Implementing BC Patient Safety & Learning System: A Centralized Approach to Provincial Spread and Adoption

Annemarie Taylor, Doug Cochrane, Manish Bharadwaj, Michelle Preston, Dean Bruce, Inderpal Chani, Linda Cumming, Darren Frizzell, Jyoti Ladhar, Laura Cook and Patrick Devine

Background

A robust adverse event reporting and learning system is foundational to a comprehensive patient safety program. Electronic tools can remove barriers to reporting created by paper-based systems, and a patient safety-focused approach to implementation can remove other barriers by fostering safety culture. However, implementation can be expensive and time-consuming and the expertise needed to achieve adoption is not always available. We have taken steps to address these challenges in our provincial implementation of the BC Patient Safety & Learning System (BCPSLS).

Healthcare Administration in BC

BC is divided into six health authorities (HA), five of which - Fraser, Interior, Northern, Vancouver Coastal and Vancouver Island - are geographically defined. The sixth, Provincial Health Services Authority, administers specialty services throughout the Province.

Figure 1. Areas covered by the five geographic health authorities.

Objective

Can a centralized implementation approach effectively achieve system adoption by diverse, geographically distributed users?

Methods

Between 2007 and 2009, five of the six HAs began to implement BCPSLS. Each was assigned a Project Manager and Configuration Analyst from our Central Team. Other members of our multi-disciplinary group provided overall vision, leadership, change management, technical expertise, training and communications support. We used implementation as a 'culture carrier' - a change initiative aimed at increasing awareness and fostering safety culture. We combined rigorous project management with an iterative quality improvement model to engage HA leaders and staff and transferred knowledge and ownership over several implementations.

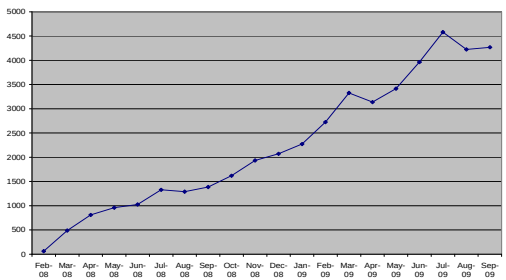

Figure 2. Number of new reports per month. The number of safety event reports in the provincial database has steadily increased since February 2008, as shown by this line graph. The database now holds nearly 45,000 records with an average of 150 new events reported daily.

Results

BCPSLS has been adopted by a large segment of the province's healthcare sector in acute care, residential and community settings. Reporting volumes have steadily increased (Figure 2) and an average of 150 event reports are received daily. The provincial database now holds nearly 45,000 records. Each HA is taking responsibility for any remaining implementation work, ongoing sustainment and growth, while maintaining connections to our Central Team. Engagement remains strong, as demonstrated by active participation by all HAs on our governance and advisory committees and working groups. Implementation planning with the sixth and final HA has begun.

We have learned that although each HA is different, success requires that certain steps always be taken before system implementation begins. Specifically:

- develop an understanding of organizational and safety culture
- tailor plans based on leadership awareness and engagement, organizational readiness and unique learning needs of various user groups
- use a targeted campaign approach to communications to raise awareness and foster engagement.

Discussion

Our centralized model effectively promoted adoption of BCPSLS to diverse HAs across the province. Our deliberate approach to engagement and knowledge transfer set the stage for further spread and sustainable change. Our use of implementation as a 'culture carrier' fostered safety culture.

Others undertaking similar work should consider the benefits of a centralized model, particularly in terms of consistency of approach, optimal, cost-effective use of expert resources and the potential for rapid spread. The importance of assessing organizational culture and change readiness prior to beginning cannot be stressed enough, and time must be allocated to allow these assessments to be undertaken. This approach requires significant effort before the first Go Live, after which progress is rapid. Expectations should be aligned accordingly.

Acknowledgements

The authors would like to thank the many people in the BC Health Authorities who are helping us make BCPSLS a relevant and useful patient safety tool. Funding for BCPSLS has been provided by the BC Ministry of Health Services, the participating Health Authorities and Canada Health Infoway.

References

WHO Draft Guidelines for Adverse Event Reporting and Learning Systems (World Alliance for Patient Safety, 2005)