Beyond safety: reassessing waiting-list prioritization criteria for occupational therapy in home care

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Declaration of interests

• This study was funded by:
  – *Fonds de recherche Santé Quebec*
  – *Quebec rehabilitation research network* in collaboration with the *Office des personnes handicapées du Québec*.

• Marie-Hélène Raymond works part-time as a home care occupational therapist but did not know any of the participants who completed the questionnaire in person.
Background

- Rehabilitation services in home care have an important role in the health care system: helping clients remain at home as long as possible (Canadian Home Care Association, 2011).

- Occupational therapist’s role in home care:
  - Maximize clients’ independence;
  - Ensure safety in activities of daily living.
  - Typical interventions:
    - Home adaptations
    - Assistive devices
    - Teaching strategies
Background

- Access is problematic
  - Excessively long waiting lists (CAOT, 2008; OEQ, 2005)
  - In the province of Quebec, median wait time of
    - 2 days for urgent referrals
    - 4 weeks for high priority referrals
    - 18 months for lowest priority referral (Raymond et al, 2013)
Background

- Use of home-made tools
  - Not standardized
- Prioritization criteria inconsistent between settings
  - Not developed by consulting the literature or the target clientele

(Raymond et al, 2013)

<table>
<thead>
<tr>
<th>Occupational therapy prioritization criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Priority 1</strong></td>
</tr>
<tr>
<td>• Acute condition (total hip or total knee replacement, fracture, stroke...)</td>
</tr>
<tr>
<td>• Palliative care</td>
</tr>
<tr>
<td>• Pressure sores</td>
</tr>
<tr>
<td>• Safety is compromised (crisis situation, new setting, return home after hospitalization)</td>
</tr>
<tr>
<td>• Cognitive assessment with imminent danger</td>
</tr>
<tr>
<td>• Dysphagia</td>
</tr>
</tbody>
</table>

| **Priority 2**                               |
| • Loss of independence in activities of daily living |
| • Repetitive falls                            |

| **Priority 3:**                              |
| • Cognitive assessment without imminent danger (e.g. screening or reassessment) |
| • “Home adaptation program” through the Quebec Housing Society |
| • At risk of falls                           |
| • Request for wheelchair or other assistive device through governmental program |
| • Non-acute clients                         |

| **Priority 4:**                              |
| • Loss of independence in instrumental activities of daily living and leisure |
| • Request for scooter through governmental program |
| • Reassessment                             |
| • Other                                     |

Source: Raymond et al, 2013, Table 1.
Background

• Prioritization criteria

Is this consistent with the priorities of our target clientele?
Objective

• Compare views of home care occupational therapists and their target clientele (elderly persons and physically disabled adults) on key criteria that are used to prioritize waiting lists.
Methods: Study design

- Mixed methods (mainly quantitative)
- "Discrete choice experiment"
  - Increasingly used in health services research (Ryan & Farrar, 2000)
  - Survey where respondents must choose one preferred option from a set of choices.

- In this study:
  “Which of these two people on the waiting list should be seen first?”

- Aims to quantify the relative importance of different factors that influence a decision

- 5 steps
Methods

• Step 1: Identify attributes that influence the decision
  – Chosen from our previous study of prioritization criteria (Raymond et al, 2013)
  – Represent main values at stake
### Methods

**Step 2: Identify severity levels for each attribute**

<table>
<thead>
<tr>
<th>Level</th>
<th>Falls</th>
<th>Wait time</th>
<th>Ability to shower</th>
<th>Ability to exit the home</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No falls</td>
<td>2 months</td>
<td>Without difficulty</td>
<td>Without difficulty</td>
</tr>
<tr>
<td>2</td>
<td>One fall</td>
<td>10 months</td>
<td>With difficulty and fear</td>
<td>With difficulty and fear</td>
</tr>
<tr>
<td>3</td>
<td>A few falls</td>
<td>18 months</td>
<td>Unable (can only sponge bathe)</td>
<td>Unable</td>
</tr>
</tbody>
</table>
Methods

- **Step 3: Devise case scenarios using various combinations of these levels**
  - Combinations are determined using a D-Optimal design (OPTEX procedure in SAS)

<table>
<thead>
<tr>
<th>Case Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Has been on the occupational therapy waiting list for 10 months</td>
</tr>
<tr>
<td>Is unable to shower; can only sponge wash at the sink</td>
</tr>
<tr>
<td>Has not had any falls at home</td>
</tr>
<tr>
<td>Is unable to enter or exit the home because of the stairs</td>
</tr>
</tbody>
</table>
Methods

