

**Community support,
education and
prevention services**

Community Support
Team:

Family Support Services
WIT Employment Program
Individual Community Supports
Peer and Group Training
Public Education
Injury Prevention
Okanagan Conference on Brain
Injury

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Kindly advise if there is a change of name or address, or to remove a name from our mailing list.

If you have any questions about COBIS or Gray Matters, please contact us at the above address.

COBIS Golf Marathon
Friday, September 9th,
2005

- Ponderosa Golf & Country Club – Peachland, BC
- 100 holes of golf in one day
- Funds raised for injury prevention

Best day of golf EVER!

Okanagan Conference on Brain Injury

May 5, 6 & 7, 2005 – Naramata, BC

KEYNOTE SPEAKERS:

Dr. Raymond Ancill
Psychiatrist – Abbotsford, BC
Pre-Conference Workshop

Dr. Janet Williams
Director – Community Works – Mission, Kansas

Beverley Richmond
Author/Survivor – Hillier, ON

Chris Johnson
Renowned International Motivational Speaker – White Rock, BC

Don Parker
International Speaker, Survivor and Magician – Peachland, BC
Pre-Conference Workshop

CONCURRENT SESSIONS:

Still Friends: Friends Still! – Robyn Littleford, G.F. Strong School Program/Vancouver School Board

Sexual Issues After Brain Injury – Dr. John Limbert, Victoria, BC

Managing Your Emotions – Maribeth Friesen, Manager, Southern Alberta Brain Injury Program & Laurie Markosky, Community Support Coordinator, COBIS

How Memory Works, and How It Fails – Dr. James P. Schmidt, Schmidt, Trentadue and Associates, Ft. Langley, BC

Using Computers After Brain Injury – Alex Gilchrist, Vancouver Island Head Injury Society, Victoria, BC

The Cognitively Impaired Offender – Dr. Evan H. Lopes, Corrections Service Canada, Mission and Ferndale Correctional Institutions

Advocating: A Mother's Perspective – Lynn Taylor, Kelowna, BC

Pathways of Service and Support – Interior Health ABI Program-Bridging Hospital and Community – Cathryn Tabata, ABI Coordinator – Okanagan, Interior Health

After Brain Injury: Alcohol and Drug Relapse Prevention – Kathy Wyse, Case Manager Kamloops Mental Health and Kim Vandeppear, Neuro-Rehab Case Coordinator, Interior Health

For more information go to: www.cobis.org

April 2005

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WWW.COBIS.ORG

Gray Matters

A publication of COBIS – Information on acquired brain injury issues
Education | Prevention | Incidence | Prevalence | Outcomes | Strategies

Science Based Driving Assessment for Individuals with Decline in Mental Abilities

It is estimated that there are currently over 5.7 million licensed drivers in Canada and the U.S. who are cognitively impaired. Traffic casualties of young drivers are being reduced through massive public information campaigns and graduated licensing programs. In stark contrast, the crashes of cognitively impaired drivers are increasing at an unprecedented rate.

Cognitive decline can be attributed to various sources such as the natural aging process, acquired brain injury and medical conditions.

Individuals with cognitive difficulties provide the most challenging situations for decision about driving competence and safety. The most challenging cases are when there is cognitive impairment but the impairment is not so great as to make the driving decision obvious.

The question and problem for physicians is whether or not the person is competent to drive given the functional decline associated with the medical condition(s).

There is a new approach to assess the competence of medically-at-risk drivers of any age. Resulting from years of extensive, award-winning research, DriveABLE™ is the first procedure of its kind that offers research based objective evaluation of a driver's competence. The science base makes DriveABLE™'s procedures acceptable to licensing authorities and the medical community, both of which have strong mandate to move to 'evidence-based decision making'. DriveABLE™ has the ability to assess individuals' capability to drive and to accurately identify drivers who are cognitively impaired and unsafe to drive.

DriveABLE™ assessments are offered through DriveABLE in Kelowna. The office location is 1873 Spall Road, Spall Business Centre Kelowna, BC V1Y 4R2. Phone: 250-718-7878 Fax: 250-712-0977 – www.driveable.com

The DriveABLE™ assessment is made up of two parts: the In-office Cognitive Evaluation and the Road Evaluation.

The DriveABLE™ Cognitive Evaluation

- A trained professional guides the client through the assessment. Touch screen/push button responses provide measurement precision in a non-threatening environment
- Specific tasks assess the mental and motor skills required for safe driving
- Successful performance requires the integration of memory, judgment, decision-making, attention, and motor speed abilities
- Clients in the most dangerous and most competent ranges are identified through automated scoring procedures
- A clear, understandable report is provided with an explicit recommendation.

The DriveABLE™ ROAD Evaluation

- Only clients who scored in the indeterminate range in the competence screen need to be road tested
- Road tests are given on a standardized road course in a dual-brake automobile for safety
- Specialized evaluators are DriveABLE™ trained and certified to identify driver errors that signal a decline in competence
- Scoring procedures identify unsafe drivers while enabling experienced competent drivers to pass
- A clear, understandable report is provided with an explicit recommendation.

