Clinical/Vocational Outcome Measurement Guided Rehabilitation & Vocational Rehab Tools

Dr. J. Douglas Salmon Jr.
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CEO, Rehabilitation Research, Education & Evaluation Services (RREES)
Dr. Salmon Associates Assessments

- Clinical Psychological Assessment
  - For diagnostic and psychological management purpose
- Psychovocational/Neurovocational Assessment
  - To provide vocational options may include clinical component (and neuropsychological)
- Neuropsychological Assessment
  - To assess the presence of brain pathology; may include clinical component
- Cognitive-Psychological FAE
  - To assess functional status relative to cognitive/psychological job demands
Dr. Salmon Associates
Psychological Treatment

- Adjustment disorders
- Major depression
- PTSD
- Phobias (in-vehicular, pedestrian)
- Pain disorders
- Sleep disturbance
- Cognitive disorders
- “Chemo Brain”

- Cognitive behavioural approaches
- Stress/pain management
- Driving rehabilitation services
- Headache treatment
- Dizziness management
- Attention treatment
Session Objectives – Part I

- Review current rehab process pitfalls re segmentation/poor vocational integration
- Present comprehensive outcome measurement based approach as “glue” to address pitfalls
- Present holistic model for impair’t/job demand specific disability assess’t and voc rehab guidance
Part II: Vocational Rehabilitation Tools

- Methodology for ruling in/out the patient’s pre-condition occupation
- Related evaluation tools
- Methodology for considering alternate occupations
- Related evaluation tools
The problem: The state of rehabilitation service provision in Ontario

- general lack of rehab barriers reviews at start/end of treatment stages
- poor outcome measurement in midst of & at end of treatment stages
- Patient progress not transparent to all parties
- loss of rehab gains as lack transition between rehab phases i.e. no case management
- Disruption/bias of IE/IME assessments
- minimal or very late vocational rehabilitation provision
- new Minor Injury Guideline (MVA)?
Clinical Management & ADL/Essential Job Tasks Link

- Pre-condition Functioning
- Illness Onset
- ADL/Essential Job Tasks Criterion (Physical, Cognitive, Socioemotional)
- Sporadic Active Treatment
- Rare Vocational Rehabilitation

Measuring Progress Towards Max ADL & Essential Job Task Criterion
Current System Outcome

- Poorer rehabilitation outcomes (ADL/vocational)

- Increased income benefits, attendant/homemaking-housekeeping costs and tort exposure

- Increased/more entrenched mental health impairments related to
  - Increased family crisis and breakdown
  - Increased claimant loss of prior employment leading to increased financial burden/crisis
Current System Outcomes cont…

- Increased burden/stress on families (increased caregiving precluding employment $\Rightarrow$ diminished family income) & secondary psychosocial impacts on children.

- Increased burden on other systems (OHIP, welfare, ODSP, CPP).

- Entitlement appeals now typically only through costly and slow legal process.

- Ongoing insurer driven reforms.
Return to Work Probability: The case for aggressive intervention and vocational management

- Probability of returning to work:
  - 50% after 6 months
  - 20% after one year
  - 10% after two years


Increasing income benefit exposure & deteriorating mental health and familial status
Proposed Solution Components

- Clinicians to be responsible for providing/referring client to next treatment/rehabilitation phase based upon mid/end tx rehabilitation barriers reviews: “Passing the baton”

- Minimum timeframes to (re)assess client’s current functional/vocational status and related prognosis relative to expected maximum functional recovery

- Involved clinicians and insurers (as a back up if clinicians not actively file) should implement treatment/rehabilitation recommendations stemming from IEs
Proposed Solutions Cont...

- Adoption of “Clinical case coordination” through integrated Clinical/Vocational Model
- Community based integrated clinical-vocational rehabilitation networks should be promoted to foster expedient integration across treatment/rehabilitation phases
- Vocational Rehabilitation professionals should be integrated into process
THIS IS WHERE WE WANT TO BE VS CURRENT “JAGGED LINE” APPROACH

Pre-condition Functioning

Illness Onset

Essential Job Tasks Criterion (Physical, Cognitive, Socio-emotional)

Integrated Active Treatment

Vocational Rehabilitation

ROMS Measures Progress Towards Essential Job Task Criterion
How do we get to where we want to go?

- Requires a clinical conceptual framework regarding what to measure and why
What is Rehabilitation Outcome Measurement System (ROMS)?

