DETERMINANTS OF ERROR REPORTING, RECOVERY, AND LEARNING IN CANADIAN RETAIL PHARMACIES: A CONCEPTUAL MODEL

This research develops a conceptual model of the factors influencing the reporting, service recovery, and organizational learning resulting from medication errors within Canadian retail pharmacies. Based on a review and synthesis of the research literature, it is proposed that individual perceived self-efficacy, QRE process capability, QRE process support, organizational culture, management support, and regulatory authority influence, all influence the completeness of QRE reporting, which, in turn, influence QRE service recovery and QRE learning.

Introduction

It is well known in healthcare management that medication errors and “near misses”, collectively known as Quality Related Events (QREs), represent one of the most serious issues impacting patient safety in retail pharmacies. Extrapolating the current international research (e.g., Ashcroft, Quinlan & Blenkinsopp, 2005; Flynn, Barker & Carna, 2003) to the approximately 425 million prescriptions dispensed in Canadian retail pharmacies in 2008, it is estimated that as many as 7 million QREs could occur in Canadian retail pharmacies this year alone. Yet, despite their implications for both the pharmacy and the public, the under-reporting of QREs in the retail pharmacy setting is high (Kelly, 2004; Ashcroft, Morecroft, Parker, & Noyce, 2006). Aside from the obvious health risks associated with QREs, when made public, such errors may also lead to a number of negative business implications for retailers, including direct legal and financial costs, as well as tarnished reputations and decreased customer loyalty.

Given the significant human aspect of their core workflow processes, pharmacy staff will make mistakes. These mistakes do however, present opportunities for the focal organization, including pharmacists, technicians, and management, as well as the provincial regulators, to learn from these mistakes, and take steps to reduce the likelihood that they reoccur. This research seeks to help pharmacies better learn from QREs by exploring the factors that may promote or inhibit QRE reporting and subsequent learning activities. More specifically, this research develops a conceptual model of the determinants of QRE reporting, recovery, and learning in Canadian retail pharmacies. QRE reporting gauges under what behavioral conditions and patient outcomes a QRE is reported, such as only when the patient is severely impacted by the error and/or dispensing protocols have been violated. QRE recovery is the effort made to inform pharmacy stakeholders of the QRE, should it directly impact them. Such activities may include a phone call to the patient (e.g., QRE discovered after prescription pickup) or in the case of a “near miss”, a phone call to the prescribing physician. QRE learning is the extent that the organization has learned from the QRE and has made internal changes to prevent a similar QRE from
occurring again. Such activities may include, for example, discussing the QRE at a staff meeting, determining the root-cause of the error, and revising store dispensing processes, workflow, or technology.

Quality related events, while naturally impacting healthcare service and delivery, are less the domain of healthcare per se, and increasingly can be understood as a product of retail practice and management, public and regulatory policy, and risk management and communication. As such, factors influencing QRE reporting, recovery, and learning not only originate from the individual staff members, but also from the retail pharmacy as a whole, as well as from regional differences and the different approaches used by regulators who are responsible for developing and enforcing provincial and national pharmacy policy. As a result, this research seeks to develop a holistic model by not only considering individual pharmacy staff actions, but also characteristics of the pharmacy and regulatory authority.

**Risk Factors of Low QRE Reporting, Recovery, and Learning**

“A key characteristic of high-reliability industries, such as nuclear power, aviation, automobile manufacturing, and chemical processing, is acceptance of the fact that errors will occur, that the impact of errors can be devastating, and that efforts should be made to discover system weaknesses before harm occurs” (Greenall, Walsh & Wichman, 2007, pp. 191). The U.S. Institute of Medicine (2002) issued a report stating the healthcare industry is at least ten years behind the aviation industry in preventing errors. Leape (1994) attributes the difference to the airline industry’s focus on safety in design and processes, and as such supported the creation of a system for reporting medication errors in the healthcare industry. Evans, Berry, Smith et al (2004) reported that 90% of consumers believe that QREs should be reported, and both the U.K. Department of Health (2000) and the Australian Council for Safety and Quality in Health Care (2001) recommend more open incident reporting to better understand QREs and their causes.

