

Regional Trauma Network Development

A Tale of Two Pilots: Ottawa and Hamilton

Presented by Alanna Keenan and Barbara Klassen
Trauma Association of Canada Annual Conference
April 11, 2015



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Acknowledgment

- Critical Care Service Ontario (CCSO)
- Ontario Trauma Advisory Committee
- Our Lead Trauma Hospital Teams



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ONTARIO LEAD TRAUMA HOSPITALS: REFERRAL BOUNDARIES FOR ADULT PATIENT TRANSFERS



- 1 Hotel Dieu Grace Hospital, Windsor**
- 2 London Health Sciences Centre**
- 3 Hamilton Health Sciences**
- 4 St. Michael's Hospital, Toronto**
- 5 Sunnybrook & Women's College Hospital, Toronto**
- 6 Kingston General Hospital**
- 7 The Ottawa Hospital**
- 8 Sudbury Regional Hospital**
- 9 Thunder Bay Regional Hospital**



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Regional Trauma Network Pilot Sites

- OTAC developed working groups to advance trauma systems in Ontario
- July 2013: Advisory Panel for Regional System Development
- August 2013: Hamilton and Ottawa were identified as Regional Trauma Network (RTN) Pilot Sites



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Characteristics of Pilot Sites

Both LTHs cover a large geographic area (3x PEI),
with urban and rural populations

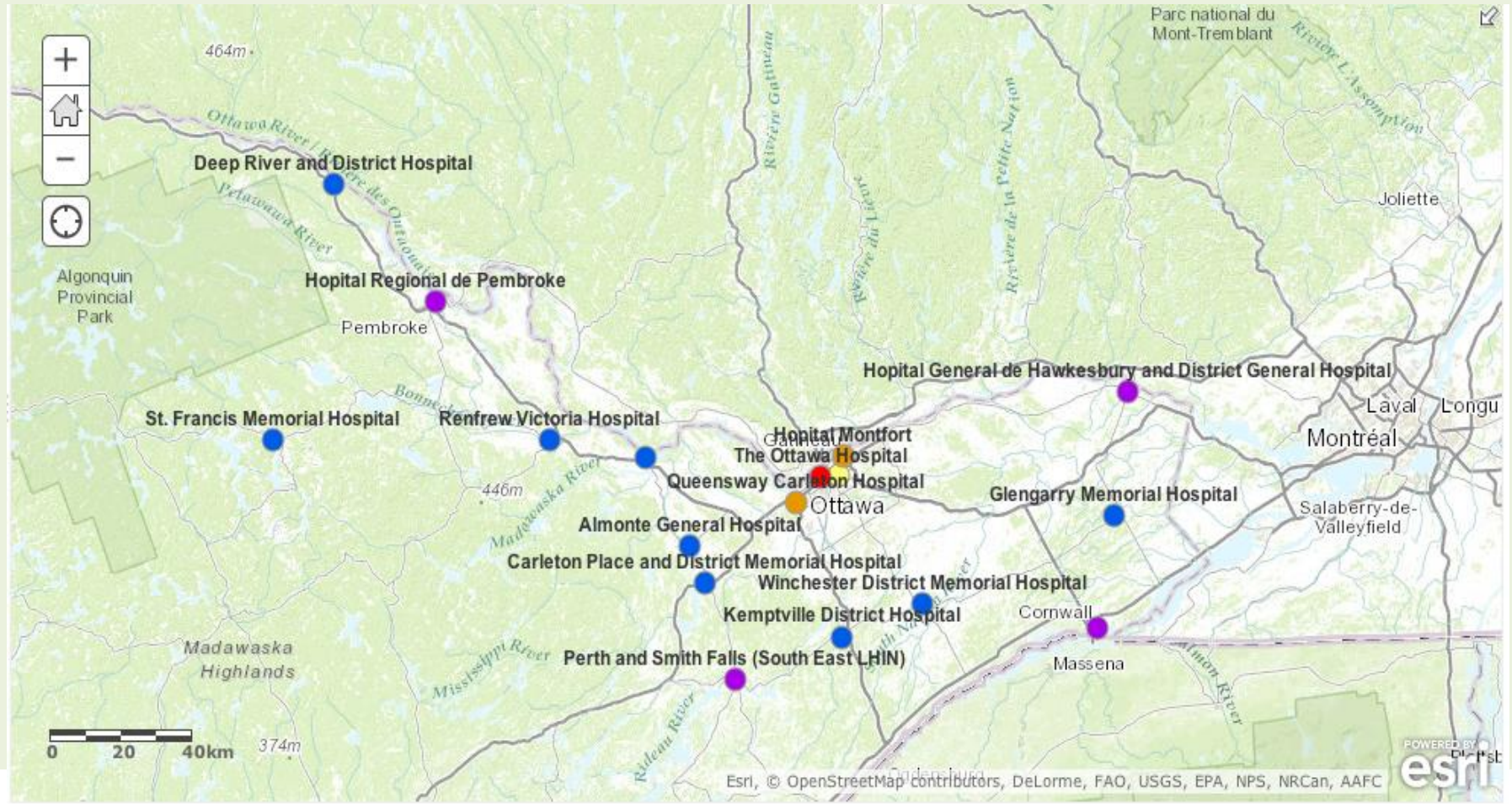
Ottawa	Hamilton
<ul style="list-style-type: none">• One LHIN	<ul style="list-style-type: none">• Three LHINs
<ul style="list-style-type: none">• Greater than 2.5 hours to nearest LTH• Borders Quebec	<ul style="list-style-type: none">• Close proximity to several LTHs• Borders USA
<ul style="list-style-type: none">• Informal yet broad network in place	<ul style="list-style-type: none">• Very informal regional network
<ul style="list-style-type: none">• Site Visits (13 of 15 visited between 2011 -2013)	<ul style="list-style-type: none">• Outreach education/support offered to community hospitals (1 - 4 / year)
<ul style="list-style-type: none">• Annual regional conference, annual Trauma day for nurses, trauma courses (ACTN and TNCC) offered	<ul style="list-style-type: none">• Two annual regional conferences (MD and Multi-disciplinary), trauma course (ATCN) offered
<ul style="list-style-type: none">• Regional Trauma Team Development Course initiated in February 2013 (6 sites completed)	<ul style="list-style-type: none">• Regional trauma education rounds (3/monthly via OTN)
<ul style="list-style-type: none">• Prevention focused on adolescents / PARTY (weekly)	<ul style="list-style-type: none">• Prevention focused on adolescents / CHAT (bi-annual)