- Comprehensive graphical outcome measurement system
- Based on validated measures in WSIB and MVA populations in Ontario
Review of Key Measures

- Rehabilitation Checklist (RCL)
- Rehabilitation Survey of Problems/Coping (R-SOPAC)
- Rehabilitation Activity of Daily Living Survey (R-ADLS)
- Functional Status Measures (FSM)
- Extensive technical manuals/validation (~300 WSIB; 100 MVA; ~200 un/employed)
Rehabilitation Checklist

I. Prioritized Rehabilitation Barriers

- Physical symptoms
- Emotional symptoms
- Cognitive symptoms
- Psychosocial (family, financial, ESL, comfort, etc.)
- Prior job (unsafe, too heavy/demanding, unavailable, etc.)
- Employment (ESL, low education/skills, etc.)
Mental Health Concern/Referral

- Emotional rehabilitation barriers endorsed (especially priority)
- Worsening emotional condition (G)
- Worsening physical condition (F), contrary to medical evidence
- Fear towards workplace, driving, etc. (A.42)
- Marital/family problems (A.10)
- Dependence upon medication, alcohol/substances (A.31, A.35)
II. LIFE ROLES DISABILITY RATING AND RANKING

1. Household chores
2. Relationship with friends
3. Parental activities
4. Volunteer work
5. Relationship with spouse/lover
6. Self-sufficiency (dress, transportation etc.)
7. Sports/hobby participation
8. Social participation
9. Regular work
10. Learning/Memory
11. Modified work
12. Overall disability
RCL Graph
## Rehabilitation Survey of Problems and Coping

by J. Douglas Salmon, Jr., Ph.D. and Marek Celinski, Ph.D.

### Part 1: Survey of Problems

<table>
<thead>
<tr>
<th>Name:</th>
<th>Date: / /</th>
</tr>
</thead>
</table>

**Instructions:** Below is a list of items. Circle the number, ranging from 0-Not a Problem to 6—Extreme Problem, beside the item that best describes how much of a problem each one is for you. **Please note:** The higher the number, the more of a problem it is for you.

Please indicate the degree to which you are able to cope with your condition or problem overall:

<table>
<thead>
<tr>
<th>Cannot Cope At All</th>
<th>Can Cope Satisfactorily</th>
<th>Can Cope Very Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Not a Problem</th>
<th>Moderate Problem</th>
<th>Extreme Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Balance</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Concentration</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Dizziness</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Self-confidence</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Noise in ears</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. Sexual activity</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. Reading</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9. Nightmares</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10. Pain (other than headache)</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11. Hand co-ordination</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12. Memory</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13. Depression/Sadness</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14. Headaches</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15. Epileptic Seizures</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16. Anger/Irritability</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. Decision making</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18. Tired/Low energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19. Nervous/Worried</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20. Planning/Organizing</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21. Feeling helpless</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>22. Upsetting memories</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23. Muscle tension</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>24. Fear of Driving/ of being a passenger</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>25. Embarrassed of my appearance</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
**Rehabilitation Survey of Problems and Coping**

by J. Douglas Salmon, Jr., Ph.D. and Marek Celinski, Ph.D.

**Part 2: Survey of Coping**

<table>
<thead>
<tr>
<th></th>
<th>Cannot Cope At All</th>
<th>Can Cope Satisfactorily</th>
<th>Can Cope Very Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sleep</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2. Balance</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3. Concentration</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>4. Dizziness</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>5. Self-confidence</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6. Noise in ears</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>7. Sexual activity</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>8. Reading</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>9. Nightmares</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10. Not related to headache</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11. Hand co-ordination</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>12. Memory</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>13. Depression/Sadness</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14. Headaches</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15. Epileptic Seizures</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16. Anger/Irritability</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. Decision making</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18. Tired/Low energy</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19. Nervous/Worried</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20. Planning/Organizing</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21. Feeling helpless</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>22. Upsetting memories</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23. Muscle tension</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>24. Fear of Driving/ of being a passenger</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Please indicate how disabled you feel overall:**

