

A New Approach to Maintaining Competency in Cognitive Assessment

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Presentation Objectives

By the end of this presentation, attendees will be able to:

- State reasons for the use of creative methods/tools to translate knowledge into practice.
- Describe various methods used by a group of OTs to improve practice related to cognitive assessment.
- Start to consider how to apply various educational strategies to transfer of knowledge about cognition and other areas of ABI practice.



Evidence Based Practice

Sackett et al. defines evidence-based medicine (practice) as “*conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence-based medicine means integrating individual clinical expertise with the best available external evidence from systematic research.*”

- Evidence based practice relies on evidence based implementation



Knowledge Translation

▪ Definition

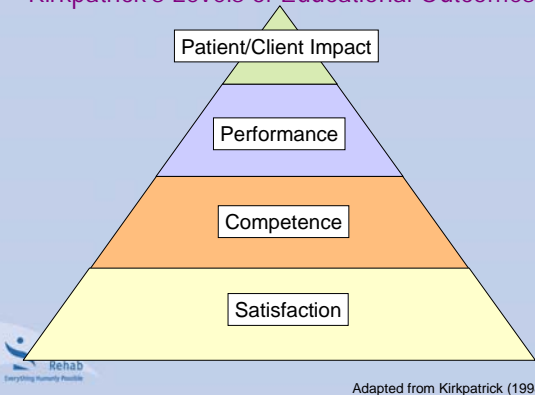
“Knowledge translation is a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system.”

Canadian Institute of Health Research, 2008

▪ “Bridging the gaps”



Kirkpatrick's Levels of Educational Outcomes



Toronto Rehab



- Canada's largest academic hospital specializing in adult rehabilitation, complex continuing care and long term care
- Fully-affiliated with University of Toronto with a strong integration of both research and education to improve patient care
- 7 Clinical Programs – Neuro Rehab, Spinal Cord Rehab, Cardiac Rehab, Geriatric Rehab, Musculoskeletal Rehab, Complex Continuing Care, Lakeside Long Term Care
- Providing service to > 16,000 people per year at its five sites



Occupational Therapists at Toronto Rehab

- Approximately 56 FTE OTs work at Toronto Rehab
- OTs work throughout 5 sites in our Neuro Rehab, Geriatric Rehab, Spinal Cord Rehab, Musculoskeletal, and Complex Continuing Care Programs
- Role of OT : “The primary goal of occupational therapy is to enable people to participate in the occupations which give meaning and purpose to their lives.” CAOT, 2008
- Specialized skills, for example, wheelchair seating, sensory stimulation, functional electrical stimulation, splinting, cognitive assessment and intervention



Best Practice Groups at Toronto Rehab

- In 2002, an OT retreat was planned by OT leaders
- Areas of Best Practice: Documentation in Occupational Performance, Low Vision, Visual-perception, Return to Work, Return to Driving, Wheelchairs/Seating
- Goals: To review best practice, disseminate evidence in area, act as resource, support to change practices



Evolution into Continuing Professional Development (CPD) Strategy

- In 2005, Corporate Professional Leaders recognized the need for profession-specific plans that were unique to each program → developed a recommended process and received support from Senior Management
- As part of this process, the leaders facilitated a needs assessment with the clinicians to determine which areas they prioritized for continuing professional development
- Where possible, in OT, the Best Practice Groups meshed with CPD plans, so V-P Group → Cognitive V-P Group with the addition of new members



Continuing Professional Development Defined

“... the process by which health professional keep updated to meet the needs of the patients, the health service and their own professional development... the continuous acquisition of new knowledge, skills and attitudes to enable competent practice”

(Peck et al., 2000)

“... includes educational methods beyond the didactic, embodies concepts of self-directed learning and personal development, and considers organization and system factors”

(Davis et al, 2003)



Objectives of Cognitive V-P CPD Group

Goals:

- Occupational Therapists will appropriately select, administer and interpret a range of standardized cognitive assessments.
- Occupational Therapists will appropriately select, administer, and evaluate a range of cognitive interventions.

Focus:

- Determine best practice in cognition across all populations that Toronto Rehab serves
- Develop appropriate resources for best practice and disseminate this knowledge for implementation across the organization



Establishing Baseline

To establish baseline knowledge and competency (in Summer of 2007) we:

- Surveyed OT's from all five sites:
 - 30 surveys received
 - Questions asked included comfort and satisfaction level with cognitive assessments, learning needs, current perceived resources and preferred methods of learning

Survey: Kirkpatrick's base levels of educational outcomes, learners' reaction/satisfaction and perceived competence



Establishing Baseline (Cont'd)

To establish baseline knowledge and competency (in Summer of 2007) we:

- 2) Audited a sample of health records from each site:
 - 17 health records reviewed
 - Generated form for a review: evaluating number and appropriateness of chosen cognitive assessments (including functional cognitive evaluations), and other quantitative and qualitative data

Health record review: Ability to observe a change in performance? (A higher level of Kirkpatrick's model)



Findings of Survey

- Wide range of assessments used (with reported comfort of use of between 2-12 assessments)
- Resources most often used for review: Other therapists (17), manuals (9), literature (16)
- Request for more education on 3 cognitive assessments already owned
- Preferred learning method: In-services (17), videos--if easily accessible (9), group reviews (6), list of assessments on the Intranet (5), updating of cognitive module guidelines (5)



Findings of Survey (Cont'd)

Projects resulting from the survey:

- Completed a video on administration and scoring of BADS (The Behavioural Assessment of Dysexecutive Syndrome)
- The second video on administration and scoring of LOTCA (The Lowenstein Occupational Therapy Cognitive Assessment) is in the editing stage
- Compiled a list of all cognitive assessments available at TRI and reviews of priority assessments/screens, posted on Intranet



Findings of Review of Health Records

- Large variations among programs, that to large extent reflected the population served as well as individual therapist's level of comfort and knowledge with cognitive assessment
- Inconsistent process of screening for cognitive issues
- Documented link between cognitive impairment and mood

Is documentation reflective of practice?