The majority of the research on QREs in retail pharmacies focuses on identifying the causes of medication errors. For example, a US Pharmacopeia report (Santell, et al., 2003) ranks the most common reported causes of dispensing errors as performance deficit (38%), policy or procedure not followed (20%), transcription inaccurate or omitted (15%), incorrect or insufficient documentation (12%), computer entry (11%), knowledge deficit (10%) and lack of communication (10%). The most commonly occurring cause of dispensing errors, performance deficit, refers to a mistake made by the person responsible for administration. This failure could occur for a variety of reasons, which the literature also highlights as causes themselves (e.g., Szeinbach, Seoane-Vazquez, Parekh, et al., 2007; Malone, Abarca, Skrepnek, et al., 2007; Davidhizar & Lonser, 2003; Wilkins & Shields, 2008; Moeller, 2003), including noisy workplace settings, staffing shortages, lack of patient information, poor lighting, and inexperienced staff, among others.

Despite the volume of literature on the sources of QREs in retail pharmacies, research on what motivates pharmacy staff to report the QRE in the first place and to take both short and long term steps to reduce the chances of the error, or a similar one, from reoccurring is significantly lacking. In addition, more research is required on organizational learning practices within retail pharmacies, with an emphasis on improving existing reporting and feedback systems. Working towards this goal, Ashcroft, Morecroft, Parker & Noyce (2005b) assess the validity and feasibility of the Manchester Patient Safety Assessment Framework (MaPSAF) (i.e., a tool to increase awareness in pharmacies about risk management) among UK retail pharmacies. In their assessment, Ashcroft et al. (2005b) generate five ascending levels to describe a pharmacy’s safety culture, specifically: pathological, reactive, calculative, proactive and generative. Ashcroft et al. (2005b) highlight that UK pharmacies should be striving for the generative culture, where errors are recognized as inevitable, mistakes are deemed as learning opportunities, and knowledge obtained from error reporting is shared between pharmacies to increase overall quality across the healthcare system. The generative culture integrates risk management in every business process, and is considered the greatest manifestation of organizational learning. In reality, however, interviews with
pharmacy staff confirm that the majority of pharmacies are instead at the pathological stage; characterized by avoiding reporting QREs where possible, and the lowest of the five stages of safety culture development. A pathological culture prevailed because of the threat error reporting poses to a pharmacy’s reputation, and job security. Therefore, error reporting in retail pharmacy is seen as something whose benefits do not outweigh its costs (Ashcroft et al, 2005a). The proliferation of the pathological culture in retail pharmacies is somewhat indicative of the lack of research on QRE reporting and organizational learning, and emphasizes the need for best practices, recommendations, and practical advice to assist managers in moving the pharmacy from one that fails to report QREs to one that learns as a whole from such errors.

Expanding the scope of the literature search, far more studies have explored the determinants of QRE reporting and subsequent activities within the hospital context. For example, Evans et al. (2006) gage doctor and nurse familiarity with the current system for incident reporting, as well as barriers to reporting healthcare incidents; with nurses more familiar with the incident report forms than doctors (99.8% vs. 93.6%), and completed incident report forms far more frequently (89.2% vs. 64.6%). More importantly, Evans et al. (2006) identify various self-perceived barriers to reporting. The most common barriers cited, which have also found individual support in other studies (e.g., Osborne, Biais & Hayes, 1999; Wakefield, et al 1996; McArde, Burns, & Ireland, 2003) include lack of feedback on action taken as a result of reporting, system design (e.g., form takes too long to fill out, not enough time to complete the forms), incident too trivial, delaying filling out a report and ultimately forgetting, and lack of justification for reporting a “near miss”. Additional barriers, albeit less commonly reported, mainly pertained to the workplace culture; a belief that adverse incident reporting is unlikely to lead to system changes, a belief that nothing else needs to be done other than speaking to the person involved, and concern surrounding confidentiality, support of coworkers and threat of litigation.

In addition to systems (e.g., complexity, speed) and outcome (e.g., tangible action taken) oriented determinants, Force, Deering, Hubbe et al., (2006) highlight that the culture of the hospital is a major determinant of low QRE reporting. Specifically, Force et al. (2006), in a case of a hospital attempting to improve QRE reporting, found that “inherent fear of retribution, punitive actions, and professional humiliation prevented self-reporting of medication errors.” (pp.36) Through actions such as reporting confidentiality (e.g., incident reports never went into staff files), and efforts focused on improving QRE form design and improved feedback, the culture of blame within the hospital setting was reduced, and as a result incident reporting significantly increased from an average of 14.3 reports to 72.5 reports per month.

