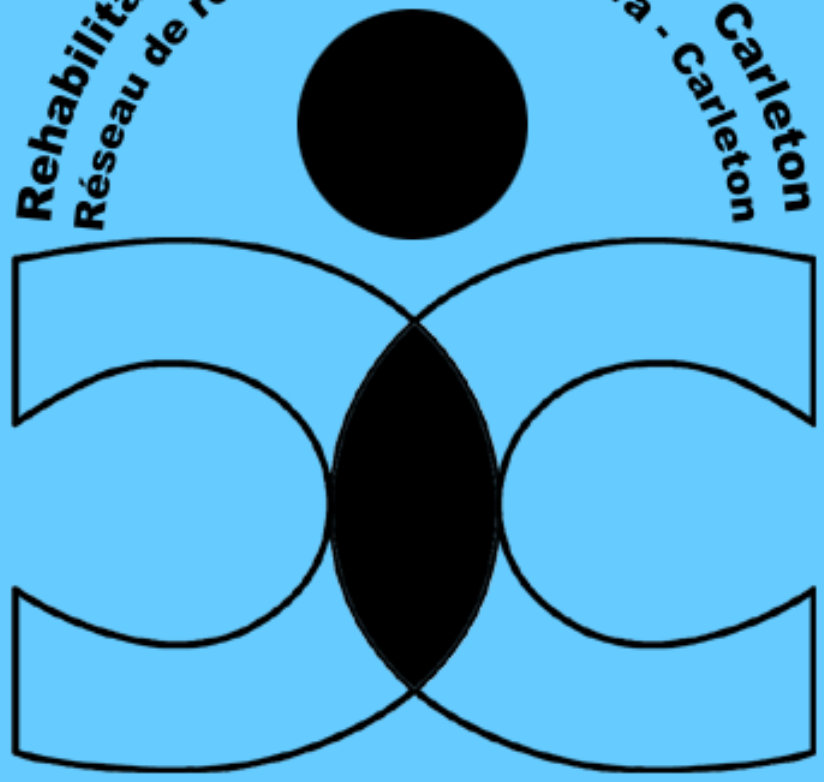
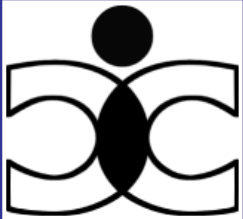


**Rehabilitation Network of Ottawa - Carleton**  
**Réseau de réadaptation d'Ottawa - Carleton**





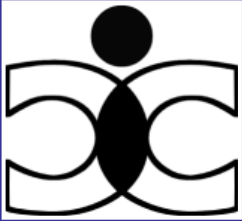
**TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT**

**FUNDERS**

**The Ministry of Health and Long Term Office  
Mental Health and Rehabilitation Reform Branch**

**And**

**Ontario Neurotrauma Foundation  
for their generous financial support!**



**TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT**  
**STEERING COMMITTEE**

**The Rehabilitation Centre**

**Sisters of Charity of Ottawa Health Service**

**Pathways to Independence**

**Ministry of Health & Long-Term Care**

**Community Care Access Centres – Cornwall, Eastern Ontario and Renfrew**

**Children's Hospital of Eastern Ontario**

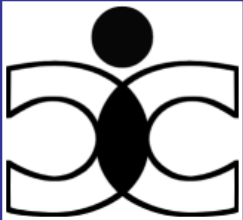
**The Ottawa Hospital**

**Ottawa Children's Treatment Centre**

**Cornwall General Hospital**

**CA McCool Rehabilitation Service**

**Champlain District Health Council**



**TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT**

# **PROJECT TEAM**

## **The Rehabilitation Centre**

**(Project Lead) Dan DeForge, Shawn Marshall, Ed Lemaire, Dorothyann Curran**

## **Sisters of Charity Health Centre**

**Mark Ferland**

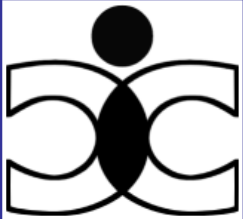
## **Children's Hospital of Eastern Ontario – Rehabilitation**