Hamilton/GTA and Surrounding LHIN Regions



Source: Critical Care Services Ontario B. Lawless

Ottawa LHIN Region



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Comparison of Site Demographics and Resources

Ottawa	Hamilton
<ul style="list-style-type: none"> • Level 1 Trauma Center 	<ul style="list-style-type: none"> • Level 1 & 2 Trauma Center
<ul style="list-style-type: none"> • Adult Hospital 	<ul style="list-style-type: none"> • Adult and Pediatric hospitals
<ul style="list-style-type: none"> • Approximately 1.2 million people 	<ul style="list-style-type: none"> • Approximately 2.5 million people
<ul style="list-style-type: none"> • Involvement of 1 LHIN 	<ul style="list-style-type: none"> • Involvement of 3 LHINs
<ul style="list-style-type: none"> • CHEO - Pediatric LTH Intra-city 	<ul style="list-style-type: none"> • MCH - Pediatric Trauma Center
<ul style="list-style-type: none"> • Burns transferred to Montreal or Toronto 	<ul style="list-style-type: none"> • Burn Trauma Center
<ul style="list-style-type: none"> • 1 Rehabilitation Center 	<ul style="list-style-type: none"> • 3 Rehabilitation Centers
<ul style="list-style-type: none"> • 5 Paramedic Services 	<ul style="list-style-type: none"> • 9 Paramedic Services
<ul style="list-style-type: none"> • 2 Central Ambulance Communication Centers 	<ul style="list-style-type: none"> • 4 Central Ambulance Communication Centers
<ul style="list-style-type: none"> • 1 Provincial Air Ambulance Service 	<ul style="list-style-type: none"> • 1 Provincial Air Ambulance Service
<ul style="list-style-type: none"> • 1 Provincial CritiCall System 	<ul style="list-style-type: none"> • 1 Provincial CritiCall System