0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100%
<table>
<thead>
<tr>
<th>Scale</th>
<th>Structure/Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td>Dizziness</td>
</tr>
<tr>
<td></td>
<td>Sleep Disturbance</td>
</tr>
<tr>
<td></td>
<td>Pain (non-headache)</td>
</tr>
<tr>
<td></td>
<td>Balance</td>
</tr>
<tr>
<td></td>
<td>Noise in ears</td>
</tr>
<tr>
<td></td>
<td>Muscle Tension</td>
</tr>
<tr>
<td></td>
<td>Headaches</td>
</tr>
<tr>
<td></td>
<td>Hand Coordination</td>
</tr>
<tr>
<td>Emotional</td>
<td>Depression</td>
</tr>
<tr>
<td></td>
<td>Feeling Helpless</td>
</tr>
<tr>
<td></td>
<td>Upsetting Memories</td>
</tr>
<tr>
<td></td>
<td>Embarrassed of Appearance</td>
</tr>
<tr>
<td></td>
<td>Fear of Driving/Passenger</td>
</tr>
<tr>
<td></td>
<td>Nervousness</td>
</tr>
<tr>
<td></td>
<td>Self-confidence</td>
</tr>
<tr>
<td></td>
<td>Sexual Activity</td>
</tr>
<tr>
<td></td>
<td>Nightmares</td>
</tr>
<tr>
<td></td>
<td>Fatigue</td>
</tr>
<tr>
<td></td>
<td>Anger</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Planning/Organizing</td>
</tr>
<tr>
<td></td>
<td>Memory</td>
</tr>
<tr>
<td></td>
<td>Concentration</td>
</tr>
<tr>
<td></td>
<td>Decision Making</td>
</tr>
<tr>
<td></td>
<td>Reading</td>
</tr>
<tr>
<td>Research Items</td>
<td>Epileptic Seizures</td>
</tr>
<tr>
<td></td>
<td>Self-perceived coping overall</td>
</tr>
<tr>
<td></td>
<td>Self-perceived disability overall</td>
</tr>
</tbody>
</table>
### Table 7.19
Employed, Unemployed, Clinical R–SOPAC Means Comparison.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Age</th>
<th>Intensity – Total (Mean)</th>
<th>Coping – Total (Mean)</th>
<th>Overall Total (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>88</td>
<td>43.7</td>
<td>24.4</td>
<td>20.5</td>
<td>44.9</td>
</tr>
<tr>
<td>Unemployed</td>
<td>102</td>
<td>36.2</td>
<td>37.0</td>
<td>34.3</td>
<td>71.3</td>
</tr>
<tr>
<td>Clinical</td>
<td>194</td>
<td>40.8</td>
<td>77.9</td>
<td>68.0</td>
<td>145.8</td>
</tr>
</tbody>
</table>

### Table 7.20
Employed, Unemployed, Clinical R–SOPAC Test Results.

<table>
<thead>
<tr>
<th>Group</th>
<th>Intensity – Total (Mean)</th>
<th>Coping – Total (Mean)</th>
<th>Overall Total (Mean)</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed vs. Unemployed</td>
<td>&lt;.001</td>
<td>&lt;.0001</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Unemployed vs. Clinical</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.005</td>
</tr>
<tr>
<td>Clinical vs. Employed</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>&lt;.0001</td>
<td>.ns</td>
</tr>
</tbody>
</table>
R-SOPAC Graphs
### Rehabilitation Activities of Daily Living Survey II (OM)

**Client's Name:** Jane Smith  
**Observer Name:**

**Age:** 21  
**Gender:** M  
**Today's Date:** 04/01/01  
**Condition Onset:** 10/19/00  
**Administration #:**

**Instructions:** Please read each of the activities below and indicate how much you were limited BEFORE your condition and are limited CURRENTLY. Do this by entering a percentage rating from 0% to 100% in the appropriate column, where 0% indicates no limitation, and 100% indicates complete limitation. For example, if you could climb stairs and needed only a little assistance during the course of your condition, you might enter 20% under “Before Condition.” Likewise, if you are currently experiencing a high, yet not complete, degree of limitation, you might enter 85% under “Currently.” If the activity is not applicable to you, or your limitation is not yet known, please circle “NA” in the appropriate row. Next, please indicate any symptoms (up to 3) that have limited you in performing these activities. Do this by writing them down in the space provided under “Limiting Symptoms.”

<table>
<thead>
<tr>
<th>Activity</th>
<th>Before Condition</th>
<th>Currently</th>
<th>Limiting Symptoms (pain, depression, memory, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bathing/Showering</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Grooming</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Dressing/Undressing</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Toiletting</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Sleeping</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Walking</td>
<td>% NA</td>
<td>35% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Climbing Stairs</td>
<td>% NA</td>
<td>35% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Driving</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Riding in a Vehicle</td>
<td>% NA</td>
<td>35% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Public Transportation Use</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Sitting</td>
<td>% NA</td>
<td>35% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Standing</td>
<td>% NA</td>
<td>35% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Other</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Planning/Deciding What to Buy</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Grocery Shopping/Unclogging</td>
<td>% NA</td>
<td>0% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Other</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Meal Planning/Organizing</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Meal Preparation/Cooking</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Washing Dishes</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Sweeping</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Dusting</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Vacuuming</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Bed Making</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Cleaning Bathrooms</td>
<td>% NA</td>
<td>60% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Washing Floors</td>
<td>% NA</td>
<td>60% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Cleaning Oven</td>
<td>% NA</td>
<td>60% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Cleaning Refrigerator</td>
<td>% NA</td>
<td>60% NA</td>
<td>Pain</td>
</tr>
<tr>
<td>Garbage Removal</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>% NA</td>
<td>% NA</td>
<td></td>
</tr>
</tbody>
</table>