**Lloyd Cowin**

## **Professional Staff**

**Beverley Leeks- Project Manager**

**Elly Nadorp – Clinical Coordinator/Educator**



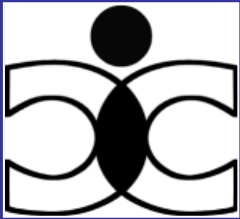
**TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT**

# **MANDATE**

**The development of an integrated rehabilitation system for TBI in the Champlaine District which**

**“ Manages The Seams”**

**when clients are transitioning the system  
(moving from service or from site to site)**



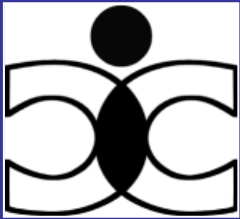
## TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

# THREE GOALS

### Goal 1

#### **Consult stakeholders:**

- **Stakeholders' needs**
- **Define the objectives for a centralized service**
- **Design of the integrated rehabilitation system for TBI**



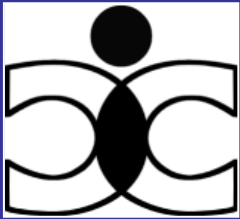
TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## THREE GOALS

### Goal 2

**The development of a centralized resource service for TBI to include:**

- **Client transition data**
- **Tracking of referrals for gaps**
- **Increase access to on-line TBI information**
- **Bilingual services**

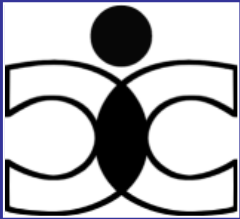


## TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

# THREE GOALS

### Goal 2 con't...

- On-line **"Knowledge Management"** on practice standards
- Educational materials on TBI for service providers and consumers
- Telehealth links
- Care and Services resource database



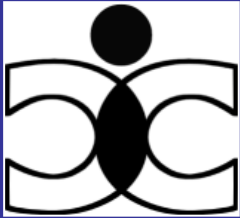
TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## THREE GOALS

