Survey of Ontario Clinics Providing Concussion Services

Summit: April 15, 2016
Purpose

• **Characterize** concussion care in different clinic settings
• Understand the **nature of services/expertise** in concussion clinics
• Characterize the **profiles of patients** receiving concussion services from clinic environments
• Examine issues related to **wait lists, referrals**
• Identify **barriers and facilitators** within the clinic environment
Methods

• Institute for Social Research, York University
• Adapted previous questions from 2012 survey
• Introductory letters mailed, followed by several telephone calls and emails over a 3-week period
• Approached 47, respondents = 32 (or 68%)
  o 33.3% completed on-line (secure web-based tool)
  o 66.7% by telephone and transcribed into tool by ISR
  o 22 responses by clinics with single location, 10 by clinics with multiple location (=32 clinics)
Type of Clinic

- Private practice rehab clinic: 32%
- TBI clinic: 31%
- Sports injury clinic: 22%
- Concussion: 9%
- Other or unclear response: 6%
Concussion patients seen

• Patients registered
  o Mean # of registered concussion patients = 188 (range of patients was 5 to 1,500)
  o 7 clinics (22%) have less than 15 patients registered
  o 6 clinics reported 100+ registered concussion patients, and the average number of these was 471.

• Proportions
  o 20% of clinics - 30% - 70% of patients have concussions
  o 16% only see concussion patients
  o 29% of clinics - 10% or fewer of patients w. concussions
  o 28% did not know the proportions of concussion patients
Patient profiles

• 87% of clinics provide services for PS requiring multiple visits.
• ~ 50% have no time restrictions how soon they see patients after a concussion
• Funding sources – only responded to by 2/3 of clinics
  o OHIP majority
  o 12 clinics - 90% or more patients (solely OHIP coverage)
  o 7 clinics - 90% or more patients (combination of OHIP/other insurance)
  o 7 clinics - more than 50% (auto insurance)
  o 8 clinics - more than 50% patients (private insurance)
Patient treatment decisions

• 18/32 (56% of clinics) decisions about patient treatment are routinely determined or reviewed by a medical doctor /family doctor
  o in 3 of these, family doctor with therapists at the clinic

• where decisions not made by medical doctor
  o task assigned to different professionals, often by more than one person in the clinic
  o Several mentions of: psychologists, physiotherapists, occupational therapists, neuropsychologists
  o In 1 clinic; chiropractors, osteopath
## Services provided

<table>
<thead>
<tr>
<th>Service</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return to work, school, or play protocols</td>
<td>91</td>
</tr>
<tr>
<td>General medical care</td>
<td>78</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>66</td>
</tr>
<tr>
<td>Psychosocial counseling</td>
<td>63</td>
</tr>
<tr>
<td>Occupational therapy</td>
<td>56</td>
</tr>
<tr>
<td>Neuropsychological testing</td>
<td>53</td>
</tr>
<tr>
<td>Massage therapy</td>
<td>44</td>
</tr>
<tr>
<td>Peer support programs or family counseling</td>
<td>44</td>
</tr>
<tr>
<td>Speech therapy</td>
<td>34</td>
</tr>
<tr>
<td>Chiropractic services</td>
<td>25</td>
</tr>
<tr>
<td>Neurology</td>
<td>25</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>22</td>
</tr>
<tr>
<td>Social Work related</td>
<td>13</td>
</tr>
<tr>
<td>Vision therapy</td>
<td>13</td>
</tr>
<tr>
<td>Athletic therapy</td>
<td>6</td>
</tr>
</tbody>
</table>
Concussion Services Wait Times

<table>
<thead>
<tr>
<th>Type of Appointment</th>
<th>Mean # of days</th>
<th>Range (days)</th>
<th>% seen in &lt; 7 days</th>
<th>% seen in 8 - 21 days</th>
<th>% seen in 22 - 60 days</th>
<th>% seen in 61 - 150 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>18</td>
<td>1-120</td>
<td>52</td>
<td>27</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>Short-wait services</td>
<td>14</td>
<td>0-90</td>
<td>74</td>
<td>9</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Long-wait services</td>
<td>36</td>
<td>0-150</td>
<td>37</td>
<td>15</td>
<td>30</td>
<td>18</td>
</tr>
</tbody>
</table>

- Short waits for acute injuries, athletic therapy, OT and PT
- Longer waits for neurologist, psychologist, persistent symptoms
- Shortest wait time for any type of appointments = 1 day
- 7 clinics - no wait times for any services
- 2 clinics - wait of 150 days / 1 clinic - 120 days
Referral Sources to Clinics

For the clinics that provided this information:

Family doctors
- most common and single largest source of referrals
- 93% of clinics – over 5% of patients referred by family doctors
- 25% of clinics - 50% or more of their patients from family docs

Medical specialists
- 54% of clinics – over 5% of patients from medical specialists
- 10% of clinics - 50% or more from specialists

Emergency Departments
- 48% of the clinics – more than 5% of the patients

Self-referral
- Four in ten (40%) clinics - 5% or more patients were self-referrals
Referrals from Clinics

• Every clinic refers patients to other specialists

- Vision/optometry/neuro-optometry
- Physiotherapy
- Neurology
- Neuropsychological assessment
- Occupational Therapy
- Psychology
- Speech Language /Audiology
- Physiatry
- Headache
- Sports med
- Psychiatry/Neuropsychiatry
- Sleep
- Tertiary clinic
- ENT

# of mentions
Guideline use

- 77% of clinics use formal concussion guidelines (for diagnosis and management) all or most of the time.

<table>
<thead>
<tr>
<th>Guideline</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario Neurotrauma Foundation (ONF)</td>
<td>19</td>
</tr>
<tr>
<td>Zurich/SCAT 3</td>
<td>13</td>
</tr>
<tr>
<td>American Association of Pediatrics</td>
<td>8</td>
</tr>
</tbody>
</table>

- More than 1 guideline used = 58%, 3 guidelines = 33%
- Sometimes guidelines mentioned are not guidelines!
- **13% of clinics** do not use formal conc. guidelines
Greatest Challenges of Clinics

**PATIENTS FUNDING SOURCES**
- Whether patients can get care they need
- Limits regarding referrals re. $$

**RESOURCES**
- Insufficient staffing
- Demand/waitlists

**CARE COORDINATION**
- FP/ED knowledge
- Coordination beyond our clinic
- Lack of services to refer to

**CARE ISSUES**
- Patient mental health
- Complexity of pre-existing symptoms
- Managing persistent symptoms

**PATIENT ISSUES**
- Not complying/pacing Parent impatience for RTP
- Patients not aware of services
Views on Patient Needs

• 3 main topic clusters

1) education and early intervention;
   • what to do and resources/services available

2) standardized, comprehensive & coordinated treatment;
   • multidisciplinary / improved coordination
   • follow up care
   • more consistency of information and care

3) improved access
   • to trained clinicians
   • to assessment and treatments
Ideal Clinic

• **Multidisciplinary** (54% of clinics)
• Comprehensive
  - all in one place
  - improved coordination between providers
• Physician led and/or available, attached
• Access, and timely care
  - reduced wait times
  - walk in
  - timely assessment and treatment/
  - good acute management
• Long-term as needed, follow-up
• Patient education, counselling, support.