*Please ensure that you have filled in the “Limiting Symptoms” column.  
Continue Survey on Reverse Side*
<table>
<thead>
<tr>
<th>Activity</th>
<th>% Limitation Before Condition</th>
<th>% Limitation Currently</th>
<th>Limiting Symptoms (pain, depression, memory, etc.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doing Laundry</td>
<td>0 % NA</td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Ironing</td>
<td>0 % NA</td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Sewing</td>
<td>0 % NA</td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Grass Cutting</td>
<td>0 % NA</td>
<td>35 % NA</td>
<td>pain</td>
</tr>
<tr>
<td>Gardening</td>
<td>0 % NA</td>
<td>60 % NA</td>
<td>pain</td>
</tr>
<tr>
<td>Snow Shovelling</td>
<td>0 % NA</td>
<td>35 % NA</td>
<td>pain</td>
</tr>
<tr>
<td>Home Repairs</td>
<td>0 % NA</td>
<td>35 % NA</td>
<td>pain</td>
</tr>
<tr>
<td>Other</td>
<td>0 % NA</td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Relating to Partner</td>
<td></td>
<td>60 % NA</td>
<td>depression, stress</td>
</tr>
<tr>
<td>Relating to Children</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Relating to Relatives</td>
<td></td>
<td>35 % NA</td>
<td>depression, stress</td>
</tr>
<tr>
<td>Relating to Friends</td>
<td></td>
<td>35 % NA</td>
<td>stress</td>
</tr>
<tr>
<td>Sexual Activity</td>
<td></td>
<td>0 % NA</td>
<td>stress, self-confidence</td>
</tr>
<tr>
<td>Informal Social Activities</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Formal Social Activities</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Recreational Activities and Hobbies</td>
<td></td>
<td>0 % NA</td>
<td>depression, pain</td>
</tr>
<tr>
<td>Sports/Exercise</td>
<td></td>
<td>0 % NA</td>
<td>pain, self-confidence</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Daily Banking/Bills, Finances</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Keeping Appointments</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Remembering Errands</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Understand/Recall What You Have Read</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Following/Recalling a Movie/TV Program</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Recalling Conversations/Events</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Remembering/Following Directions</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Prioritizing Activities</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Organizing Activities, Projects</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Forgetting Iron/Stove On, Lock Doors, etc.</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Handling Several Things at Once</td>
<td></td>
<td>35 % NA</td>
<td>depression, stress</td>
</tr>
<tr>
<td>Concentrating With Distractions</td>
<td></td>
<td>35 % NA</td>
<td>stress</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Initiating/Following Conversation</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Finding Words to Express Thoughts</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Writing So Others Understand</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Understanding What Others Say</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Talking On the Telephone</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
<tr>
<td>Typing/Keyboarding</td>
<td></td>
<td>0 % NA</td>
<td>pain</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>0 % NA</td>
<td></td>
</tr>
</tbody>
</table>

Please ensure that you have filled in the "Limiting Symptoms" column. Thank You for completing this survey.
Rehabilitation Activities of Daily Living Survey (R-ADLS)

- For all disability groups with any combination of physical (P), cognitive (C), emotional (E) symptoms
- From acute care to community integration
- Measures identifies relative contribution of above symptoms per ADL domain
- Allows measurement of entire domain or item
- Improves understanding of relative P, C, E impacts
R-ADLS Graphs
- Orthopedic assessment
- Psychological assessment
- Social work/family assessment
- Sleep assessment
- Dizziness, substance abuse vs. anxiety/panic attacks
- Vision/hearing assessment

3. PHYSICAL INTERVENTION(S)
- Physiotherapy
- Work conditioning
- Vestibular rehabilitation
- In home OT
- Work hardening

4. PSYCHOLOGICAL I INTERVENTION
- Pharmacological
- Psychological intervention
  - cognitive behavioural
  - stress/symptom management counselling

5. PSYCHOLOGICAL II INTERVENTION
- Home/community behavioural programming (12-16 weeks)
- Psychological support

ROMS RE-ASSESSMENT I
(If intervention occurred for initial Primary Barriers)

ROMS (PHYSICAL) RE-ASSESSMENT II

ROMS RE-ASSESSMENT III
Determine status after Level I Intervention and/or at interim