### Goal 3

**Ensure the outcome evaluation of the project measures:**

- **Efficiency**
- **Client centeredness**
- **Functional measures**

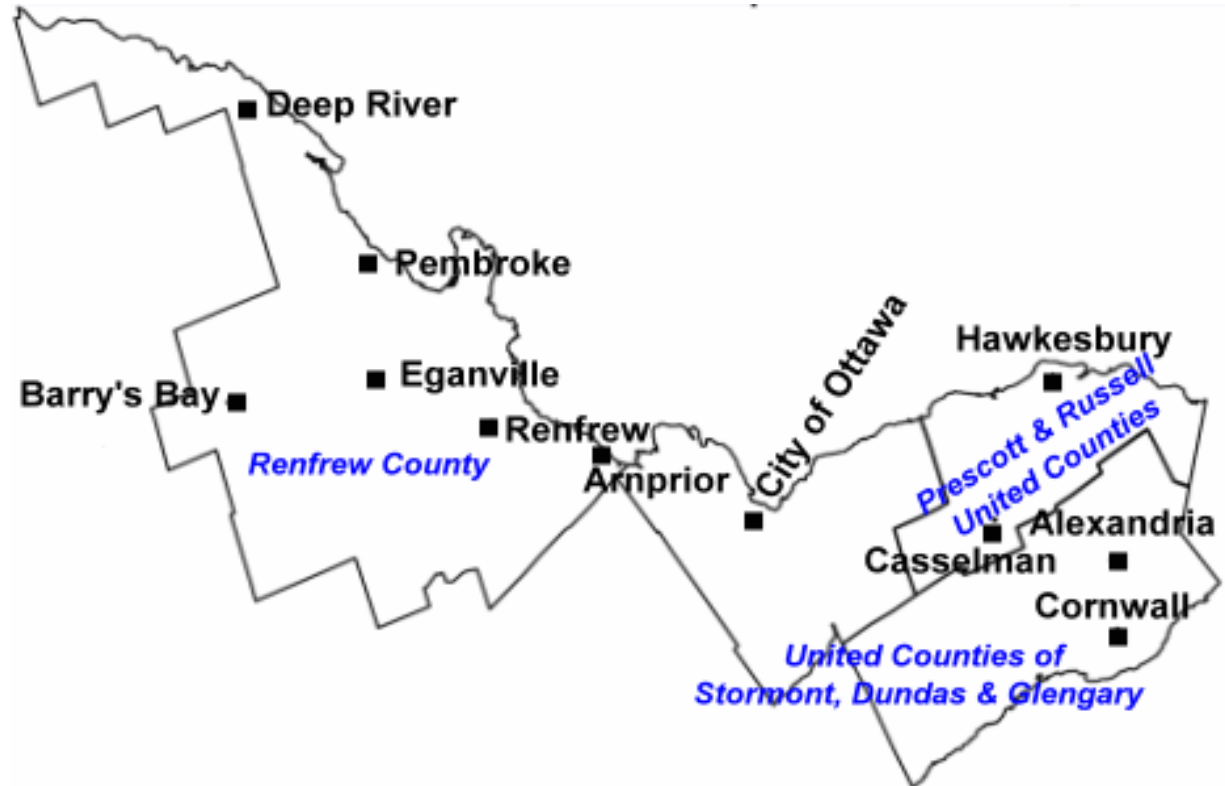


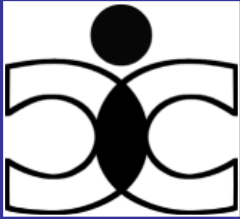
# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## PROJECT SCOPE

### Champlain District

- Renfrew County
- City of Ottawa
- The Five Eastern Counties of Stormont, Dundas and Glengarry, and Prescott-Russell





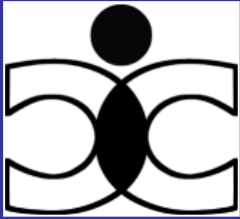
## TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

# PROJECT SCOPE

### **Client Selection Criteria & Role**

- **Live in the Champlain District**
- **Clients (substitute decision makers) who agree to participate (signed an Agreement to Participate form)**
- **Have one of the following “primary diagnosis of a Traumatic Brain Injury”:**
  - **Glasgow Coma Scale on Admission less than or equal to 14**
  - **Injury / trauma to the brain was the cause of being admitted to hospital**
  - **Need on-going brain injury rehabilitation**

*We estimate that the average client may transition two to three times during the length of this project*



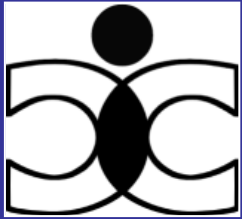
TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## CLIENT CENTERED SYSTEM

From being **informed** of the decision

To **“integration”**

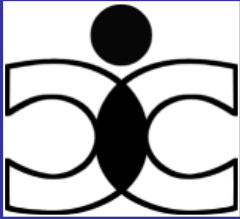
**Consulting** the client regarding options  
before decision-making



## TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

# MAKING AN INTEGRATED SYSTEM WORK

- A “seamless system” is a **“well-tailored”** system
- Improved management of the **“seams”** between services and sectors
- Well structured and cohesive
- Built on the current strengths
- Addressing gaps in the health care system to eliminate fragmentation