The culture of blame is one that seems to be magnified within the retail pharmacy context. In the UK for example, a dispensing error can be deemed a criminal offence, whereas doctors and nurses are not subjected to the same disciplinary measures (Nathan, 2004). For this reason, Nathan (2004) believes that a “fair blame culture” cannot work in retail pharmacy the same way it does in the hospital setting. Ashcroft et al. (2006) discovered that the likelihood of a QRE being reported within the pharmacy was at best on a level of indifference, and where a violation of protocol was made, at that. Reporting to the U.K. National Patient Safety Agency for any QRE was rare. While different, both the retail pharmacy and hospital context share similarities in terms of barriers to QRE reporting. Because of aversion to blame, embarrassment and humiliation, confidentiality of QRE reporting is a high priority for staff; as well as concerns regarding firm reputation and job security. Feedback and organizational learning are also important determinants for both pharmacies and hospitals in rendering a QRE reporting system worthwhile (Ashcroft & Parker, 2007; Evans, Berry, Smith et al., 2006; Force, et al., 2006). Figure 1 summarizes, based on a review of the literature, the different factors that may influence low QRE reporting, recovery, and learning in Canadian retail pharmacies.
Based on a review of the literature, the determinants of QRE reporting, recovery, and learning can be grouped into six areas: (1) Individual pharmacist/technician (e.g., insufficient knowledge of regulations); (2) Process and technology (e.g., difficulty, time and effort to use an IS QRE reporting tool); (3) Management (e.g., punishment related to QREs); (4) Regulatory authority (e.g., stringent/lax approach to enforcement); (5) Regional (e.g., differences in provincial regulations regarding the reporting of QREs in pharmacies); and (6) National (e.g., prevalence of national groups, such as ISMP, NAPRA, in developing and promoting strategies to address QREs). The degree to which the pharmacy can address each factor depends upon the group. Those factors stemming from pharmacy staff, process & technology, management, and culture are within the ability of the retailer to either reduce or promote. Factors stemming from regulatory, regional, and national issues are outside of the immediate control of the retailer, with responsibility for such factors instead falling to government or the regulatory authority. Instead of directly addressing these latter factors, the best a pharmacy can do is to reduce or increase their impact by making changes to internal operations. Internal changes may, however, present new determinants. Therefore, pharmacies need to undergo periodic self-assessments to identify current factors and to develop, not only in-store strategies, but also collective and regional strategies, in order to address policy and regulatory factors.
Conceptual Model of QRE Reporting, Learning, and Recovery

This framework (i.e., Figure 1) helps to illustrate several gaps in the existing body of knowledge concerning QREs in Canadian retail pharmacies. First, with the limited research focused on system, outcomes, and organizational culture issues, there is a lack of research addressing how regulatory influence and regional and national policies may influence QRE reporting, recovery, and learning. And although the literature from the information systems (e.g., Davis et al., 2003), innovation diffusion (e.g., Frambach and Schillewaert, 2002; Tornatzky and Fleischer, 1990), quality/lean management (e.g., Boyle, Kumar, and Kumar, 2006; Scherrer-Rathje, Boyle, and Delflorin, 2009), and public policy (e.g., Wiktorowicz, 2003) domains presents a “laundry list” of potential determinants; a core list of risk and success factors within a Canadian retail pharmacy context has not yet been identified and empirically validated. Second, one cannot assume that all determinants will influence QRE reporting, recovery, and learning, equally. Research is needed to identify those determinants that may, for instance, be associated with low QRE recovery, but not with low QRE learning. Third, to help retail managers prioritize the determinants they should address first, research is needed to determine the relative influence of each core factor. Fourth, because the regulatory authority is both a source of risk factors and a solution to improving QRE reporting, more research is needed to better understand how various characteristics of the regulatory authority influences QRE reporting, recovery, and learning. This research takes in initial step in this direction by developing a conceptual model of the major factors influencing QRE reporting, recovery, and learning within Canadian retail pharmacies. This initial model is presented in Figure 2.

