RESEARCH PAPER

What Factors Impact Implementation of Critical Incident Disclosure in Ontario Hospitals: A Multiple-Case Study

Quels facteurs influent sur la mise en œuvre de la divulgation d'incidents critiques dans les hôpitaux ontariens : une étude de cas multiples

MICHAEL HEENAN, BA, MBA, CHE
PhD Candidate, Business Administration (Health Management)
DeGroote School of Business
McMaster University
Hamilton, ON

GILLIAN MULVALE, PHD
Associate Professor, Health Policy and Management
DeGroote School of Business
McMaster University
Member, Centre for Health Economics & Policy Analysis
Member, Michael G. DeGroote Health Leadership Academy
Hamilton, ON

Abstract

Guidelines and legislation prescribe how hospitals should conduct critical incident disclosures with patients. However, variation in secondary disclosure implementation can occur. Using the Consolidated Framework for Implementation Research, this qualitative multiple-case study explored the factors that impact Ontario hospitals' secondary disclosure of critical incidents. The study concludes that while hospitals generally implement guidelines consistently, complex environments and differing professional backgrounds lead to variations. Consequently, hospitals should address timing delays, improve documentation and enhance support to clinicians who conduct the disclosures. Policy makers should consider the benefits

and challenges of written disclosure, and offering patients a choice in the setting where disclosure occurs, as potential improvements.

Résumé

Les lignes directrices et la législation prescrivent la façon dont les hôpitaux doivent divulguer les incidents critiques qui concernent les patients. Cependant, il peut y avoir une variation dans la mise en œuvre de la divulgation secondaire. À l'aide du cadre consolidé pour la recherche sur la mise en œuvre, cette étude qualitative de cas multiples a permis d'explorer les facteurs qui influent sur la divulgation secondaire des incidents critiques dans les hôpitaux ontariens. L'étude conclut que si les hôpitaux mettent en œuvre les directives de manière cohérente, les environnements complexes et les divers antécédents professionnels entraînent des variations. Par conséquent, les hôpitaux devraient réduire les délais, améliorer la documentation et renforcer le soutien aux cliniciens qui procèdent aux divulgations. Les décideurs devraient considérer, comme mesures d'amélioration potentielle, les avantages et les défis de la divulgation écrite et ils devraient offrir aux patients le choix du cadre où la divulgation a lieu.

Introduction

Patient safety literature has demonstrated that open, transparent disclosure of critical incidents to patients and families improves confidence in the health system (Gallagher et al. 2007; López et al. 2009; O'Connor et al. 2010). As a result, guidelines issued by agencies such as the Canadian Patient Safety Institute (CPSI), Accreditation Canada and the Healthcare Insurance Reciprocal of Canada (HIROC) outline the processes that hospitals should follow in conducting disclosure conversations (Accreditation Canada 2014; CPSI 2011; HIROC 2015). In Ontario, Regulation 965 of the *Public Hospitals Act* was amended to detail legislative requirements related to engaging the patient and family in disclosure, designating who is responsible for disclosure, noting when disclosure should occur and identifying how disclosures should be documented (Government of Ontario 1990).

Despite guidelines and legal requirements, the delivery of disclosure can vary (Bell et al. 2017). Variation in disclosure practices can be attributed to the lack of education and training needed to assist clinicians in disclosure (Manser 2011), fear of litigation (Iedema et al. 2011) and limitations in institutional support structures (Wu et al. 2013). Non-uniformity in critical incident disclosure can also be attributed to limited understanding of patient needs and the anticipation of adverse impacts on the patient–provider relationship (Bell et al. 2017; Kalra et al. 2013). Clinician experience in disclosure conversations has been shown to influence their effectiveness, with those with more experience being better attuned to using culturally sensitive, plain language when apologizing (Bell et al. 2017; Gallagher et al. 2006). A lack of strong leadership and role modelling is a factor in front-line clinicians hesitating to participate in the process (Harrison et al. 2017).