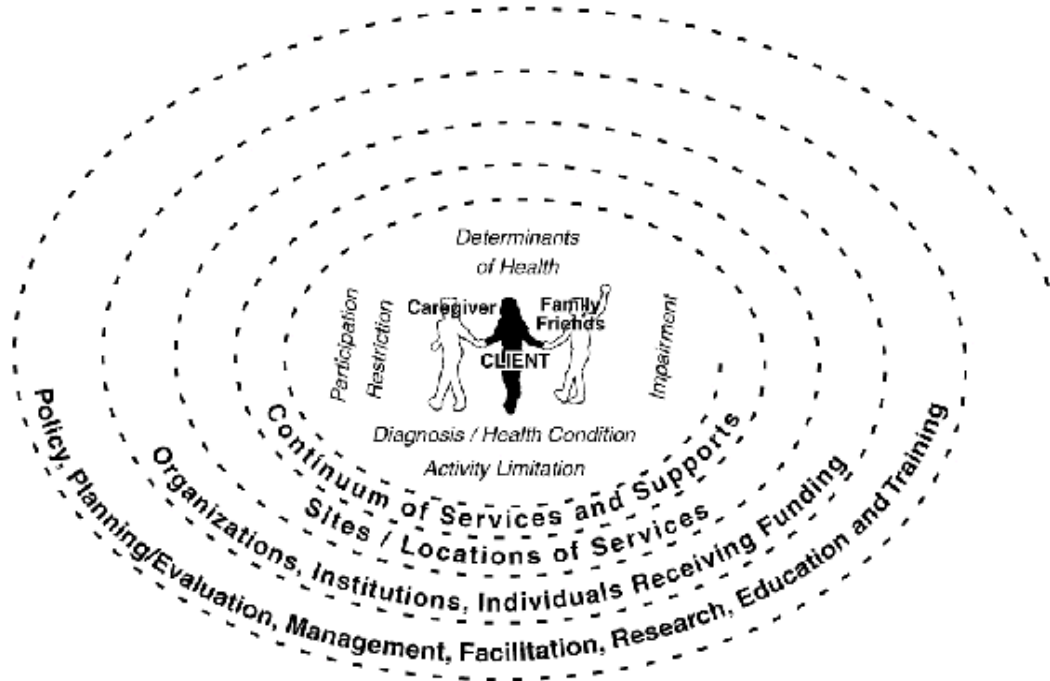


# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

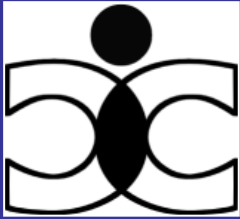
## GETTING THE PICTURE

Components of Client Centered Rehabilitation

Fig. 1



**Note: This project lies at the outer circle. Survivors of TBI are located in the inner circle. We seek input from stakeholder at all levels.**

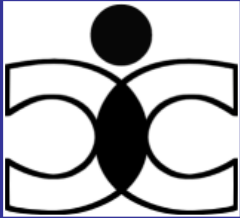


# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## FOCUS GROUPS *KEY* RECOMMENDATIONS

### **Tagged as High Priority**

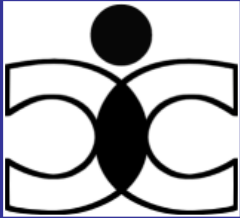
- **Exploit internet to centralize information and make it easy to access**
- **Keep and make paper version of all “e-forms”**
- **Make the movement of information across the internet safe**
- **Build in mechanisms which supports empowerment of the clients/caregivers in the decision making process**



## TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

# FOCUS GROUPS *KEY* RECOMMENDATIONS

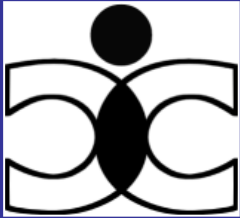
- **Help us to understand “where we are, what happens, what’s next, and what resources are available to us at each point**
- **Bring education and training into our respective environments so that our group discussions can be focused and relevant**
- **Eliminate duplication and redundancy**



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## FOCUS GROUPS *KEY* RECOMMENDATIONS

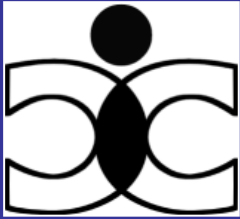
- **Build the system to support client/caregiver independence and empowerment (Unique to Rural)**
- **Keep us informed on the outcomes of our input**
- **Ensure the design of this system and its resources are responsive**



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## FOCUS GROUPS *KEY* RECOMMENDATIONS

