Success factors for improving the trauma care network in Québec (Canada)

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1. Context

Prior to 1992, the Traumatology Services Continuum (TSC) in Québec (Canada) did not exist. Suboptimal care was delivered to individuals who sustained traumas such as brain and spinal cord injuries, or multiple traumas.

2. Problem

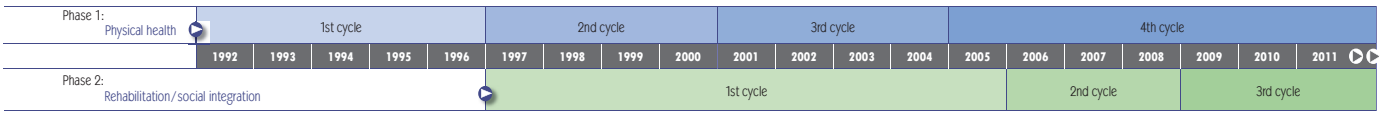
Organized care was poorly structured and integrated, and was especially lacking in quality evaluation mechanisms and in culture of evaluation. Indeed, trauma care did not meet quality standards and patients received variable standards of care and experienced long transfer delays. The end results were a high level of morbidity and mortality for trauma patients.

3. Problem assessment

- Hospitals turned patients away.
- No hospital was officially designated as a trauma centre.
- Patients' health deteriorated.
- Patients received non-specialized care.
- 52% of severe trauma patients died.
- Transfer delays to rehabilitation were very long.

4. Change strategy

- The Ministère de la Santé et des Services sociaux (MSSS) mandated the Société de l'assurance automobile du Québec (SAAQ) to organize the province's trauma care network.
- A Trauma Care Advisory Group (TCAG) (physical health component -1992, rehabilitation/social integration component -1999) including expert care providers, managers, policy-makers and opinion leaders, was created.
- Implementation of a Quality Assurance (QA) Program.



5. Results

Starting in 1992, the Trauma Services Continuum (TSC) began to gradually implement a system organized by region.

- 73 care facilities designated as trauma centres with a direct link to ambulance services
- Care organized hierarchically and by region across Québec
- Service agreements with no right of refusal and no delays
- Trauma registry and information system implemented
- Quality improvement program with external audits of care facilities

Starting in 1997, the rehabilitation component and the consortium concept were integrated into the TSC.

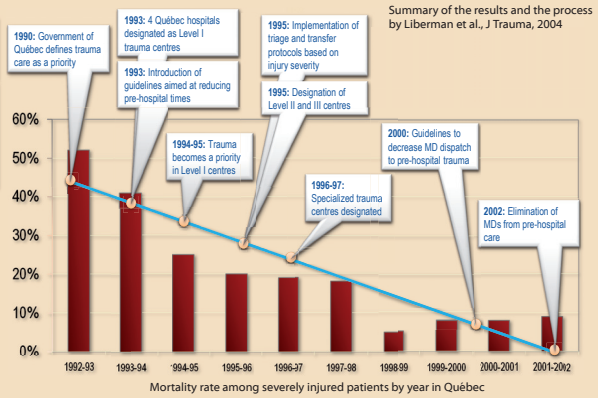
- 10 rehabilitation services designated for post-acute care (integrated into neuro-trauma centres)
- 18 rehabilitation centres designated for rehabilitation/social integration)
- 21 regional and inter-regional consortiums for patients with moderate to severe traumatic brain injuries
- Expert care centres for spinal cord injuries (2), severe burn victims (2), emergency revascularization surgery (1)
- Quality improvement program with external audits for rehabilitation facilities, consortiums and expert care

6. Improvement measurement

- Assessment through visits by external auditors (TCAGs) providing reports with recommendations for designation
- Scientific studies
- Québec auditor general's assessment of the continuum for people with moderate to acute injuries (2005)
- Award of excellence in the public service category, granted by Québec's institute of public administration, for the quality of its work (2006)

7. Effects of changes

- Mortality rate among victims with serious injuries (ISS > 12) fell from **52%** in 1992 to **8,6%** in 2002.
- Waiting times for transfers to rehabilitation centres dropped from **more than 30-days** (1997) to **less than 5 days** (2008)- TCAG (rehabilitation/social integration component).
- A **15-day reduction** in acute care leads to a **34-day reduction** in rehabilitation with improved prognosis - Sirois et al., Arch Phys Med Rehab, 2004.
- Nearly **100%** of the recommendations by the two TCAGs were applied by the MSSS.
- **Best practices** recognized by Québec's auditor general (2005) and Québec's institute of public administration (2006).
- Formation of **consortiums** created a synergy between healthcare, rehabilitation and social integration.



Lessons learned

- Leadership
- Gradual implementation
- Clear allocation of responsibilities and a well-organized process
- Mechanisms for concerted action, coordination and follow-up
- Stakeholders' commitment
- Accessibility and continuity in service delivery
- Implementation of bidirectional communication and bridging mechanisms between stakeholders
- Availability of clinical information and a rapid and seamless flow of information
- Sharing of protocols based on known practices or evidence
- Continuous quality improvement system
- Alliance with research community

New development

- At the end of 2008, the Trauma Quality Improvement Program was transferred from the Société de l'assurance automobile du Québec (SAAQ) to AETMIS and then to the new Institut national d'excellence en santé et en services sociaux (INESSS).

Key messages

- Implementation of networks
- Communication mechanisms
- Implementation of interfaces between parties involved, through the establishment of service corridors and the monitoring of service agreements
- Concerted efforts of parties involved in coordinating bodies
- Quality improvement program through external audits
- Strong and constant leadership

Web site

www.fecst.gouv.qc.ca

The TSC is the organizational model for trauma care in Québec. It consists of 14 components in 5 fields of intervention.