



**Ontario Concussion Care Strategy:  
Starting with a Common Language to Improve  
Clinical Care and Research**

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# Ontario Concussion Care Strategy

## Current Partners



The Ottawa Hospital | L'Hôpital d'Ottawa



Hamilton Health Sciences



UNIVERSITY OF TORONTO



University Health Network



Western UNIVERSITY - CANADA

**Holland Bloorview**

Kids Rehabilitation Hospital Foundation



FOWLER KENNEDY *stay active*



Sunnybrook HEALTH SCIENCES CENTRE



Lakehead UNIVERSITY



Kingston General Hospital



CIMVHR | ICRSMV



ST JOSEPH'S HEALTH CARE LONDON



SPORTS MEDICINE

SONS CONTINUS Bruyère CONTINUING CARE



THUNDER BAY Regional Health SCIENCES CENTRE

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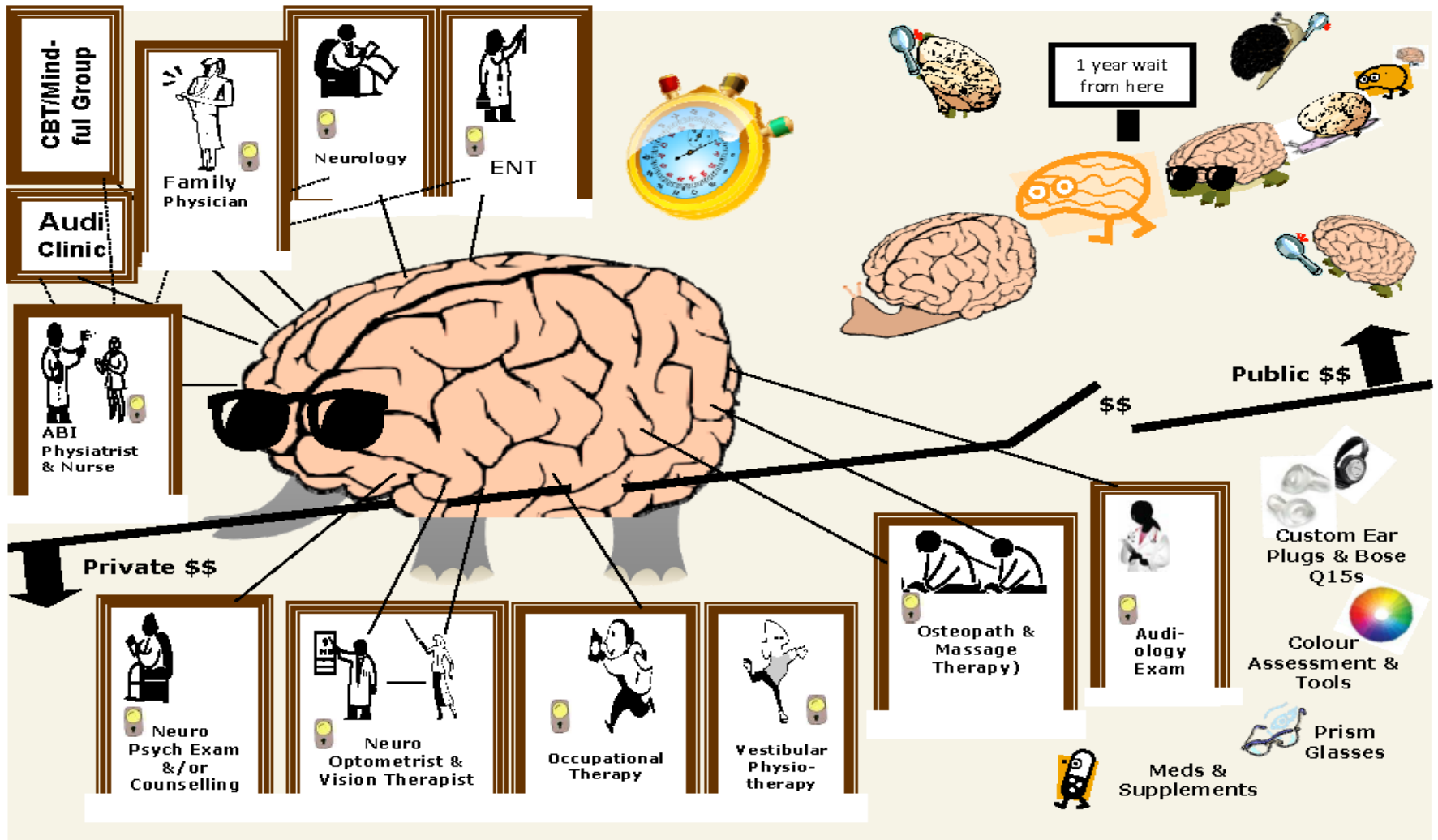
**St. Michael's**