The existing literature primarily addresses implementation factors and barriers related to physician participation in disclosure. Limited research has explored how consistently disclosure guidelines are implemented in Canadian hospitals, involving not only physicians but also nursing and allied health professionals. Furthermore, there has been limited study of how hospitals complete secondary disclosure, the point at which the findings of a formal incident analysis are communicated with patients and families. To explore how these guidelines are applied in hospitals, a multiple-case study involving three Ontario hospitals was conducted using the Consolidated Framework for Implementation Research (CFIR) as a guiding analytical framework (Damschroder et al. 2009). This framework explores a wide variety of external, organizational, intervention, individual and process factors that shape implementation of a given intervention or policy. Exploring the research question "What factors impact implementation of critical incident disclosure guidelines in Ontario hospitals?" the study identifies key implementation considerations and offers suggestions on how to improve secondary disclosure guidelines and policies in Ontario hospitals.

Methodology

This study adopted an exploratory qualitative approach based on multiple cases using two data sources: semi-structured informant interviews and documentation analysis (Yin 2018). Consistent with a case-study approach, the CFIR (Damschroder et al. 2009) was used as a guiding conceptual framework. The CFIR identified 23 constructs that affected the implementation of a policy or intervention within five domains: policy/intervention characteristics; outer setting; inner setting; characteristics of individuals; and process factors. Approved by McMaster University's Research Ethics Board, the selection of case units included three acute-care hospitals in Ontario in distinctly different geographic areas of the province. The sample included hospitals within urban, suburban and rural settings to capture a range of contexts; however, the analysis did not compare findings along these lines to preserve confidentiality of the participating hospitals. Data sources included semi-structured interviews with multiple leaders within each hospital. The selection of hospital leaders was purposeful with informants being management leaders responsible for the overall process of disclosure or clinical leaders who have directly participated in disclosure discussions. Ten hospital leaders were interviewed between November 8 and 28, 2019, with four interviews at hospital 1 (H1) and three interviews each at hospitals 2 and 3 (H2 and H3). The sampling approach sought variation of professional perspectives, including at least one physician and one registered nurse from each hospital and three allied health professionals. Multiple professionals were interviewed from each hospital to identify a common organizational perspective rather than relying on a single leader to represent the entire hospital.

Interviews were conducted in person and by telephone and followed an established interview protocol. The protocol included 13 questions categorized into the five CFIR domains.

Interview participants were provided with the interview protocol and an overview of the CFIR ahead of time. The CPSI disclosure guidelines and the hospital's policy on disclosure were used as reference tools throughout the interviews. Interviews lasted approximately 30-45 minutes.

Upon receiving consent from participants, nine of the 10 interviews were audio-recorded and transcribed using a professional transcription service. The tenth participant consented to the interview but did not give consent to be audio-recorded. The tenth participant's interview was documented and transcribed manually.

The interview data were initially analyzed manually by case, using a coding and memo approach (Saldana 2013). The findings by hospital were categorized into themes and categories using deductive coding. Deductive codes were developed based on the CPSI disclosure guidelines, Ontario's legislative requirements (Regulation 965 of Ontario's *Public Hospitals Act*) and the CFIR model (CPSI 2011; Damschroder et al. 2009; Government of Ontario 1990). Findings from each hospital were then analyzed within the CFIR to identify commonalities for discussion.

Following the semi-structured interviews, the study's second component involved document analysis whereby individual hospital policies were deductively coded and compared to the (CPSI) guidelines and Ontario's legislative requirements to assess alignment. Individual hospital policies on disclosure of critical incidents were forwarded to the researcher by the hospital ahead of informant interviews. The results of the document analysis were triangulated with the interview results to assess if the implementation factors identified by informants were also contained or referenced in the hospital policy (Creswell and Creswell 2018).

Documents and conceptual frameworks

Three documents and frameworks were used as analytic guides. The first two documents used were the CPSI's Disclosure Guidelines and Regulation 965 of Ontario's *Public Hospitals Act* (CPSI 2011; Government of Ontario 1990). The third framework used in the study was the CFIR (Damschroder et al. 2009). The CFIR identified 23 constructs within five domains of implementation: intervention characteristics; outer setting; inner setting; characteristics of individuals; and process factors. These documents and frameworks formed the basis of the deductive codes by which the quantitative interviews and documentation analysis were studied.