Demonstrated Fairness to both Urban and Rural Drivers:

- DriveABLE™ research showed that urban and rural drivers matched on the basis of age, sex, medical diagnosis, and level of cognitive decline had equal outcomes for the DriveABLE™ assessment.

Who should be sent to DriveABLE™?

- Patients of all ages whose driving competence is questionable due to a medical condition, medications or a natural decline affecting mental abilities. Persons with physical disabilities requiring vehicle modifications may be accepted for evaluation on an individual approval basis.

Are older drivers unsafe drivers? Some are, most are not: Medical conditions, not age, are the cause of declines in the ability to drive safely.

Medical conditions that affect cognitive abilities (e.g., memory, attention, decision making, judgment) are the most important for increasing driver risk.

Drivers with cognitive impairments are more than 7 times likely to be involved in an at-fault crash. (A blood alcohol level of .08 increases crash risk 5 fold.)

Issues, Headlines & Abstracts

Costs and caregiver consequences of early supported discharge for stroke patients.

Teng J, Mayo NE, Latimer E, Hanley J, Wood-Dauphinee S, Cote R, Scott S.

Joint Department of Biostatistics and Epidemiology and Occupational Health, Faculty of Medicine, McGill University, Montreal, Quebec, Canada.

BACKGROUND AND PURPOSE: Early supported discharge (ESD) for stroke has been shown to yield outcomes similar to or better than those of conventional care, but there is less information on the impact on costs and on the caregiver. The purpose of this study is to estimate the costs associated with an ESD program compared with those of usual care. **METHODS:** We conducted a randomized controlled trial of stroke patients who required rehabilitation services and who had a caregiver at home. **RESULTS:** Acute-care costs incurred before randomization when patients were medically ready for discharge averaged \$3251 per person. The costs for the balance of the acute-care stay, from randomization to discharge, were \$1383 for the home group and \$2220 for the usual care group. The average cost of providing the 4-week home intervention service was \$943 per person. The total cost generated by persons assigned to the home group averaged \$7784 per person, significantly lower than the \$11,065 per person for those assigned to usual care. A large proportion of the cost differential between the 2 groups arose from readmissions, for which the usual care group generated costs more than quadruple those of the home intervention group. **CONCLUSIONS:** Providing care at home was no more (or less) expensive for those with greater functional limitation than for those with less. Caregivers in the ESD group scored consistently lower on the Burden Index than caregivers with usual care, even caregivers of persons with major functional limitations. For persons recovering from stroke and their families, ESD provides a cost-effective alternative to usual care.

Stroke. 2003 Feb;34(2):528-36

Frustrated and invisible - younger stroke patients' experiences of the rehabilitation process.

Roding J, Lindstrom B, Malm J, Ohman A.

Department of Community Medicine and Rehabilitation, Umea University, Sweden. jenny.rodin@hv.luth.se

PURPOSE: This study aimed to get knowledge of the younger stroke patient's viewpoint and to describe how young stroke patients experience the rehabilitation process. The purpose was also to develop hypotheses about the relationship between young stroke patients and the rehabilitation process. **METHOD:** Thematized in-depth interviews were performed with two women and three men who suffered from stroke (37 - 54 years). The analysis used was the Grounded Theory method of constant comparison. **RESULTS:** The analyses resulted in the core category 'Frustration' which was derived from the categories labelled 'The paralysed everyday' and 'Outside and invisible'. 'The paralysed everyday' category involved different aspects of everyday life after a stroke. Because of their fatigue they were unable to work and

their family and social life were negatively affected. They found it difficult to engage in daily life activities and felt indifferent. The three women expressed frustration over the demands they experienced as being mothers and housekeepers, whereas the two men emphasized economic responsibility of the family as problematic. The category 'Outside and invisible' describes the lack of participation the informants experienced regarding the rehabilitation process. The informants felt they lacked information and age-adapted interventions. Their needs were not provided for and they felt distant from the other patients. Their remaining symptoms were probably on a cognitive basis and therefore invisible. This was a source of frustration. **CONCLUSION:** The hypotheses generated indicated that young stroke patients are frustrated and invisible due to the fact that the rehabilitation setting does not acknowledge the different needs of young stroke patients compared with older patients.

Disability Rehabilitation. 2003 Aug 5;(15):867-74

A population survey found an association between self-reports of traumatic brain injury and increased psychiatric symptoms.

Anstey KJ, Butterworth P, Jorm AF, Christensen H, Rodgers B, Windsor TD.

