



DELIVERY IN FOCUS: Strengthening obstetrical care in Canada

10-YEAR REVIEW OF CMPA AND HIROC DATA-SUMMARY REPORT

BACKGROUND

Obstetrical patient safety incidents, while infrequent, have a significant impact on patients and families, healthcare providers, the healthcare system, and society. As such, obstetrical practice is considered an area of high medico-legal risk. In October 2016, the Canadian Medical Protective Association (CMPA) and the Healthcare Insurance Reciprocal of Canada (HIROC) co-created the report *Obstetrics Services in Canada: Advancing Quality and Strengthening Safety*¹, with Accreditation Canada and Salus Global Corporation. During this collaboration, the CMPA and HIROC recognized each had a medico-legal database that had the potential to advance patient safety knowledge and embarked on a collaborative joint analysis of obstetrical medico-legal cases.

OBJECTIVES

The CMPA and HIROC undertook a retrospective analysis of obstetrical cases to:

- · identify contributing factors to obstetrical incidents
- support learning
- strengthen patient safety

RESULTS

- The analysis identified 288 CMPA and 403 HIROC medico-legal cases, involving an obstetrical incident that occurred between 2004-2013. CMPA cases were closed at the time of analysis, whereas HIROC included open claims.
- Physicians were involved in all CMPA cases, and nurses in 35% of cases. HIROC reported physician involvement in 81% of cases, with 79% involving nurses and other healthcare providers, e.g. respiratory therapists.
- Severe maternal outcomes, (7% CMPA; 9% HIROC) and maternal deaths (7% CMPA; 4% HIROC) were similar and often related to cerebral hemorrhage, amniotic fluid emboli, and hypovolemic shock.
- Major and catastrophic neonatal outcomes, e.g. spastic quadriplegia and global development delay, made up a larger proportion of HIROC cases (61% vs 24%), whereas CMPA had a higher percentage of cases that involved neonatal death (22% vs 9%).
- Incidents occurred in more than one phase of care in 24% of CMPA cases and 40% of HIROC cases. The majority of cases involved intrapartum delivery issues for both groups (45% vs 34% respectively), and was often an evolving clinical situation that led to a patient safety incident.
- For those cases with an obstetrical incident, provider factors were the largest category of contributing factors (Tables 1 and 2). Two key themes for both groups were provider decisionmaking, including a lack of situational awareness, and team communication. System issues included inadequate processes and protocols, second-on-call contingency plans, and resourcing issues.

TABLE 1.

CONTRIBUTING FACTORS TO OBSTETRICAL INCIDENTS, CMPA OBSTETRICAL CASES 2004–2013 (N=288)

Type of factor	No. (%) of cases
Provider*	160 (55.6)
Team†	85 (29.5)
System	19 (6.6)

Note: Cases usually involve multiple contributing factors, which are often overlapping.

* Provider includes physicians, nurses, and other healthcare providers.

†Team includes communication and consent issues for all healthcare providers, including physicians.

TABLE 2.

CONTRIBUTING FACTORS TO OBSTETRICAL INCIDENTS, HIROC OBSTETRICAL CASES 2004–2013 (N=403)

Type of factor	No. (%) of cases
Physician	284 (70.5)
Non-physician healthcare provider*	236 (58.6)
System	130 (32.3)

Note: Cases usually involve multiple contributing factors, which are often overlapping.

*Non-physician healthcare providers include nurses and other healthcare providers (e.g. respiratory therapists).

 Fetal surveillance and induction and augmentation of labour with oxytocin were the two highest shared risk areas of the five identified (Figures 1 and 2). A single case may involve more than one high-risk area.

FIGURE 1.

AREAS OF PRACTICE AT HIGH-RISK, CMPA OBSTETRICAL CASES 2004–2013 (N=288)



Note: A single case may involve more than one high-risk area.

FIGURE 2.

AREAS OF PRACTICE AT HIGH-RISK, HIROC OBSTETRICAL CASES 2004–2013 (N=403)



Note: A single case may involve more than one high-risk area.

STRATEGIES ARISING FROM THIS ANALYSIS

In sharing our complementary analyses, CMPA and HIROC developed the following strategies to improve quality and safety of obstetrical services.

Clinical decision-making by providers

- Adopt human factors strategies to identify and reduce errors in clinical decision-making.
 - Cognitive biases
 - System issues
- Facilitate and encourage simulation training and drills to acquire and maintain the following:
 - team-shared situational awareness
 - effective communication
 - crisis response
- Team communication
- Use standardized documentation to strengthen communication.
- Speak up with team members about deteriorating patient condition.
 - Enhances team situational awareness
 - Confirms team recognizes urgency

System issues

- Foster a culture of safety which encourages:
 - Effective teamwork
 - Speaking up
 - Interprofessional education
- Develop and encourage team escalation strategies for clinical concerns.
- Create, update, and evaluate policies such that:
 - Standardized protocols are effectively implemented
 - Regular review and training is encouraged
 - Policy adherence is measured
 - Quality improvement activities are ongoing

Aside from sharing two common risk areas—intrapartum fetal surveillance and the induction or augmentation of labour with oxytocin—HIROC and CMPA data identified three main factors that contributed to obstetrical patient safety incidents: provider clinical decision-making, team communication, and system issues.

The CMPA and HIROC concluded that patient safety activities and risk mitigation strategies should focus on training aimed at improving clinical decision-making and team communication. Furthermore, system changes should include the use of standardized and reliable care processes, as well as the development of a culture that encourages effective teamwork.

NOTE:

1. Obstetrics Services in Canada: Advancing Quality and Strengthening Safety is a collaborative report by Accreditation Canada, the Healthcare Insurance Reciprocal of Canada (HIROC), the Canadian Medical Protective Association (CMPA), and Salus Global Corporation. It profiles the quality and safety of obstetrics services in Canada from 2004 to 2015 and was published 2016.

For information on methods, limitations, and a detailed analysis of the results, see the full report *Delivery in focus: Strengthening obstetrical care in Canada.*

Ce document est aussi disponible en français.

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