Comparison of Trauma Data

Ottawa	Hamilton
<ul style="list-style-type: none"> Trauma Registry 2013/14 	<ul style="list-style-type: none"> Trauma Registry 2013/14
<ul style="list-style-type: none"> Reportable Cases: 649 <ul style="list-style-type: none"> Adult: 643 (6 Peds) Pediatric (CHEO): 54 	<ul style="list-style-type: none"> Reportable Cases: 973 <ul style="list-style-type: none"> Adult: 896 Pediatric: 77 (MCH)
<ul style="list-style-type: none"> TTA Cases: 199 (31%) <ul style="list-style-type: none"> Adult: 197 (2 Peds) Pediatric (CHEO): 17 	<ul style="list-style-type: none"> TTA Cases: 720 <ul style="list-style-type: none"> Adult: 658 (19 Peds) Pediatric (MCH): 62
<ul style="list-style-type: none"> Transferred from Community Hospitals 42% 	<ul style="list-style-type: none"> Transferred from Community Hospitals 51%
<ul style="list-style-type: none"> Transported by Air 12% 	<ul style="list-style-type: none"> Transported by Air 12.6%

Context of LHIN Referral Hospitals and LTH Staffing Resources

Ottawa

15 Community Hospitals:

Level 2: 2

Level 3: 4

Level 4: 0

Level 5: 9

- **1.0 FTE Trauma APN** reports to Director of Surgery
- **1.0 FTE Trauma Coordinator**
- **0.6 FTE Injury Prevention Coordinator**
- **1.0 FTE Data Analyst**
- **0.6 FTE Administrative Assistant**
- All report to Trauma APN

Hamilton

22 Community Hospitals:

Level 2: 1 (MCH)

Level 3: 5

Level 4: 3

Level 5: 5

No Level Reported: 9

- **1.0 Trauma Coordinator / Injury Prevention:** reports to Director of Critical Care/ED/Acute Medicine
- **1.0 FTE Nurse Clinician**
- **1.7 FTE Data Analysts**
- **0.7 FTE Senior Analyst/Research Analyst**
- **0.6 FTE Administrative Assistant**

CCSO Support

- Provincial direction and support
- Development of framework for RTN
 - Templates for Terms of Reference, Membership, Agenda
- Administrative support
- Financial – travel/parking, refreshments, etc