Figure 2

Proposed Determinants of QRE Reporting, Recovery, and Learning
This research proposes that a variety of individual, technology, process, and management factors at the store level will influence the extent of QRE reporting, recovery, and learning in retail pharmacies. Given the potential impact to the patient, and the potential embarrassment suffered by the pharmacist/technician committing the QRE, it is proposed that that ability of that individual to cope with such a challenging and stressful scenario will impact their reporting. As such, this research proposes that the individual pharmacist/technician’s perceived self-efficacy will impact QRE reporting. At the process and technology levels, it is suggested that various characteristics of the store’s existing QRE reporting process will impact reporting, including ease of use, degree of confidentiality, and completeness or reporting, among others. Such characteristics are grouped into QRE process capability (e.g., features and characteristics of the QRE process) and QRE support (e.g., individual and store support for the QRE process). It is also proposed that a number of store level characteristics will also influence QRE reporting, such as management support for QRE reporting, and the extent that the culture of the organization is supportive and not blame oriented. Moving beyond the individual pharmacy, it is also proposed that perceived characteristics of the regulatory authority (e.g., lax vs. strict policy enforcement) will also influence QRE reporting among pharmacy staff. It is suggested that if QREs are not reported, then the pharmacy loses the opportunity to properly recover from the error, as well as to take steps as an organization to reduce the likelihood that a similar QRE will occur again. Subsequently it is proposed that QRE reporting will directly influence QRE recovery, and once the immediate issues/dangers have been addressed, QRE learning. As QRE recovery may not always occur, such in the case of a near miss, a direct relationship between QRE reporting and learning is also suggested.

**Individual Self–efficacy**

Based on Figure 1, QRE reporting, recovery, and learning starts with the individual pharmacist or pharmacy technician. As such, various characteristics of these individuals are proposed to influence the extent that reporting, recovery, and learning activities actually occur in the retail pharmacy. To identify such broad characteristics, this research applies the perceived self–efficacy construct, used to capture an individual’s ability to effectively cope with challenging scenarios (Schwarzer, 2008), such as responding to a quality related event. To capture this construct, this research adopts the measurement items developed by Jerusalem & Schwarzer (1992). This ten-item construct has been shown by previous healthcare studies to be reliable, with adequate discriminant and convergent validity. The items that comprise the construct include: I can always manage to solve difficult problems if I try hard enough (SOLVE), If someone opposes me, I can find means and ways to get what I want (OPPOSE), It is easy for me to stick to my aims and accomplish my goals (GOALS), I am confident that I could deal efficiently with unexpected events (EVENTS), Thanks to my resourcefulness, I know how to handle unforeseen situations (UNFORSEEN), I can solve most problems if I invest the necessary effort (PROBLEM SOLVE), I can remain calm when facing difficulties because I can rely on my coping abilities (CALM), When I am confronted with a problem, I can usually find several solutions (SOLUTIONS), If I am in trouble, I can usually think of something to do (THINK), and No matter what comes my way, I am usually able to handle it (HANDLE).

**Process Capability & Support**

Pharmacies in a number of Canadian provinces (e.g., Nova Scotia) are legislated to have in place a process for documenting and reporting QREs. In addition, many pharmacies are expected to have such a process in place in order to protect from litigation; as demanded by headquarters. This research therefore proposes that various characteristics of this reporting system will also play a significant factor in the extent that QREs are reported and resulting recovery and learning activities take place. Such characteristics may range from effort and ease of use, to capabilities of the technology. For example, based on the technology acceptance model (Davis, 1989), it is expected that any QRE process and related technology that is perceived to be difficult to use, is unlikely to be used. Likewise, it may be more
difficult for the pharmacy to learn from an error if their system does not give them the ability to summarize and analyze QREs. However, in addition to the physical characteristics of the process, it is also important to understand the extent that this QRE reporting process is supported within the pharmacy. For example, is the process in place simply to meet provincial legislation, or headquarters demands, or is it truly supported as a means to better reduce QRE and learn from such mistakes. Subsequently, this research will capture the QRE process at the pharmacy using two constructs, QRE process capability and QRE process support.

QRE process capability is focused on identifying if the current process is one conducive of full QRE reporting and effective recovery and learning. This construct will be captured by the extent that the process is modern and up-to-date (MODERN), is updated periodically (UPDATE), is easy to complete (EASECOMPLT), does not take much time to complete (TIMECOMPLT), has useful reporting and analysis tools (REPTOOLS), permits the reporting of errors anonymously (ANONY), is seamlessly integrated into the day-to-day operations of the pharmacy (INTEGRATED), and is cost effective (COSTEFF). QRE process support is the extent that members of the pharmacy support this process. This construct is captured by the extent that the current QRE process has the support of the individual pharmacist/technician (INDSPRT) and of their colleagues (COLSPRT), celebrates successful learning (LEARNING), feels like it is their own process (MYPROCESS), encourages members to make continuous improvements (CONIMPVR), poses low risk to business operations (e.g., meets regulatory compliances, reduces legal risks) (LOWRISK), treats QREs as a “taboo” subject (reverse-coded) (TABOO-REV), and is reinforced and openly discussed at meetings (MEETING).