ROMS Demonstrated Progress

ROMS RE-ASSESSMENT IV+

ROMS Demonstrated Minimal/No Progress
Functional Status Graphs
Clinical Management & ADL/Essential Job Tasks Link

**Pre-morbid ADL/Essential Job Tasks Criterion (Physical, Cognitive, Socioemotional)**

Pre-condition

Functioning

Illness Onset

Active Treatment

Vocational Rehabilitation

ROMS Measures Progress Towards Essential Job Task Criterion
ROMS slides
Clinical/Vocational Integration & Essential Job Tasks Link

"Essential Job Tasks" (EJT) Criterion (Physical, Cognitive, Social-emotional)

Pre-condition Functioning

Illness Onset

Active Treatment

Active Treatment

Vocational Rehabilitation

Terminal "EJT" Shortfall

Measured by:
- FAE
- CP-FAE
- NPA

ROMS Measures Progress Towards Essential Job Task Criterion
Vocational Rehabilitation

- Job modifications/accommodations
- Adaptive devices
- Job sharing
- Job trials, work hardening/volunteer work
- *Alternative work
- *Retraining
  - *Informed by Psycho/Neurovocational Assessment
Model Key Points

- Expedite determination of diagnosis, primary rehab barriers & perform rehab baseline

- Aggressive physical treatments/psychotherapy & functional interventions for *evolving* primary barriers

- Outcome measures required to guide intervention stages & maximize functional recovery

- Comprehensive measurement of status relative to “essential job tasks”
Summary Key Points cont…

- Aggressive vocational rehabilitation for essential task functional shortfall

- Funding continuation facilitated via progress measurement

- Facilitates demonstration of client motivation

- Useful as client discussion/motivational tool
Model Advantages

- Advances maximal clinical/vocational progress
- Continually review residual symptom/other barriers, ADL and occupational shortfalls
- Facilitates demonstration of client motivation
- Useful as patient discussion/motivational tool
GP Role – Realistic?

- May act a “team coordinator”
- Review patient at mid (ideally) and end of prescribed treatment periods
- Liaise with treatment providers
- In/formal review of patient perceived primary rehabilitation barriers
- Identify barriers/ADL areas not being addressed
- Refer for next rehab stage
Clinical Assessments

- **Purpose**: address impairment issues relative to symptoms; severe impairment may clearly preclude employment

- **Symptoms/Barriers**: any symptom

- **Disadvantages**: as recovery progresses and impairments improve vocational implications of impairment less certain
Impairment & “Own Occupation” Disability Determination

Illness/Injury

Impairment/Diagnosis Determination

Physical Impairments/Dx
- IME/s (neurol., orthop., etc.)
- Allied physical assessment (PT, speech, etc.)

Emotional/Behavioural Impairments/Dx
- Psychological assessments
- Psychiatric assessment

Cognitive Impairments/Dx
- Neuropsychological assessments

Occupational Disability Determination: Can client perform essential job tasks?

Physical Functional Abilities (FAE)
- IME’s – basic sensory-motor (e.g. visual, hearing)
- FAE Specific

Emotional/Interpersonal Functional Abilities (CP-FAE)
- Comprehensive Psychological Disability Assessment
- Cognitive/Psych. FAE
- Neuropsychological

Cognitive Functional Abilities (CP-FAE)
- Neuropsychological (Neurocognitive impairment)
- Cognitive/Psych. FAE (or NPA) (Non-neurological impairments)

Situational Work Assessment: All demands (sedentary/light & non-technical/managerial

Physical Demands (PDA)

Emotional/Psychosocial Demands (CP-JDA)

Cognitive Demands (CP-JDA)

Job Demands Analysis

Dr. J. Douglas Salmon, Jr. © 2001, 2006
Functional Ability Evaluation

- **Purpose:** addresses physical tolerances relative to specific, general work demands

- **Symptoms/Barriers:** headaches, pain, dizziness, physical limitations

- **Disadvantages:** not cognitive, noise intolerance, interpersonal, stamina/productivity over time, nor academic/retraining potential, etc.
“Given recent estimates that about 75 percent of the new jobs in the economy have to do with cognitive ability, not physical ability, and that the heavy lifting in the economy is now being done with people’s minds, not with their backs, this aspect of mental disability is more significant than it might have been a number of years ago”.

Rod Phillips, President/CEO, Warren Sheppell Consultants Corp
Cognitive/Psychological Job Demands Analysis (CP-JDA)

- Parallel’s *physical* job demands analysis (JDA)

- For occupational requirements/essential job demands substantially cognitive/interpersonal in nature

- Assesses workplace characteristics relative to cognitive and psychological demands

- Example occupational areas among many others: professional, executive, managerial, administrative, technical, trades, consulting/advising, teaching, business/financial services, health services, editing/writing, inventory, quality monitoring/control.
Cognitive/Psychological Functional Ability Evaluation (CP-FAE)

- Assesses strengths and limitations of individual relative to cognitive and psychological demands of a given occupation or generally.