Results: Implementation Factors

The following section presents the findings of each hospital case study and summarizes their commonalities.

Hospital 1 (H1)

The following table (Table 1) illustrates the CFIR factors H1 considers when implementing their disclosure policy.

TABLE 1. H1 implementation factors

CFIR Domain	Results
Intervention characteristics	• The hospital uses the CPSI guidelines to inform and hold itself accountable. • The hospital is most compliant with pre-disclosure preparation meetings. • The hospital has an opportunity to improve documentation in the health record.
Outer setting	• Different patient populations may impact use of sensitive, plain language. • Multiple patient events may influence timing and methods of disclosure. • The hospital references professional colleges to help convince those who are hesitant to disclose that they are supported by a third party.
Inner setting	• The hospital's culture of putting the patient first guides most disclosure conversations, but there is variation by program and profession. • Experience in disclosure impacts sensitivity of disclosure. • The hospital's complex setting can lead to challenges in scheduling that can delay disclosure and prevent offering patients a choice in the location of disclosure.
Individual characteristics	• Different professional backgrounds within the hospital impact approaches, with social workers seeing disclosure as therapeutic, nurses seeing it as a practice component and physicians seeing it as a clinical risk management strategy.
Process factors	• The hospital rarely takes time to reflect and evaluate how well they disclose. • The hospital noted the need to provide training and support for those who do not regularly disclose.

In summary, H1 indicated its patient experience culture was the strongest factor in its ability to disclose consistently with attention to preparation, supporting the patient clinically and ensuring the disclosure conversation communicates the facts and next steps. H1 leaders reference regulatory colleges, insurance constructs and legal requirements to convince clinicians who are hesitant to disclose that they are supported by their professional bodies. H1's busy environment often leads to postponements in the incident analysis, which in turn can delay secondary disclosure. H1 recognized that different patient populations require different approaches in terms of language and culture sensitivity. Due to scheduling challenges, H1 does not consistently offer patients the opportunity to conduct the disclosure conversation at a location of their choice. This is only offered if H1 proactively notices a different location may be needed or if a patient asks. While H1 agreed that they consistently documented secondary disclosure in the hospital incident reporting system, physicians may not consistently do so in the patient's health record. H1 leaders were incongruent in whether patients should receive either an explanation of the disclosure process or incident review recommendations in writing.

Hospital 2 (H2)

The following table (Table 2) illustrates the CFIR factors H2 considers when implementing their disclosure policy.

TABLE 2. H2 implementation factors

CFIR Domain	Results
Intervention characteristics	• The hospital uses the CPSI guidelines to inform their process. • The hospital is most compliant in preplanning disclosure by ensuring role clarification. • The hospital has opportunities for improvement, including the methods used for documentation and in the use of sensitive, plain language in disclosure conversations.
Outer setting	• Different patient populations may impact the use of sensitive, plain language, especially in areas such as pediatrics and mental health. • Multiple patient events may influence timing and methods of disclosure. • The hospital noted that patient cases involving outside legal agencies and coroners lead to greater compliance with policy, especially documentation.
Inner setting	• The hospital's mission and culture of patient first guides most disclosure conversations, but there is variation by program and profession. • The hospital's busy complex setting can lead to challenges in scheduling that can delay incident analysis and timing of disclosure and prevent offering patients a choice in the location of disclosure.
Individual characteristics	• Different professional backgrounds within the hospital impact approaches. • Physicians feel the emotional burden of disclosure as the most responsible provider and leader of disclosure discussion.
Process factors	• The hospital recognizes the need to slow down the pace of disclosure discussions, as not all patients' health literacy and reactions are the same. • The hospital is considering amending its practice to explain the process of disclosure and case review recommendations to patients and families in writing. • The hospital is building an in-house wellness program to specifically support clinicians during disclosure discussions as an alternative approach to traditional employee assistance programs.