- **Provide a list of other helpful web sites (e.g., new research)**
- **Web Site should be easy to use and understand**

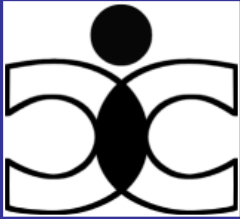


# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## FOCUS GROUPS *KEY* RECOMMENDATIONS

### **Our project ...**

- - does not store any data on the internet
- - moves “YOU” across the internet and helps YOU find OUR privately owned and secure server
- - does not let anyone save client data to any computer
- - is a facilitator only when a client is in a “transition” phases, regardless of where they are in the continuum of care
- - does not interfere with the referring and receiving service provider work/decisions
- - is not involved in any care / services



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## FOCUS GROUPS *KEY* RECOMMENDATIONS

### **Our server ...**

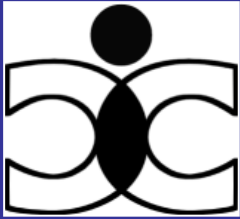
- is physically located in a secure location in an undisclosed health institution

### **Our database is ...**

- software which has been specially programmed for ease of use only by registered service providers

### **On your screen ...**

- you will see a copy of the data which has been first encrypted by our server, then sent to your computer, then decoded by your computer so that you can read it.
- the reverse happens when you hit save or submit.

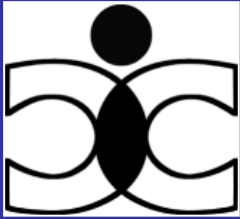


# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## FOCUS GROUPS *KEY* RECOMMENDATIONS

### **Our client data ..**

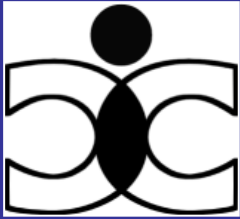
- can only be accessed by registered service providers
- can only be given to clients by attending service providers
- contains only “factual” information
- is a snap shot of what, when and who info



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## ACHIEVEMENTS

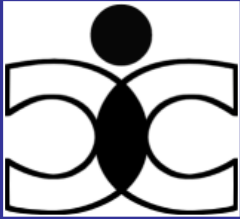
Region & Location	Date & Time	Activity	Eng.	Fre.	Adult	Pediatric	Urban	Rural	Survivors of TBI	Caregivers	Service Providers
Pembroke Marguerite Centre	December 7 10:00 am – 2:00 pm	3 Focus Groups	✓		✓	✓		✓	3	3	11
Ottawa The Rehabilitation Centre	December 10 8:30 am – 12:30 pm	3 Focus Groups	✓		✓		✓		7	6	11
Ottawa Champlain District Health Council	January 9 4:00 pm – 8:00 pm	3 Focus Groups		✓	✓	✓	✓		2	0	7
Ottawa Champlain District Health Council	January 10 4:00 pm – 8:00 pm	3 Focus Group	✓		✓		✓		4	3	7
Hawkesbury Hawkesbury & General Hospital	January 14 9:30 am – 2:00 pm	1 Focus Group		✓	✓	✓		✓	1	0	7
Ottawa Champlain District Health Council	January 16 1:00 pm – 4:30 pm	1 Focus Group	✓			✓	✓		0	0	14
Cornwall Cornwall General Hospital	January 17 1:00 pm – 4:30 am	1 Focus Group	✓		✓	✓		✓	0	0	5