- Applicable to any condition—physical, emotional or cognitive—significant impacting individual’s thinking, cognitive and interpersonal processes and abilities e.g.
  - Mental health/psychological impairment
  - Stress claims
  - Chronic pain
  - Fibromyalgia
  - Chronic Fatigue
  - Neurocognitive disorders
Cognitive/Psychological Functional Ability Evaluation (CP-FAE)

- Combined with psychological diagnostic assessment
- Recent diagnosis needed to identify diagnostic based limitations, restrictions, facilitators, accommodations
- Client collaborative interview focuses on:
  - Identifying barriers/stressors within the work environment
  - Identifying workplace facilitators
  - Identifying impairment related limitations/restrictions
  - Identifying workplace modifications, accommodations, adaptive strategies/devices, scheduling
Cognitive/Psychological Functional Ability Evaluation (CP-FAE)

Worker Characteristics/Role: Barriers and facilitators

- Adherence to/concerns with work policies
- Level of responsibility + related stress perception
- Work attitude/philosophy
- Job enjoyment/satisfaction
- Work Approach
- Creativity involved
- Complex tasks involved
- Repetitive Tasks
Cognitive/Psychological Functional Ability Evaluation (CP-FAE)

Work relationship characteristics reviewed:

- Relationship with boss
- Relationship with supervisees
- Coworkers
- Customers
Cognitive/Psychological Functional Ability Evaluation (CP-FAE)

Organizational parameters reviewed:

- Employment, turnover, layoffs
- Qualifications
- Training
- Organization of workplace
- Management style/accessibility
- Co-workers
- Physical space
- Organizational culture/fit
Cognitive/Psychological Functional Ability Evaluation (CP-FAE)

Other areas considered:
- Communication modes
- Supervision/supervisory characteristics
- Learning opportunities/demands
- Training expectations
- Rehabilitation opportunities/considerations
- Prioritized rehabilitation barriers
- Perceived symptom intensity/coping
Cognitive/Psychological Functional Ability Evaluation (CP-FAE)

Objective testing domains considered:

- General learning ability
- General educational development
- Occupational aptitude
- Sustained concentration and persistence
- Attention/memory/learning
- Higher level cognitive abilities (problem solving, thinking, decision making)
- Social interaction
- Stress demands
- Work traits

- All sub-domain areas compared to CP-FAE demands to determine if client meets job demands
- Diagnosis based impairment ratings grounded in AMA Disability Guides methodology
<table>
<thead>
<tr>
<th>Essential (Y/N, NA)</th>
<th>CP- Job Demands Analysis</th>
<th>CP-FAE Demands Measurement*</th>
<th>CP-JDA &amp; CP-FAE Demands Match</th>
<th>Limiting Symptom/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vigilance/monitoring</td>
<td>Y</td>
<td>Mild impairment</td>
<td>Does not meet</td>
<td>- weak mental control, visual attention span &amp; immediate verbal memory; this would likely be highly cognitively fatiguing activity for her, thus degrading task performance over time</td>
</tr>
<tr>
<td>Multi-tasking ability</td>
<td>Y</td>
<td>Borderline</td>
<td>Borderline</td>
<td>- weak mental control, visual attention span &amp; immediate verbal memory; this would likely be highly cognitively fatiguing activity for her, thus degrading task performance over time</td>
</tr>
<tr>
<td>Planning</td>
<td>Y</td>
<td>No impairment</td>
<td>Meets</td>
<td></td>
</tr>
<tr>
<td>Reasoning/problem solving</td>
<td>Y</td>
<td>Moderate impairment</td>
<td>Does not meet</td>
<td>- Poor reading comprehension; weak mental control, visual attention span &amp; verbal memory/learning</td>
</tr>
</tbody>
</table>

Higher Level Cognitive Abilities

- **Vigilance/monitoring**: Testers must log errors found immediately to share this information with the group. Testers must vigilantly monitor e-mails to ensure they are working on the most current software platform. Constant; Moderate (4) - Weak mental control, visual attention span & immediate verbal memory; this would likely be highly cognitively fatiguing activity for her, thus degrading task performance over time

- **Multi-tasking ability**: Constantly working between 4 different programs, each represented on the screen, monitoring e-mails, reviewing documents and keeping focused on task at hand. Constant; Moderate (4) - Weak mental control, visual attention span & immediate verbal memory; this would likely be highly cognitively fatiguing activity for her, thus degrading task performance over time