In summary, H2's strong focus on quality and practice make disclosure a priority and enables greater role clarity. H2 noted that timeliness of secondary disclosure can be impacted when incidents involve multiple patients or other outside agencies. H2 also noted that different patient populations impact the language used in disclosure, based on the observation that conversations may vary with patients of lower economic status or certain cultural backgrounds. Physician leaders at H2 experience an emotional burden in disclosure given that they are designated as the "most responsible" for the patient's care and may feel shame for the error. As a result, H2 is developing an in-house program to train and emotionally support those who disclose given that traditional employee assistance programs may not be suitable. H2 participants agreed that they consistently document secondary disclosure in the hospital incident reporting system, but do not necessarily do so in the patient's health record. H2 is supportive of issuing the details of the disclosure process and incident recommendations in writing to patients and families.

Hospital 3 (H3)

The following table (Table 3) illustrates the CFIR factors H3 considers when implementing their disclosure policy.

TABLE 3. H3 implementation factors

CFIR Domain	Results
Intervention characteristics	• The hospital uses the CPSI guideline to inform its work. • The hospital is most compliant in adopting a multidisciplinary team approach. • The hospital has opportunities to improve the timeliness of the incident analysis and disclosure discussion.
Outer setting	• Different patient populations may impact the use of sensitive, plain language, especially those with lower health literacy. • Multiple patient events may influence timing and methods of disclosure. • The hospital references professional colleges to help convince those who are hesitant to disclose that they are supported.
Inner setting	• The hospital's senior team shares a mission and culture that prioritizes disclosure conversations, but variation within programs and professions impact timeliness and the clinician's ability to use plain, sensitive language. • The hospital's complex setting can lead to delays in scheduling that can impact incident analysis and timing of disclosure and prevent offering patients a choice in the location of disclosure.
Individual characteristics	• Different professional backgrounds within the hospital impact approaches. • Physicians feel the most responsible for the emotional burden of disclosures as the leaders of the disclosure discussion. • The personal experiences of hospital leaders as patients and families themselves have led to the use of more sensitive, non-clinical language in disclosure.
Process factors	• The hospital noted that improvements could be made to preplanning in order to support clinicians and the timing of disclosure. • The hospital is open to amending its practice to explain the process of disclosure to all the patients and families in writing. In the past, this has been done when requested.

In summary, although H3 noted senior team support for disclosure, the hospital stated they often rely on legislative requirements to ensure clinicians complete disclosure. Like H1 and H2, H3's busy environment leads to unintended delays in incident analysis due to scheduling issues. H3 leaders use different language, depending on the patient population, most notably in explaining complex clinical issues to patients with lower health literacy skills. H3 reported that documentation practices improve in cases where outside agencies such as the coroner, professional colleges or legal bodies are involved in the incident review process. H3 leaders noted that their own personal experiences as either patients or family who have received difficult news have led to providing patients with more time to understand the disclosure and encouraging them to ask for more information at any time. Programs within H3 that have less experience in secondary disclosure may not use plain, culturally sensitive language in patient and family discussions. Like H2, H3's physicians feel an emotional burden in disclosure.

Cross-Case Analysis: Common Implementation Factors

The three hospitals shared similar implementation factors that cross all five CFIR domains.

Intervention characteristics

Hospitals noted that while the legislation was important, their own culture of patient engagement and the CPSI's disclosure guidelines were more influential. This was attributed to an evidence-based tool perceived to offer more clinical credibility than legislation. Hospitals complied the most with the CPSI guidelines on supporting patients clinically, preparing for disclosure, adapting to different patient populations and documenting the disclosure in corporate reporting systems. Challenges were evident in delays in completing the incident analysis; the time it took to share the results of the analysis with patients and families; the inability to offer patients a choice in where they would receive secondary disclosure – whether at the hospital, their home, a neutral location of their choice or by telephone – and inconsistent documentation of the secondary disclosure in the patient's health record.

Outer setting

Hospitals observed that both patients and health sector partners influence how they implement the guidelines and their local policy. Different patient populations by disease type impact disclosure preparation and use of plain language, but so do issues related to culture, health equity and health literacy. Hospitals also consider the difference in disclosing to a mentally competent patient compared to a guardian, a parent or an estate. To support physicians and staff who may hesitate to participate in disclosure or apologize for the fear of risk, hospitals refer the clinical staff to their professional college or insurance bodies who openly support disclosure. If outside auditing bodies such as the coroner or legal representatives are involved in a case, hospitals are more attuned to certain clauses within policies such as documentation.