Inspired Care.  
Inspiring Science.



Ontario Neurotrauma Foundation  
Fondation ontarienne de neurotraumatologie

# Finding, Funding, Waiting, Coordinating



Slide courtesy of Jane Clark



Many more **lives will be saved** and more disability prevented by **effective organization of services** and good triage of patients than by all the Intensive Care Unit and pharmacological “neuroprotective” treatments that are currently used in head injured patients.

A David Mendelow June 2010

[http://ec.europa.eu/research/health/medical-research/pdf/intbir-brussels/mary-baker\\_en.pdf](http://ec.europa.eu/research/health/medical-research/pdf/intbir-brussels/mary-baker_en.pdf)



# A Call for Change!

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Standardize the approach

Enhance efficiency

Evaluate the impact

Future Research



# Methods of CDE Implementation by OCCS

Developmental Steps	Time Frame
1. SMH and ONF invite participants to a workshop to discuss concussion care. OCCS mission and goals and CDE subcommittee established	April 2014
2. CDE committee identify elements for tertiary care settings . (NINDS, ONF-concussion/MTBI- PS guidelines, Zurich guidelines).	4 months
3. Pilot testing of CDEs in Ottawa and SMH (TCC).	Started July 2014
4. CDE group reports back to OCCS on pilot work .	April 2015
5. CDE subcommittee selects core CDEs for family practice and sports clinic	April 2015
6. ONF funding supports technical support for development of formats that support CDE data collection (TCC, FP, Sports clinics)	August 2015
7. Building decision support tools using CDEs	ongoing
8. Building Partnership (northeast, northwest)	ongoing



# International Classification of Functioning, Disability And Health (ICF)

**Health Condition**  
**Persistent Symptoms Post Concussion**

## **Body Functions & Structure**

### Pre Injury

- OSU (previous concussions)
- Personal & Family Medical History
- Medications
- ACE Score
- Suicide Attempts
- Recreational Activity

### Post Injury

- Medications\*
- Numeric Pain Scale\*
- MOCA
- Rivermead \*
- Other Injuries
- Health Service use\*

## **Activity/ Injury**

Place/activity  
Mechanism of Injury  
Amnesia Before/After  
LOC, AOC

## **Participation**

- Education, Marital Status
- Employment\*, Income
- Housing, Persons Living with
- PART-O
- ETOH, Smoking, Recreational Drugs\*

## **Environmental Factors**

- Protective Equipment At Time of Injury
- PTSD Screen

## **Personal Factors**

- Height, Weight
- Age & Gender
- Handedness
- Immigration
- Ethnicity
- Language
- QoL (Who-BRef)

# Strengths of CDEs

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1. Improving care
2. Improving wait times for patients
3. Data harmonization (patient reports data once)
4. Enhancing education of providers
5. Future projects funded will use CDEs
6. Observational clinical studies can be linked across regions and across the province
7. Multi-center and international clinical research efforts facilitated
8. Improve benchmarks for individual sites and Ontario health policy & planning





# Challenges of CDEs

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1. Push pull- data of core CDEs verses supplemental CDEs
2. Limiting # of core CDE to minimize patient fatigue in self-reported questionnaire
3. Sufficient staff/resources to support collection & management of quality data
4. Revisions of CDEs: 2.0