- **Planning**: Tester must plan testing scenarios in order to complete testing. Occasional; Moderate (3) - No impairment

- **Reasoning/problem solving**: Tester must read and comprehend complex release package information and then independently create testing scenario to properly address the desired test and outcome. Constant; High Moderate (4) - Moderate impairment - Poor reading comprehension; weak mental control, visual attention span & verbal memory/learning
<table>
<thead>
<tr>
<th>Social Interaction</th>
<th>Essential (Y/N, NA)</th>
<th>CP- Job Demands Analysis</th>
<th>CP-FAE Demands Measurement*</th>
<th>CP-JDA &amp; CP-FAE Demands Match</th>
<th>Limiting Symptoms/ Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interaction with public (customer service)</td>
<td>N</td>
<td>Testers support the program users, but these users are internal to the bank.</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Give/accept instructions</td>
<td>Y</td>
<td>Give feedback to manager, cross training with co-workers, trouble shooting and assisting callers with questions Occasional; Moderate to High Moderate (3/4)</td>
<td>No impairment</td>
<td>Meets</td>
<td></td>
</tr>
<tr>
<td>Supervisory feedback given/response accepted</td>
<td>Y</td>
<td>If tester makes an error (i.e. tester thinks problem is solved and manager determines otherwise), manager gives this feedback to tester Occasional; Moderate to High Moderate (3/4)</td>
<td>No impairment</td>
<td>Meets</td>
<td></td>
</tr>
<tr>
<td>Cooperation with co-workers (relative to behavioural issues)</td>
<td>Y</td>
<td>Co-workers must communicate and share information about problems found Frequent; Moderate (3)</td>
<td>No impairment</td>
<td>Meets</td>
<td></td>
</tr>
</tbody>
</table>
CP-JDA/FAE (Combined PVA) Follow Up Rehab Services

A. OT supported own occupation trial
   - Modifications, accommodations, aids, etc

B. Alternate occupation consideration
   - Informed by CP-FAE (and PVA) profile
   - Employer forwards (3) alternate occupations for CP-FAE comparison to job demands (CP-JDA)
   - OT supported occupational trial
Situational Work Assessments

- Address similar client (mental health/mixed disability) population to that of CP-FAE

- Better suited to front-line workers vs professional/managerial (CP-FAE preferred)

- Better addresses social-interactional skills, but lower cognitive demands tapped vs CP-FAE
Situational Work Assessments

Description:
- 2 to 3 day simulated work and standardized method-time-measurement (MTM) work sample assessment to address issues of:
  - cognitive efficiency
  - stamina
  - learning capacity
  - reasoning
  - problem solving abilities
  - stress tolerance
  - behavioural control capacity
  - social interaction skills
  - work traits
  - relative to specific (own-occupation) and general (any occupation) job demands
Alternate Occupation (Disability) Determination

Illness/Injury

Physical Impairments

Emotional Impairments

Cognitive Impairments

Physical Abilities/Limitations

• General FAE

Personal & Vocational Characteristics

Minimal Cognitive Impairment

• Psychovocational Assessment

Significant Cognitive Impairment

• Neurovocational Assessment

Potential Job Alternatives

Competitively Employable?

• Productivity
• Sustained concentration & work pace
• Social interactional, work demeanor
• & Stamina over full work day/week

Work Trial

Situational Work Assessment

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Elements of a Psychovocational Assessment

- Clinical Interview
  - Establish mandate, basic background data, interpersonal/emotional functioning, RTW motivation, rapport
- Personality Testing
  - One or combination of diagnostics and vocational in approach
- Interest Testing
  - Establish high, moderate, low interest area
- Achievement Testing
  - Establish client (grade) functional levels of reading, spelling, math
Elements of a Psychovocational Assessment

- **Aptitude Testing**
  - Establish current work-related skills level and profile for occupational training potential

- **Intellectual Testing**
  - Establish general learning, and reasoning abilities in verbal and non-verbal domains & to cross reference aptitude measures

- **Limited memory/learning Testing**
Neuro/Psychological Occ. Activity Restrictions

- Most common examples:
  - frequent driving related activities
  - frequent multitasking activities
  - frequent work disruptions
  - frequent and substantial visual or auditory distractions, including working in close proximity to others
  - highly paced work environments/occupations (e.g. assembly-line/quotas, frequent short turn around deadline pressures)
  - high stress occupations
  - fast paced/dangerous machinery
  - frequent high level, fast paced conversations
  - frequent new learning demands
Neurovocational Evaluation

- **Purpose:** identify job alternatives, and retraining potential when brain injury exists

- **Symptoms/Barriers:** attention, flexibility, planning, problem solving, memory/learning deficits; may be combined with physical/emotional inputs

- **Disadvantages:** best used for higher skilled occupational potential; doesn’t address physical functioning, academic weaknesses, long term stamina
Neurovocational Eval. Cont...