Inner setting

Complex hospital environments impact implementation. The difficulty of scheduling professionals to analyze the specific critical incident, to participate in a pre-disclosure planning meeting and to attend a date that accommodates the patient often leads to delays in secondary disclosure. This is further complicated when a patient case may require input from a variety of clinical programs. Limited communication with the patient and family throughout the process can be an unintended impact of scheduling challenges. These delays lead to an assumption that the hospital is the rightful location for the secondary disclosure conversation without the patient and family being proactively asked if they wish to return to the site where the critical incident occurred. Scheduling and workload impact the most responsible physician's compliance with guidelines of documenting the post-incident analysis disclosure in the individual patient's health record.

Some programs within hospitals may be better equipped to participate in disclosure due to the nature of their service and training. Clinicians in high-risk or high-volume programs have more experience in disclosure compared to clinicians in programs where critical

incidents and professional college complaints may be less frequent. To help all physicians and staff with emotional wellness during disclosure, the hospitals noted a need for improved support programs.

Individual characteristics

All 10 informants expressed how their professional and personal backgrounds impacted their approach to disclosure. Allied health professionals viewed disclosure as a therapeutic process that takes time. Nurses viewed disclosure as an opportunity to support the patient and enhance their professional practice requirements of being open and transparent in all communication. Physician leaders admitted that while they fully support disclosure, some within their profession often approach disclosure as a clinical risk management process. Physicians also shared the emotional burden they feel given their role as the most responsible clinician. Each leader noted that their experience in disclosure has led them to self-identify their personal bias, and welcomed a multidisciplinary approach to enrich the disclosure process for patients and families.

Process factors

Hospitals rarely reflect on the effectiveness of their disclosure practices by asking patients and families how the disclosure process was received. Given that most front-line clinicians may not participate in multiple disclosure conversations in their career, there is a greater need for training of physicians and staff on how to disclose. The hospitals recognized that leaders who participate in multiple disclosures are at risk for becoming numb to individual patient experience and may accidentally treat the process as mechanical versus therapeutic. To that end, the hospitals emphasized the need for multidisciplinary teams to balance perspectives and skills sets, and ensure patient-relations staff focus on self care and personal well being.

In summary, positive factors related to implementation include organizational culture, the support of outside agencies and the involvement of a multidisciplinary team. Factors challenging implementation include the busy nature of hospital environments that lead to delays in both incident analysis and secondary disclosure conversations, the assumption that the hospital is the location where disclosure to patients should occur, inconsistent documentation practices, limited support to physicians and staff following disclosure and an inability to evaluate the effectiveness of disclosure conversations.

Hospital Policies Documentation Analysis

Following semi-structured interviews, the study's second component involved documentation analysis. The following table (Table 4) illustrates the compliance of the individual hospital policies with the CPSI disclosure guidelines and Ontario's legislative requirements.

TABLE 4. Hospital policy compliance: document analysis

CPSI Guidelines and Legislative Requirement	H1	H2	H3
Meeting immediate needs and providing support to patients	Yes	Yes	Yes
Preparing for initial disclosure	Yes	Yes	Yes
Initial disclosure	Yes	Yes	Yes
Conclusions from incident analysis	Yes	Yes	Yes
Post-analysis disclosure to patient	Yes	Yes	Yes
Documentation in health record	Yes	Yes	Yes
CPSI Implementation Considerations	**H1**	**H2**	**H3**
Emphasizes the use of clear, supportive language	No	No	No
Provides support for physicians and staff	No	Yes	No
Considers different patient populations	No	No	No
Considers multi-patient events	Yes	No	No
Offers written documentation for patients and families	No	No	No
Offers patients a choice in location or method	No	No	No
Addresses the need to train staff and physicians	Yes	No	No
Addresses the need to evaluate disclosure effectiveness	Yes	No	No
References other supportive professional bodies	Yes	Yes	Yes

