The New Brunswick Trauma Program: A model of inclusivity

New Brunswick, Canada's only officially bilingual province, has a population of approximately 730,000 people and covers a geographical area of 71,355 square kilometres (Statistics Canada, 2007). The provision of quality trauma care for all citizens of such a diverse province is a daunting task.



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The New Brunswick (NB)

Trauma Program was created in 2010 as a formalized partnership between the NB Department of Health, Horizon Health Network, Vitalité Health Network, and Ambulance New Brunswick with a mandate to develop and implement a comprehensive system of trauma care, injury prevention, education, and research to serve the needs of trauma patients from across the province. A total of 19 trauma centres in New Brunswick are included in the system's design, ranging from 11 smaller, rural hospitals (Level V) to the province's two major trauma centres. The inclusion of all acute care hospitals, the shared ownership of the program, and the program's extensive scope are what set apart the NB Trauma Program from other systems in Canada.

Achievements to date

The majority of New Brunswick's population lives in rural areas, which introduces the need for prolonged trauma transfers before reaching definitive care. To help expedite both the decision-making process and the logistics associated with trauma transfers, one early objective of the NB Trauma Program was to implement provincially standardized Trauma Transfer Guidelines and a supporting Toll Free Trauma Referral System. Coupled with a provincially binding Guaranteed Access policy of major trauma patients, this system provides smaller trauma centres with immediate, 24/7 access to a provincial trauma control physician to offer clinical support and a destination decision. Fully integrated with the provincial EMS communications centre, staff at Ambulance NB is able to immediately (and automatically) dispatch a paramedic crew to transfer the patient.

The system has resulted in tangible and sustained improvements in access to trauma care across the province. Every call is recorded, and a rigorous quality improvement program reviews the timing, participants and processes applied during each trauma transfer call. Since April 2011, the average interval from arrival at a small trauma centre to arrival at a large centre has been reduced to four hours and 47 minutes.

Recognizing that trauma patients are best served by being transported directly to the trauma centre that is most appropriately staffed and equipped to manage their needs, the NB Trauma Program has also developed a provincially standardized tool called Field Trauma Triage (FTT) for use by all Ambulance NB

paramedics. The FTT guidelines apply the best available evidence to ensure those with a significant risk of major injury are transported directly to a Level III, II or I Trauma Centre.

The program has also led multiple interdisciplinary, interhospital case reviews in which the trauma care and transfer processes for major trauma patients who are transferred to other hospitals for definitive care is reviewed in detail by all those involved, including physicians, nurses, and paramedics regardless of where the patient first presented. These case



reviews are summarized to create three key recommendations, which are then given to people best suited to implement the recommendations. Case review findings are logged by the NB Trauma Program to allow early identification of trends that require more global resolution.

Next steps

Data collection, analysis and resulting changes in practice are integral to the continued success of the NB Trauma Program. An enhanced dataset is currently being collected from the province's Level I and II-designated trauma centre, with nationally defined data elements being used to also help populate the National Trauma Registry. This year, data collection is also starting from Level III trauma centres for both admitted and non-admitted trauma patients, which will help paint an accurate picture of the true burden of injury in New Brunswick. More importantly, these data are being used to help identify areas for improvement in the processes of care, as well as help direct continuing education and public primary prevention activities across New Brunswick.

Trauma Notes, which had previously been used in one New Brunswick facility, are being piloted at other provincial institutions. Once the pilot is complete and feedback is considered, the next step is provincial implementation, in both English and French.

The program is mindful of the requirements of the Trauma Association of Canada, the accrediting body for all trauma

systems in the country. With revised accreditation guidelines released in June 2011, the program is well positioned to invite a province-wide system accreditation visit within the next two years.

Summary

The NB Trauma Program has made sizable strides in decreasing the burden of injury for residents of New Brunswick. The benefits of initiatives such as field trauma triage, a guaranteed access policy for major trauma patients, and the implementation of trauma transfer guidelines are already apparent. Ongoing data collection, analysis and resulting continuous improvements ensure the provision of quality trauma care for all New Brunswickers.

About the author



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