- Description: Psychovocational elements plus:
  - Detailed memory/learning testing
  - Detailed executive evaluation (divided attention, problem solving, thinking flexibility, planning, decision making)
Neuro-Vocational Strength Clusters

- Manual Skills & Psychomotor Speed
- Visuospatial & Manual Strengths
- Verbal & Basic Academic Strengths
- Intellectual, Academic & Executive Strengths
Neuro/Vocational Assessments

- Best at ruling out occupations
- Serve to “narrow the field”
- May not be able to clearly “rule in”
- May still need to consider “competitive employability” in alternate field
Purpose: address likelihood of employability generally/specifically typically relative to physical and emotional barriers; ascertain work habits

Symptoms/Barriers: most symptoms, work habits, work motivation

Disadvantages: formal settings often inappropriate for premorbidly high functioning (e.g. professional, technical, students); miss subtle cognitive deficits; inherent motivational concerns in process?
Cognitive Simulated Work Assessment

- **Purpose:** as work simulation with focus on cognitive demands

- **Symptoms/Barriers:** as above

- **Disadvantages:** only partially addresses retraining/academic potential
Work Trial Assessment

- **Purpose:** real work setting evaluation with/out intensive supervision, job shadowing/coaching

- **Symptoms/Barriers:** all

- **Disadvantages:** when premature --> psychological set back, symptom aggravation/regression, may lose employer
Vocational Rehabilitation Process Mirrors “Any Occ” Determination

Illness/Injury

Physical Impairments
- Physical Abilities/Limitations
  - General FAE

Emotional Impairments

Cognitive Impairments

Personal & Vocational Characteristics
- Minimal Cognitive Impairment
  - Psychovocational Assessment
- Significant Cognitive Impairment
  - Neurovocational Assessment

Potential Job Alternatives

Vocational Counselling Exploration
- Situational Work Assessment
- Volunteer Work/Work Hardening
- Job Placement Assistance
- Work Trial/Placement

Dr. J. Douglas Salmon, Jr. © 2001, 2006
Psychoeducational/Learning Disability Evaluation

- **Purpose:** identify strengths/weaknesses relative to academic learning abilities/disabilities
- **Symptoms/Barriers:** cognitive impairment (directly and secondary)
- **Disadvantages:** academic focus only
TBI/Mental Health Vocational Interventions

- **Graduate**: hours, responsibility, rate/volume, multiple tasks
- **Compensatory strategies**: lists, day timer, computer, timers
- **Task/environmental modifications**: routinize day/tasks, reduce distractions, risks
- **Activity restrictions**: risks (financial, safety, advising/counselling), noise/light, heights, physical tolerances
- **“Supported employment”**: job shadowing, job coaching, fade support, monitoring
Mental Health Accommodations

Attendance:

- Allow flexible work environment:
  - Flexible scheduling
  - Modified break schedule
  - Leave for counseling
  - Work from home/Flexi-place

*Job Accommodations Network (www.jan.org)
Concentration/Memory:

- Reduce distractions in the work area:
  - Provide space enclosures, sound absorption panels, or a private office
  - Allow for use of white noise or environmental sound machines
  - Allow the employee to play soothing music using an earbud and computer or music player
  - Plan for uninterrupted work time
  - Purchase organizers to reduce clutter

- Increase natural lighting or provide full spectrum lighting
Allow flexible work environment:
- Flexible scheduling
- Modified break schedule
- Leave for counseling
- Work from home/Flexi-work

Divide large assignments into smaller tasks and goals

Use auditory or written cues as appropriate

Restructure job to include only essential functions

Provide memory aids such as “to do” lists, record meetings, schedulers, organizers, or cell phone apps
Emotional Accommodations:

- Encourage the use of stress management techniques to deal with frustration
- Consider the presence of a support animal
- Consider telephone calls during work hours to doctors and others for needed support
- Allow flexible breaks
- Maintenance of ongoing counselling support or minimally refer to EAP
Fatigue Accommodations

- Allow flexible work environment:
  - Flexible scheduling
  - Modified break schedule
  - Leave for counseling
  - Work from home/Flexi-place

- Provide a goal/task-oriented workload

- Reduce or eliminate physical exertion and workplace stress

- Implement ergonomic workstation design
Thank you!