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## ACHIEVEMENTS

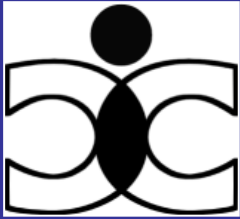
<i>Activity</i>	<i>Details</i>	<i>Date &amp; Time</i>	<i>Eng.</i>	<i>Fre.</i>	<i>Adult</i>	<i>Pediatric</i>	<i>Urban</i>	<i>Rural</i>
Web Site Public Launch	Media Launch, The Rehabilitation Centre	March 20	✓	✓	✓	✓	✓	✓
Media Information Package	9 Components Spokesperson Profile, Project Mandate, Structure, Project Member Bio's Bios (RNOC, MOH, ONF), Mapping Our Course Flow Chart, Media Advisory Kent Bassett-Spiers Speech	March 20 10 – 12:00	✓		✓	✓	✓	✓
Newsletter		March 20, 1 <sup>st</sup> of 3	✓		N/A	N/A	N/A	N/A
Pediatric Service Provider Application – Registration Form	Application Form includes Obligation Agreement To view hard copy form of Service Providers and Client Registration and Pediatric Client: Profile Sheets: <a href="http://www.moc.ca/about_tbi.asp">www.moc.ca/about_tbi.asp</a> Left navigation bar – choose Forms (pdf copy of hard copy versions) To view on-line forms: Look in the left navigation bar – Service Provider Login Click – “I would like to login” In non-applicable mandatory fields, please enter numbers and/or alphanumerical items I will ask Elly Nadorp to clear your application – this will allow you to view the e-forms	March 20	✓		✓	✓	✓	✓



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## ACHIEVEMENTS

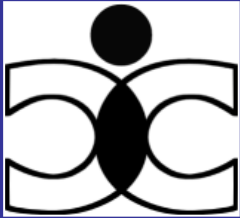
Activity	Details	Date & Time	Eng.	Fre.	Adult	Pediatric	Urban	Rural
Client Registration Package	Letter of Invitation, Criteria for Selection, Agreement to Participate Authorization to Release Info View hard copy in pdf form: <a href="http://www.rnoc.ca/about_tbi.asp">www.rnoc.ca/about_tbi.asp</a> Click forms – left navigation bar	March 20	✓		✓	✓	✓	✓
Client Data Collection Forms	Demographics, Social, Medical, Referral, Outcome Measures View hard copy in pdf form: <a href="http://www.rnoc.ca/about_tbi.asp">www.rnoc.ca/about_tbi.asp</a> Click forms – left navigation bar To view on-line forms: Look in the left navigation bar – Service Provider Login Click – “I would like to login” In non-applicable mandatory fields, please enter numbers and/or alphanumerical items I will ask Elly Nadorp to clear your application – this will allow you to view the e-forms	March 20	✓		✓	✓	✓	✓
Established Web Site	Framework & Navigation Principles used: Reading Level Grade 7, 3 clicks away from getting info, colour coding for navigation French equivalency is targeted for June pending \$ resources	March 20	✓		N/A	N/A	N/A	N/A
Electronic or on-line Power Point Presentation	A resource “presentation” for use by anyone wishing to see and promote the project: Overview of the Project, its structure, goals, objectives. French edition completed, will be added in June with French Web Site components	March 26	✓	✓	N/A	N/A	N/A	N/A



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## ACHIEVEMENTS

Care and Services	<p>Listing of ABI care and services resources. TBI specific care and services will be identified with "TBI".</p> <p>Current search capacities – suitable for service providers (currently by discipline)</p> <p>Future: By location, alphabetical (the headings for the alphabetical will be suitable for grade 7 reading – based on feedback from focus groups regarding unsuitability of listing by "discipline" for general public as it currently stands.</p>	March 26	✓	✓	✓	✓	✓	✓
Client Database	<p>Hard copy Directory and on-line (Bilingual) due in June, cooperative venture with Head Injury Association. Pediatric care and services will be identified.</p> <p>SQL Server</p>	March 20	✓		✓	✓	✓	✓
Helpful Links	<p>Links which are associated to brain injury.</p> <p>Sites with specific focus on TBI will be identified with an "TBI" – 3<sup>rd</sup> quarter.</p>	March 26	✓					



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## MAPPING OUR COURSE

**Backgrounder**

**Robin Easey Centre Centre  
– Stakeholder Consultation**

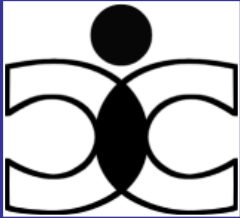
2000 – **Key Directive To Develop Central Repository of Information**