Supportive Organizational Culture

It is proposed that the organizational climate of the pharmacy and its parent organization, in the case of a franchise, will impact QRE reporting, recovery, and learning. As evident from the literature review, it is expected that the extent that the inverse of a supportive culture, specifically a blame culture, exists in the pharmacy will negatively impact the extent of QRE reporting, recovery, and learning. For example, Ashcroft & Parker (2007) highlight that UK pharmacy staff felt that a “blame culture” was quite strong in the workplace, as identified via questions such as: when an event is reported, it feels like the person is being reported, not the problem (PERSONRPT); staff feel their mistakes are held against them (HELDAGNST); there is a blame culture, so staff are reluctant to report incidents (BLAME); staff in the pharmacy are seen as the cause of the incidents (STAFFCAUSE), and the solution is retraining and punitive action (PUNITIVE); Investigations aim to assign blame to individuals (INVBLAME); Incidents and complaints are ‘swept under the carpet’ if possible” (SWEPT) (Ashcroft & Parker, 2007). This research applies Ashcroft & Parker (2007) culture construct, with each item reverse-coded.

Management Support

Responding to QREs in a safe and supporting manner will of course include a high degree of support from pharmacy management. These people, who are pharmacists themselves, must not only take a proactive role by highlighting their QREs, but be supportive of QRE reporting by others, and pharmacy level efforts to learn from such errors. To capture management support we use a variation of the six items developed by Igbaria (1990). These items have been used in prior studies (Guimaraes and Igbaria, 1997), show adequate internal consistency and validity, and include management understanding the benefits of QRE reporting (BENEFITS), encouraging the reporting of QREs by others in the pharmacy (OTRREPORT), providing the necessary training on the QRE processes (TRAINING), providing the necessary assistance (e.g., not punishing mistakes) to enable organizational learning from a QRE (ASSIST), providing the necessary resources (e.g., staff time for meetings, training seminars) for QRE learning to occur (RESOURCES), and interested in having employees satisfied with the entire QRE process (SATISFY).
Regulatory Authority Influence

Based on the review of the literature, it is expected that various characteristics and actions of the provincial regulatory will influence the extent that QREs are reported and that follow-up activities (e.g., recovery, learning) take place. For example, it is expected that a regulatory authority that is supportive, versus punishment oriented, of QRE reporting will increase the likelihood of complete QRE reporting and sufficient follow-up activities within the retail pharmacy. Regulatory efforts to make new pharmacy legislation and practices known to stores may also increase such efforts. For example, some Canadian provinces (e.g., Nova Scotia) have passed legislation preventing an apology letter from the store to be used in subsequent litigation cases. As a result, pharmacy staff’s knowledge of the latest pharmacy regulations (of which the regulatory authority plays a key role in disseminating) will also impact QRE reporting and subsequent activities. For this study, regulatory influence is captured by the extent that the regulatory authority makes me aware of the latest legislation regarding QREs (LEGISLAT), punishes mistakes (reverse-coded)(REV-PUNISH), has my best interests in mind (INTERESTS), understands the challenges we face in dispensing (DISPEN), is controlling (reverse-coded)(CONTROL-REV), and is transparent (TRANS).

QRE Reporting

Ashcroft et al. (2006) in a study of 275 pharmacy staff highlight that when deciding to report a QRE, staff take into consideration the implications to the patient and the type of behavior associated with the error, such as if normal store or dispensing protocol had been followed by the individual who committed the error. In terms of behaviors, the QRE may be associated with an error that is inline with current protocol at the pharmacy (COMPLIANCE), an error resulting from staff not being aware of specific protocol (VIOLATION), and an error resulting in a deliberate deviation from current protocol (ERROR). Each of these behaviors may have one of three effects on the patient. The first, and most desirable, is a good outcome (GOOD), where the error is caught before it reaches the patient or has no impact on them. The second, poor (POOR), is an outcome that causes “unavoidable and short-term discomfort” for the patient. The final outcome, bad (BAD), implies “more prolong and serious harm”. QRE learning is therefore captured by the likeliness that pharmacy staff would report an error under each of these nine conditions.