Centre for Mental Health Research, Australian National University, Canberra, ACT 0200, Australia. kaarin.anstey@anu.edu.au

OBJECTIVE: This study determined whether self-reported Traumatic Brain Injury (TBI), identified in a community sample and occurring up to 60 years previously, is associated with current psychiatric symptoms, suicidality, and psychological well-being. **STUDY DESIGN AND SETTING:** Three age cohorts (20-24, 40-44, 60-64) were randomly sampled from the cities of Canberra and Queanbeyan, Australia, yielding a total of 7,485 participants. The samples were

administered scales measuring anxiety, depression, suicidality, positive and negative affect, personality traits, and physical health status. **RESULTS:** Of the total sample, 5.7% reported history of TBI involving loss of consciousness for at least 15 min, occurring an average of 22 years previously. History of TBI was associated with increased symptoms of depression, anxiety, negative affect, and suicidal ideation. **CONCLUSION:** History of TBI is a risk factor for psychiatric morbidity. The effect is greatest in young adults, and occurs up to several decades subsequent to the occurrence of TBI.

J Clin Epidemiol. 2004 Nov;57(11):1202-9.

Understanding outcomes based on the post-acute hospitalization pathways followed by persons with traumatic brain injury.

Mellick D, Gerhart KA, Whiteneck GG. Craig Hospital Research Department, Englewood, Colorado 80110, USA

PRIMARY OBJECTIVES: To identify the factors that determine the pathways of care people with traumatic brain injury (TBI) follow after acute care discharge, and to identify differences in outcome based on those pathways. **RESEARCH DESIGN:** Telephone survey of a statewide, population-based sample of persons surviving through acute hospitalization for TBI. **METHODS AND PROCEDURES:** Included were 1059 individuals who: (a) were discharged from acute care in 1996 and 1997; (b) were eligible for inclusion in the statewide, population-based TBI follow-up system, (c) had either a severe TBI or were among a 20% random sample with milder injuries, and (d) consented to participate in a 1-year post-injury follow-up survey. The survey included administration of the Functional Independence Measure (FIM), the Craig

Handicap Assessment and Reporting Technique (CHART), the Alertness Behaviour Sub-scale of the Sickness Impact Profile (SIP), and the Health Status Questionnaire (HSQ-12). Medical records for all participants were abstracted for injury severity, pre-injury history (aetiologic and demographic) and discharge disposition data. Data were weighted to represent the population from which the sample was derived prior to analyses. **MAIN OUTCOMES AND RESULTS:** Almost 2/3 of TBI survivors in this population-based sample received no additional services following discharge from the acute care hospital. Six post-acute-hospitalization pathways were identified based on combinations of inpatient rehabilitation, community-based services and long-term care (LTC). In each category--except for the one involving a discharge directly from acute care to home--people with the most severe TBIs were disproportionately over-represented. Older people and people whose care was funded by

government payers were over-represented in both care pathways involving LTC, while members of minority groups were under represented. Those who went to LTC had the poorest outcomes, but even those completing rehabilitation had relatively poor outcomes compared with those discharged directly to home. **CONCLUSIONS:** Of concern are the relatively large numbers of people receiving no rehabilitation and other services in all severity categories. Those in LTC--typically older and government funded people--reported the poorest outcomes. Unanswered questions remain relating to the poor perceived quality of life reported by those completing rehabilitation programs. Further study is also needed to more fully understand the affects of such characteristics as gender, minority status, employment and funding sources on the care pathway that is followed.

Brain Injury. 2003 Jan;17(1):55-71.

Perceived Needs Following Traumatic Brain Injury

John D. Corrigan, PhD; Gale Whiteneck, PhD; Dave Mellick, MA

OBJECTIVES: (1) Provide population-based estimates of perceived needs following traumatic brain injury (TBI) and the prevalence of unmet needs 1 year post injury; (2) identify relations among needs that define unique clusters of individuals; and (3) identify risk factors for experiencing selected needs. **DESIGN:** Telephone survey 1 year after injury of a prospective cohort of all people hospitalized with TBI in the state of Colorado during 2000. **MEASURES:** Self-reported need for assistance in 13 areas of functioning. **RESULTS:** A total of 58.8% of persons hospitalized with TBI experienced at least 1 need during the year following injury; 40.2% will experience at least 1 unmet need 1 year after injury. Most frequently experienced needs were "improving your memory,

solving problems better" (34.1%), "managing stress, emotional upsets (27.9%), and "managing your money, paying bills" (23.3%). Cluster analysis revealed 8 distinctive groupings of subjects. If a need existed, those least likely to be met involved cognitive abilities, employment and alcohol and/or drug use. **CONCLUSIONS:** Results were consistent with findings from previous assessments of need for services based on surveys of convenience samples; however, the prevalence of unmet needs 1 year after injury may be higher than previously suspected. More post-hospital services addressing cognitive and emotional problems appear needed. Risk factors for experiencing needs suggest potential avenues for clinical intervention.

J Head Trauma Rehabil Vol. 19, No. 3, pp. 2005-216

Most frequently experience needs were:

"improving your memory, solving problems better" ...

"managing stress, emotional upsets" ...

"managing your money, paying bills"