Each hospital's disclosure policy includes the main components of the CPSI guidelines and all legislative requirements. However, there is an inconsistency between the implementation factors and the opportunities for improvement as pointed out by our informants. H1 identified a need to improve training for and evaluation of disclosure despite these two clauses already being in their policy. H2's policy already stated the need to support physicians and staff; however, H2 leaders identified this was not implemented consistently, and as a result, they were building an internal support program versus contracting a third party. H3's policy does not cover most of the implementation considerations, but its policy was the only one that identified the patient as having the right to refuse the opportunity for disclosure. While all hospital policies referenced other supportive professional bodies, they primarily did so only in terms of physician-based organizations versus other professional bodies such as nursing or allied health colleges and insurance or legal representatives.

Implications and Recommendations

This study identifies hospitals' general ability to implement disclosure of critical incidents to patients and families, but some variations do exist. The following improvements should be considered with respect to disclosure guidelines and local hospital policy changes.

Include multidisciplinary backgrounds in disclosure teams

To ensure that disclosure conversations are adaptable to different patient populations and use culturally sensitive language, hospitals should ensure the professional backgrounds of those

disclosing are multidisciplinary. This will not only aid the patient and family in better understanding the incident but create a supportive environment for the clinicians leading the discussion.

Proactively offer patients a location choice

While the hospitals stated that they had conducted secondary disclosure conversations at settings other than the hospital in question, the default location was consistently the hospital unless otherwise asked by the patient or family. To empower patients and families to feel comfortable in receiving secondary disclosure and participating in difficult conversations, policies should consider mandating the question that asks all patients and families where they wish to hold such discussions, be it at the hospital, their home, a neutral location of their choice or by video or telephone.

Improve the timeliness of incident reviews and secondary disclosure

Ontario's regulation requires that secondary disclosure should occur within a time frame that is practicable given that clinical reviews are complicated matters. The hospitals, however, noted that their complex environments could lead to unreasonable scheduling delays. As a result, hospitals should find innovative ways to improve the timeliness of incident reviews to better support patients and families.

Issue disclosure summaries to patients and families in writing

To help patients and families understand that critical incident reviews can often take time, future guidelines and local hospital policies should consider the benefits and challenges associated with requiring hospitals to explain the critical incident review process and share post-incident analysis recommendations with patients and families in writing.

Identify supports for those participating in disclosure

In addition to supporting patient and family well-being, hospitals should provide improved support for physicians and staff both in preparing for and after disclosure given the emotional burden of disclosing critical incidents to patients and families.

Reference supportive external partners, agencies and networks

To encourage clinicians who may be hesitant to disclose, local hospital policies should reference all supportive external partners, agencies and networks such as professional colleges, quality and patient safety institutes, insurance and legal networks, and patient and family associations.

Limitations

This study has two limitations. First, its methodology does not include the perspectives of patients and families who are on the receiving end of secondary disclosure discussions. While

this was designed to study the implementation factors of those hospital leaders preparing to disclose, future studies that examine the effectiveness of disclosure should include patients and families within their sample. Secondly, as an exploratory qualitative case study, the findings are not expected to be generalizable across Canada due to the different legislative and policy environments across the country.

Conclusion

Using the CFIR, this multiple-case study has found that Ontario hospitals report a consistent approach to implementing secondary disclosure guidelines due to positive factors such as organizational culture, the support of outside agencies and the involvement of multidisciplinary teams. However, there remain variations in certain circumstances due to complex work environments, increasingly diverse patient populations and the impact of professional backgrounds on the delivery of disclosure conversations. As a result, hospitals should advance secondary disclosure by reducing the time it takes to complete incident analysis, improving documentation and enhancing support to clinicians who may experience emotional stress as a result of the process. Similarly, health policy makers and hospital leaders should engage patients and providers in investigating the benefits and challenges of issuing disclosure in writing and enabling patients to choose the location where they receive disclosure as improvements to current guidelines, hospital policies and legislation.

Correspondence may be directed to: Michael Heenan. He can be reached by e-mail at heenanmi@mcmaster.ca.

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