QRE Recovery

Upon the discovery of a potentially life-threatening QRE, it is expected that the retail pharmacy will contact the patient to inform them of the error and suggest specific actions. However, service recovery actions need not only be limited to cases of life-threatening QREs. This research therefore also examines what happens after the QRE is reported and what factors influence the extent that service recovery activities do occur. To capture service quality, we use a variation of the RECOVSAT service recovery construct developed by Boshoff (1999). The construct has been used by a number of studies, with good internal consistency and discriminant validity (e.g., Kanousi, 2005; Boshoff, 2005). RECOVSAT considers service recovery along six dimensions including communication, empowerment, feedback, atonement, explanation, and tangibles (e.g., appearance, equipment, physical environment where complaints are handles). For this research we are interested in pharmacy staff’s assessment of their own in-store recovery activities. Subsequently, the RECOVSAT construct is used as a starting point, with changes made to shorten the number of items and better fit the pharmacy and internal assessment context of this study. Modifying a shortened version of the RECOVSAT construct (i.e., Boshoff, 2005), service recovery is captured by the extent that the pharmacy is honest in its endeavors to inform the patient of the QRE (HONEST), store employees who committed the QRE can immediately contact the patient without soliciting management approval to do so (AUTONOMY), a written letter of apology is offered to the patient (APOLOGY), ensure that the customer was not “out of pocket” for the QRE (FINANCIAL),
pharmacy provides feedback to the patient of the efforts being made to address the QRE (EFFORTS), and the patient is informed of what went wrong (EXPLAIN) and how it will be fixed (FIXED).

**QRE Learning**

QRE learning addresses the extent that pharmacy staff, and other stakeholders, learn from QREs and take significant action to reduce the likelihood of a similar QRE from occurring again. To capture QRE learning, this research adopts measures from a safety culture survey developed by Ashcroft and Parker (2008). Specifically, Ashcroft and Parker (2008) captures this culture using seven factors, including learning from the incident, staffing and management, perceptions of the causes of incidents, team working, communication, commitment to patient safety, and education and training. This research applies measures from the “learning from incidents” factor to capture QRE learning using the following variables, the effectiveness of any changes made following an incident are evaluated (EVAL), similar incidents tend not to reoccur (REOCCUR), the pharmacy learns and shares information about incidents with staff and other pharmacies (SHARES), investigations aim to learn from incidents and communicate the findings widely (WIDECOMM), following an incident, there is a real commitment to change throughout the pharmacy (CHGECOMMIT), the pharmacy welcomes any outside involvement in investigations (EXTNV), investigations are seen as learning opportunities (LEARNOPT), and continuous improvement occurs, even without the trigger of an incident (NONINCIDENT).

**Implications & Conclusions**

This research proposes a structural equation model of the factors influencing the reporting, service recovery, and organizational learning resulting from quality related events within Canadian retail pharmacies. Based on a review and synthesis of the research literature, it is proposed that individual perceived self-efficacy, QRE process capability, QRE process support, supportive organizational culture, management support, and regulatory influence, all influence the completeness of QRE reporting, which, in turn, influence QRE service recovery and QRE learning.

While its contribution to a healthy population in Canada is an important and expected eventual outcome of this research, other major contributions are found within the Canadian retail management and provincial and national regulatory contexts. Within the retail management context, this study will enable retail managers to make better management decisions by helping them more fully understand their internal operations and external environment. With improved QRE reporting and learning, managers will better understand what process and workflow (e.g., dispensing), human resources (e.g., pharmacists and technicians), technology (e.g., QRE reporting tools), and management changes are needed to improve overall levels of service quality. For many retail pharmacies, especially those independently owned, the pharmacy and customer care component (e.g., drug preparation, drug dispensing, over-the-counter drug advice) is the core source of revenue. Learning from QREs with the goal of improving overall levels of service quality, not only makes good sense from a public safety perspective, but also from the business perspective. Insufficient organizational learning allows an error to be repeated again and again, increasing the chances of lost customer trust and store litigation, both of which pose very significant financial consequences. Mistakes will occur within a retail pharmacy, regardless of the retailer’s commitment to quality. Committing a mistake the first time is, however, often less of a tragedy then failing, as an organization, to learn from the mistake and preventing it from happening again.

As highlighted in Figure 1, there are a variety of potential risk factors that are outside the immediate control of the retail pharmacy to reduce. Provincial pharmacy regulatory bodies must take the lead in addressing such factors. As such, this proposed research also explores issue surrounding public policy and those regulatory bodies assigned with the execution of such policy. In the absence of information related to various risk factors underlying QREs, provincial regulators are unable to prioritize their inspection and monitoring activities. Once such risk factors have been identified however, it will be possible for regulators to focus their efforts on high risk sectors and to also begin to undertake
preventative, educational interventions rather than relying solely on remedial activities. Once tested, it is envisioned that the research model will contribute to improved productivity, and increased awareness of risk and success factors and unintended consequences among Canadian regulatory bodies.

References