**Response to RFP  
Grant Application Submitted – Ministry of Health / ONF**  
Fall 2000



**Grant Awarded**  
**Hire Staff, Establish Office and Infrastructure**  
September to December 2001



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## MAPPING OUR COURSE

### Consultation & Development

#### **Focus Group Consultations – December 2001 & January 2002**

Report on the Consultation Workshop  
Demonstration of centralized referral and transfer tracking process



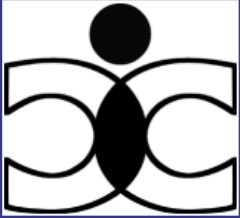
#### **Development of Component (Tools & Processes)**

January to March 2002  
Technology, Common Forms, Information Collection



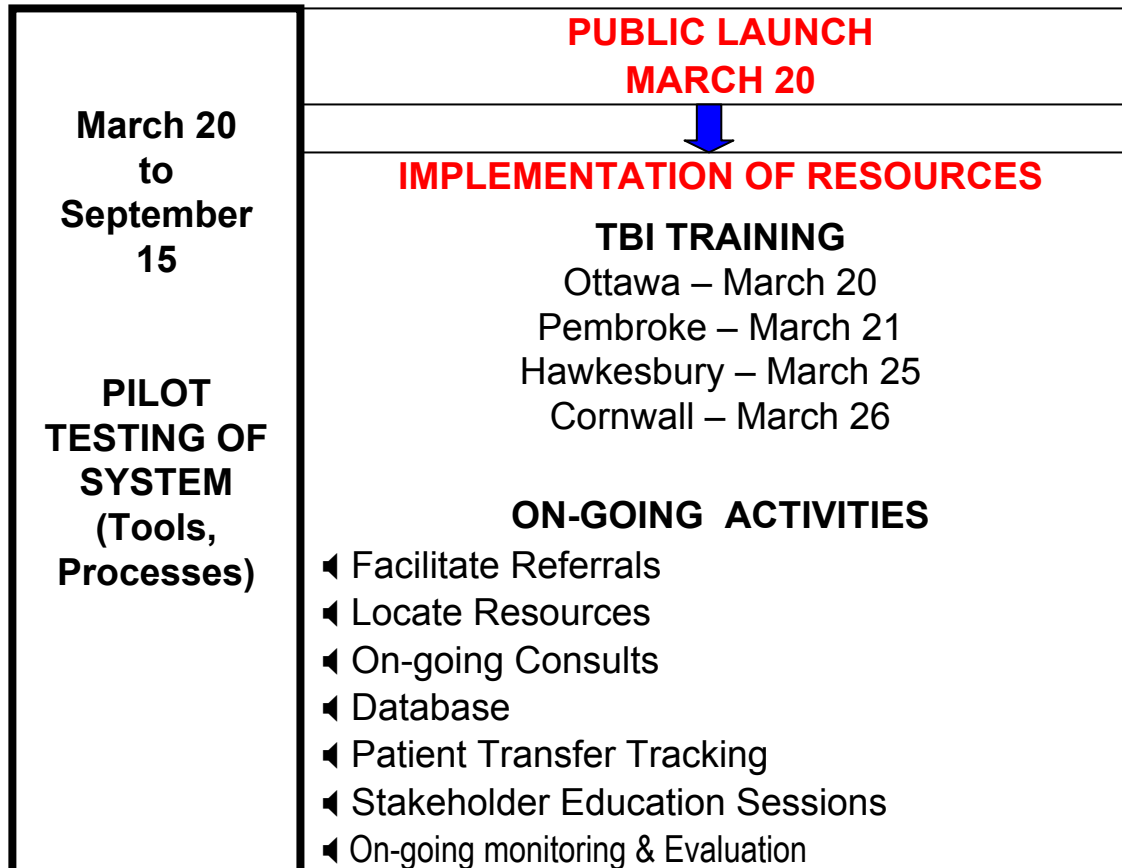
#### **Mock Trial Pilot Tests – March 4**