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Starting the Process

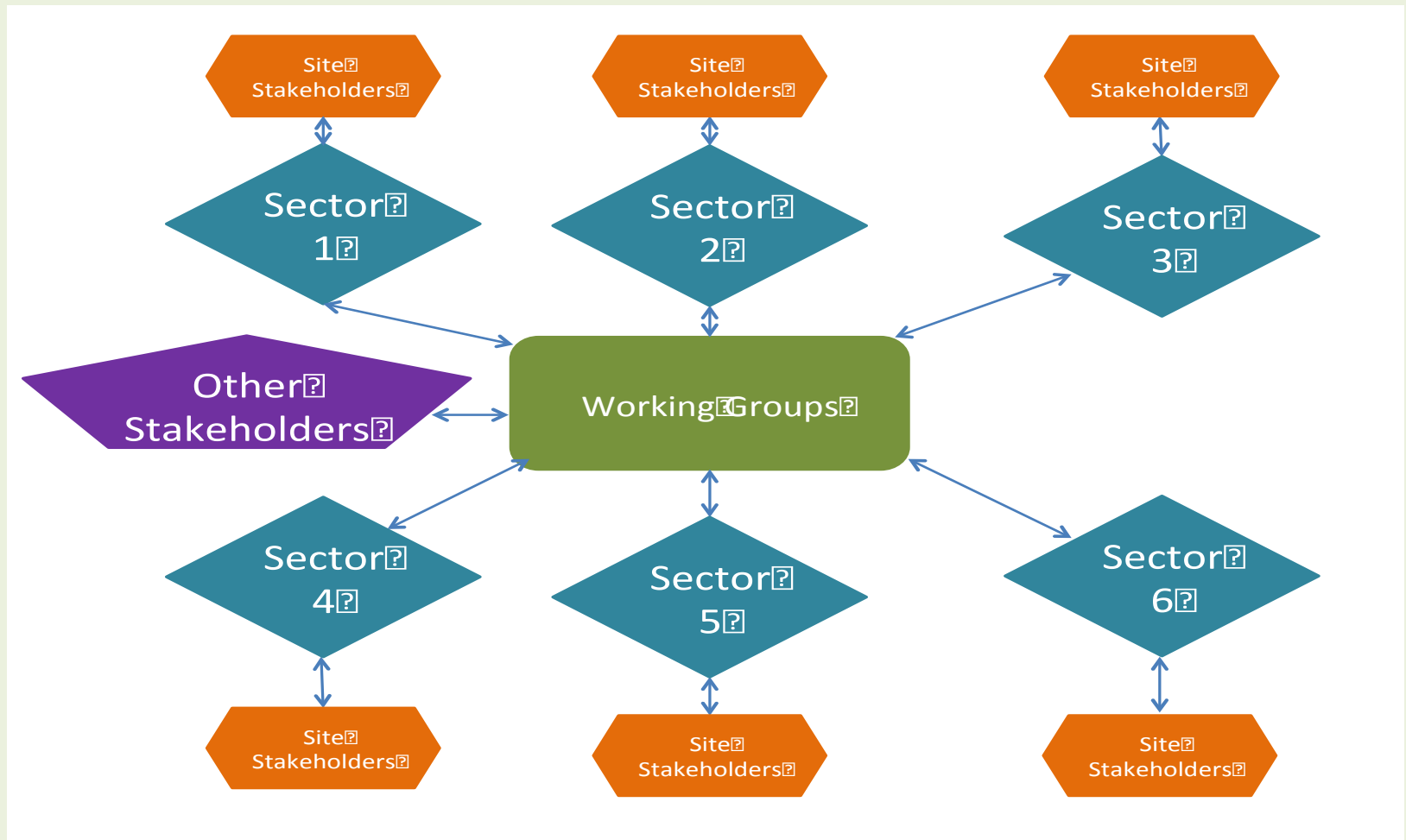
Ottawa

- Co-Chairs: Trauma APN / Trauma Coordinator
- Broad grassroots approach – Open invitation to all 15 referral sites to attend first meeting
- Hub and Spoke model: 6 hospital sectors identified, based on preexisting geographic and cultural linkages
 - at least one senior administrator
 - one physician
 - one clinical representative

Hamilton

- Chair: LTH president
- Invitation to representatives from higher volume referral hospitals
- Hub and spoke model: based on existing LHINs
 - two senior administrator
 - two physicianLHIN 6 (Halton only)
One senior administrator/one physician

Ottawa Working Groups



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Hamilton Health Sciences

Inaugural Meeting

Ottawa

- 50 in attendance. Representation from each community hospital (1 to 4 individuals per site)
- 40% regional hospital representation, 20% stakeholders, LTH/CCSO: 40%

- Round table discussions on regional issues

- Identification of regional challenges

Hamilton

- 20 in attendance (27 invited)
- 37% regional hospital representation, 33% stakeholders, LTH/CCSO: 30%

- Large group discussion on regional system issues

- Review current state of regional trauma system through matrix presentations from LTH, Ornge, EMS and CritiCall
- Questionnaire distributed to members

Subsequent Meetings

Ottawa

- Prioritization of new projects:
 - Massive transfusion protocol
 - Standardized Trauma resuscitation documentation
 - Standardized transfer documentation

- 3 Working Group teams established
 - 5-8 members per team
- Work Group Leads identified for each of the projects

- Communication strategy - SharePoint

Hamilton

- Based on the discussions from inaugural meeting, transportation challenges became a focus
 - Modified Scene transport
 - Cross border trauma transfers
 - Time to transport

- Working Group to develop physician feedback reports
- Piloted sharing data with community hospitals
 - Aggregate and case specific

- Name change - **Central South RTN**

Successes

- Engagement and enthusiasm of membership
- Stakeholders working together to align a vision for regional trauma care
- Setting priorities and standardizing processes
- Provides opportunity to increase linkages between rural and urban trauma care

Ottawa

- Benefit of having two engaged and involved co-chairs (Trauma Coord, Trauma APN)
- Grassroots priorities have been addressed and follow through has occurred

Hamilton

- Lead taken by Senior Admin
- Multiple LHINs working together within one trauma system
- Chance to use data to better understand the trauma system

Challenges

Ottawa

- Keeping members engaged, especially if not present at the table
- Maintaining high levels of communication / obtaining feedback from all stakeholders
- Making working group projects a priority as it is an “add-on” to regular duties
- Lack of presence / participation by LTH Senior Admin

Hamilton

- Keeping members engaged while ensuring everyone is represented and feedback system is working
- Establishing Trauma Levels of Care for referral hospitals
- Maintaining face to face meetings given scheduling conflicts and distance
- Multiple layers of leadership with differing perspectives



Future of RTN

- Continued engagement of stakeholders to sustain the RTN
- Continued momentum in development of QI initiatives
- Standardization of processes/documentation within the RTN
- Spread of successful initiatives across the province
- Successful completion of the Trauma Distinction Accreditation program



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Questions



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