewan. The findings also support a better understanding of the role of effort, reward, and commitment in the uptake of new work processes within the community pharmacy setting.

Self-efficacy findings from this research show that pharmacy staff on the whole have good problemsolving skills and are able to work through potential obstacles and have the tools necessary to make changes. This finding is a good indication that pharmacy staff have the resilience and confidence to implement new work processes and are also able to identify possible improvements and changes when errors and near misses are encountered.

However, the findings indicate a disconnect between pharmacy owners and pharmacy staff with regards to organizational culture. Results suggest that there is room for improvement in the safety culture demonstrated by community pharmacies in Saskatchewan, with pharmacy owners having a much more positive view of how safety is handled when compared to pharmacy staff members. Staff perceptions regarding the presence of a blame culture and organizational learning suggest that greater education for pharmacy owners and managers as to how to support a positive safety culture may be needed before QRE reporting and learning become entrenched in workflow.

Advocating for greater safety with regards to staffing levels and workload measures may also positively impact not only organizational safety culture, but also may allow staff to realize efficiencies through greater understanding and mitigation of medication errors and near misses.

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