Findings of Review of Health Records (Cont'd)

Projects resulting from chart review:

- Educational brochure that explains link between mood and cognition
- Reviews of cognitive assessments and screens prepared and posted on Intranet
- Decision-making tree to help with clinical reasoning regarding appropriate choice of cognitive screen
- Future Plan to assemble resource binder with relevant literature reviews for use at each site



Intranet

- Internal network for all Toronto Rehab employees
- OT Clinical Educator: Space on Intranet for links and educational materials
- Ideal method to disseminate new knowledge, for example, sharing PowerPoint presentations, videos, Word documents, and Brochures prepared by Cognitive CPD Group
- May be coupled with emails to all OTs regarding recent updates



Mood & Cognition Pamphlet

- Project initiated by Pre-graduate Student OT
- Rationale: ABI Program, as well as programs that traditionally do not assess and intervene related to cognition can benefit
- Review of literature regarding connection between mood and cognition
- Information in the pamphlet includes
 - Distinguishing between mood and depression
 - Signs of depression
 - Impact of depression on specific cognitive skills
 - Functional examples from daily life
 - Simple self-help strategies
 - Recommendation to seek professional help



A Cognitive Screening Decision Tree

- Project initiated by Pre-graduate Student OT
- Rationale: Cognitive screens can help clinicians detect potential cognitive impairments which may not be easily observable.
- 3 Trees prepared based on population
 - ABI or suspected ABI
 - Elderly or suspected dementia
 - Suspected cognitive impairment without specific diagnosis



Videos

- August 2007 to April 2008, BADS administration and scoring video was prepared by student and staff OTs



Cognitive Assessment Review

- Assessment summaries were prepared using a format modified from Law, M., Baum, C., & Dunn, W. (2001).
- 20 summaries were edited or completed and posted on the intranet.
- Summaries included
 - Assessment title, author, date, and source/publisher
 - Purpose, focus, and type of client and age range
 - Format, procedures, completion time and clinical utility
 - Standardization (reliability/stability, validity) and references
 - Strengths, weaknesses and overall recommendations of utility



Survey and Chart Review 2008

Survey sent again in the fall of 2008

- The reported confidence in administration and interpretation of BADS by OTs has increased
- List of cognitive screens and assessments on Intranet ranked highest as a method for further learning
- Provided direction for the next assessments

Chart Review

- 20 charts reviewed from 3 sites
- Inconsistent results between programs regarding knowledge of appropriate cognitive assessments and interventions
- Large differences among therapists on the same program



Meaning of these Findings

Positive outcomes:

- Promising finding related to learners satisfaction with resources and increased confidence in competence
- Shift in recognition of alternative methods of learning

Challenges:

- Limitations in method of evaluating change in Occupational Therapists' performance
- Review of charts (possibly biased samples evaluated, new chart format)
- Projects not yet fully completed and disseminated (instructional videos, resource binder for each site, cognition and mood pamphlet)



“Unevaluated” Outcomes

- New OTs and students have more resources for self-directed learning specific to the assessment methods used at Toronto Rehab
- Our video and reminders of how to access the intranet have been requested by these groups with increasing frequency
- Due to use of the Intranet by the OTs, Media Services at Toronto Rehab is planning to pilot a “networking site” with this group to aid in professional development by improving communication among clinicians at various sites



Next Steps

- “We are on the right track”
- Complete the projects currently in progress
- Focus on the dissemination—ensure that all staff consider use of the intranet as a resource when looking for information about cognitive assessment
- Initiate projects related to cognitive intervention
- Reconsider evaluation methods



Summary

- Creative methods/tools to translate knowledge into practice are required to efficiently meet the educational needs of clinicians, particularly with large teaching organizations
- We have developed videos, clinical reasoning tools, and an educational brochure to improve practice related to cognitive assessment. Dissemination of these tools has been initiated using the intranet
- Our methods have been based in KT theory and demonstrates that it’s applicable to clinical settings



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Questions?



References

- Canadian Association of Occupational Therapists, <http://www.caot.ca/default.asp?pageid=1344>, Retrieved October 20, 2008.
- Canadian Institutes of Health Research, <http://www.cihr-irsc.gc.ca/e/29418.html>, Retrieved October 20, 2008.
- Davis, D., Fox, R., & Barnes, B. (2003). The horizon of continuing professional development: Five questions is knowledge translation. In *The Continuing Professional Development of Physicians*. Chicago: AMA Publications.
- Kirkpatrick, D. L. & Kirkpatrick, J.D. (1998). *Evaluating training programs: The four levels*. San Francisco: Berrett-Koehler Publishers, Inc.
- Peck, C. McCall, M., McLaren, B., & Rotem, T. (2000). Continuing medical education and continuing professional development: international comparisons, *BMI*, 320: 432-435.
- Sackett, D.L., Rosenberg, W.M., Gray, J.A., Haynes, R.B., Richardson, W.S. (1996). Evidence Based Medicine: What it is and what it isn't, *BMI*, 312(7023): 71-2.