Access to Trauma Systems

The Canadian Experience
Trauma in Medicine Defined

- Serious bodily injury or shock as from violence or accident.
- An emotional wound or shock that creates substantial lasting damage to one’s psychological development, often leading to neurosis, i.e. child abuse, rape or PTSD.
Background

- Trauma is the leading cause of morbidity, potential years of life lost and health care expenditure (among the most expensive).
- Systems are established to provide comprehensive injury care and to lead injury control efforts.
- Significant structure variations/disparities and access exist in rural and remote communities.
Trauma System Concept

A fully comprehensive and inclusive trauma system is a preplanned, organized and coordinated injury control effort in a defined geographic area which:

- Has an identifiable lead agency
- Publicly administered, funded and accountable
- Engages in comprehensive injury surveillance, reporting and prevention programs
- Delivers the full spectrum of trauma care from the time of injury to recovery
- Engages in research, training, and performance improvement
- Establishes linkages with an all hazards emergency preparedness program.
Level of Care

1. Central role in the provincial trauma system, and majority of tertiary/quaternary major trauma care in the system. Academic leadership, teaching, research program

2. Provides care for major trauma. Some trauma training and outreach programs. Similar to Level I without academic and research programs

3. Provides initial care for major trauma patients and transfers patients in need of complex care to Levels I and II trauma centers

4. Major urban hospital with a nearby major trauma centre (Levels I–III). Does large volume of secondary trauma care. Bypass and triage protocols are in place diverting major trauma patients to level I and II centers

5. Small rural community hospitals or treatment facilities with little to no immediate access to Level I, II, or III Trauma Centers. Most trauma patients are stabilized, if possible and rapidly transferred to higher level trauma care

Available at:
http://www.traumacanada.org/accreditation committee/Accreditation
Case Study

A bus rolled over on a slippery wet road on the way to Peterborough, an hour away from Toronto. Someone activated the emergency call #911. Call is dispatched to the police, firemen and the EMS. The EMS triaged the wounded. Those wounded but could be managed at the nearest hospital were directed there. 2 passengers with critical injuries were airlifted to a level 1 trauma centre.
Trauma Care Road Map

- 911
- EMS, police, fire dept. Triage: ABCD
  
  Stable: to local area/ level 5-4
  Critical: to Level 3-1/ water, air or land ambulance

Trauma leader Mobilizes trauma team/ OR/ ICU
Link with other agencies for further management and rehabilitation.

(agreement)

The Trauma Assoc of Canada (TAC) deals with accreditation and guidelines; while until 2014, the National Trauma Registry (NTR) logged data of trauma incidents in the country for research, further improvement and prevention.
In the Realm of EMS

- There is NO NEXT TIME
- There is NO SECOND TIME
- There is NO TIME OUT
Trauma Team

- Well trained team of first responders, surgeons, anaesthetists and nurses with 24/7 access to CT scans, OR, blood transfusions (in Canada: from the sub artic to the USA border)
Steps

- Triage by EMS personnel (bring right patient to the right hospital) **Not One Size Fits All!**

- Aim of EMS:
  - Right patient- right place – right time (golden hour)-every time
Emergency Preparedness
(Community Driven Exercises)

- Aims to practice grassroots volunteers and residents on how to mobilize their resources and deal with large scale emergencies within the neighbourhood. (coop.fed/ prov/municipal) through mock disasters
  - 911
  - BCLS/ ACLS (Seattle Experience)
Avery Nathens on Access to Trauma Care in Ontario

https://www.youtube.com/watch?v=Cyhm8b2b6I0
SCIENCE:
MORE THAN A WILD ASS GUESS
Thank you for listening

- "(Ladies and) Gentlemen, we must, indeed, all hang together or most assuredly, we will all hang separately".
  - Benjamin Franklin
The BIBAK Toronto Organization under the leadership of Theresa Cadiogan-Gamsawen and the Mountain Province Organization of Canada under Cleofe Wadasen-Bangsoy send the IGO and the Mountain Province greetings and best wishes for a successful and productive conference and Lang-ay.

Gawis ay Mountain Province.
Matagotago tako.