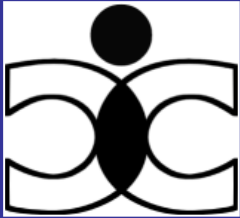
TBI Project Orientation & Demonstrations (Centralized processes, web site, common forms)



# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

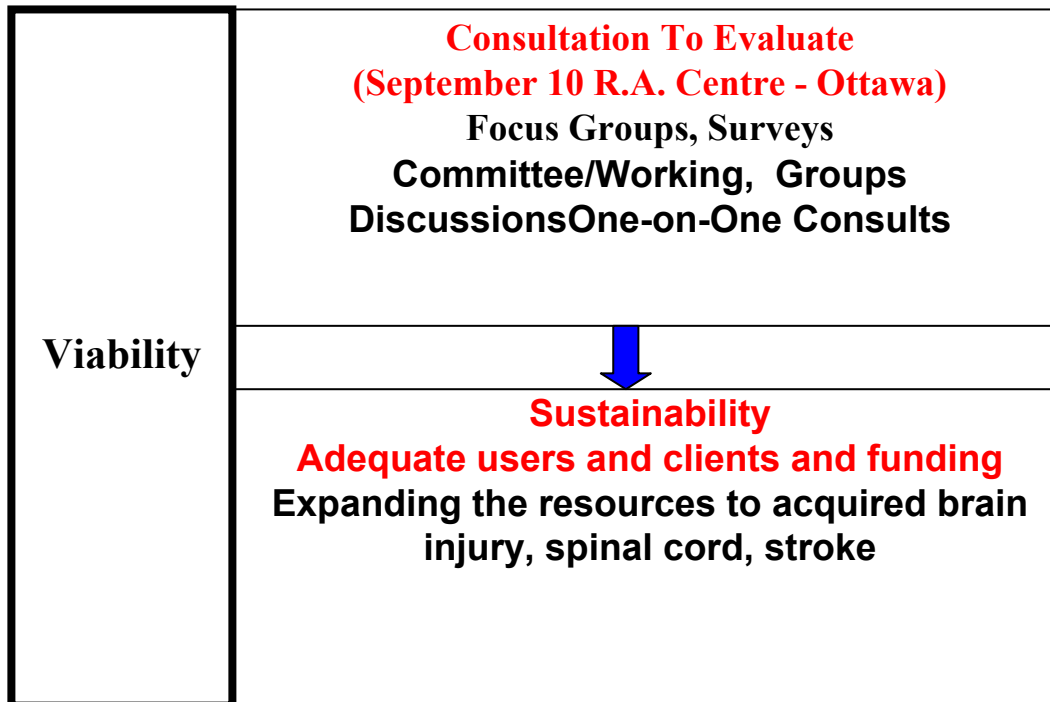
## MAPPING OUR COURSE

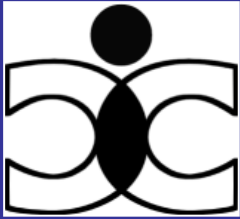




# TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

## MAPPING OUR COURSE

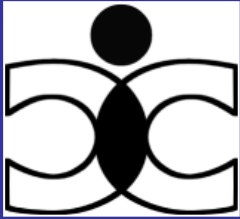




## TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT

# WHAT'S NEXT?

- **Identify/Register Service Providers**
- **Identify / Register TBI Clients**
- **On-going modification of resource tools based on user feedback**
- **Identify and data entry of "ABI Care and Services" with TBI identified as a sub-set**
- **Adding Helpful Links**
- **September Consultations to Evaluate Project Success**
- **Pro-Active Communications Strategy and Implementation**



**TRAUMATIC BRAIN INJURY (TBI) INTEGRATION PROJECT**

# **SUSTAINABILITY**

- **Expansion to include acquired brain injury, spinal cord and stroke**
- **Efficiencies within the system**
- **Automate where appropriate**
- **Adequate Resources (Funding, People, Time)**