Step 4: Data collection (choice tasks)

<table>
<thead>
<tr>
<th>Which of these two people should be seen first by the home care occupational therapist?</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ this person who :                              or</td>
</tr>
<tr>
<td>Has been on the occupational therapy waiting list for 10 months</td>
</tr>
<tr>
<td>Is unable to shower; can only sponge wash at the sink</td>
</tr>
<tr>
<td>Has not had any falls at home</td>
</tr>
<tr>
<td>Is unable to enter or exit the home because of the stairs</td>
</tr>
<tr>
<td>☐ this person who :</td>
</tr>
<tr>
<td>Has been on the occupational therapy waiting list for 2 months</td>
</tr>
<tr>
<td>Is able to shower without difficulty</td>
</tr>
<tr>
<td>Has fallen a few times at home</td>
</tr>
<tr>
<td>Is able to enter and exit the home but with difficulty and fear in the stairway</td>
</tr>
</tbody>
</table>
Methods

• Data collection: mail survey
• 8 choice tasks per questionnaire
• 3 groups of respondents:
  – Home care occupational therapists (professional licensing board)
  – Community-dwelling elderly people aged 65+ (research center)
  – Community-dwelling physically disabled adults (advocacy groups)
• Sample size: at least 200 per group (Bridges, 2011)
Methods

• Step 5: Data analysis
• Logistic regression analysis
  – Dependent variable: scenario is chosen or not
  – Independent variables: each of the 4 attributes and the respondent group (main effects and two-way interaction effects)
Methods: Qualitative component

- Questionnaire completed in person with a subsample
- Cognitive interviewing techniques (Drennan, 2003)

- Videotaped interviews
- Qualitative content analysis (Graneheim and Lundman, 2004) to identify themes

Why are you choosing this person over the other?

What do these issues mean to you?
Findings

- Respondents: n=714 (quantitative), n=30 (qualitative)
  
  - Occupational therapists n=241 (11 in person)
  - Elderly people n=226 (10 in person)
  - Physically disabled people n=247 (9 in person)
Findings

• Conditional logit model for full sample (n=714):
  ➢ Significant interaction of each main attribute with the group (p ≤ 0.001)
Findings

- Conditional logit model for each group separately

<table>
<thead>
<tr>
<th>Attribute main effects</th>
<th>Occupational therapists</th>
<th>Elderly people</th>
<th>Physically disabled adults</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds ratio estimate</td>
<td>95% confidence limits</td>
<td>Odds ratio estimate</td>
</tr>
<tr>
<td>Falls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A few falls vs. no falls</td>
<td>48.66</td>
<td>33.64-70.37</td>
<td>8.82</td>
</tr>
<tr>
<td>One fall vs. no falls</td>
<td>6.39</td>
<td>4.88-8.36</td>
<td>3.06</td>
</tr>
<tr>
<td>Ability to enter and exit the home</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unable vs. no difficulty</td>
<td>10.56</td>
<td>7.99-13.97</td>
<td>30.82</td>
</tr>
<tr>
<td>With difficulty and fear vs. no difficulty</td>
<td>2.47</td>
<td>1.96-3.12</td>
<td>5.04</td>
</tr>
<tr>
<td>Ability to shower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unable vs. no difficulty</td>
<td>3.19</td>
<td>2.49-4.07</td>
<td>5.49</td>
</tr>
<tr>
<td>With difficulty and fear vs. no difficulty</td>
<td>3.54</td>
<td>2.79-4.49</td>
<td>3.33</td>
</tr>
<tr>
<td>Wait time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 months vs. 2 months</td>
<td>6.54</td>
<td>5.04-8.48</td>
<td>4.19</td>
</tr>
<tr>
<td>10 months vs. 2 months</td>
<td>2.37</td>
<td>1.88-3.01</td>
<td>2.95</td>
</tr>
</tbody>
</table>
Findings

Odds ratios of choosing scenario with this problem
Level 3 vs. Level 1

A few falls

Wait time 18 mths

Unable to exit home

Unable to shower

Odds ratios:
- 48.7
- 30.8
- 16.8
- 0

Groups:
- Occupational therapists
- Elderly
- Physically disabled
Findings

Odds ratios of choosing scenario with this problem
Level 2 vs. Level 1

One fall

Wait time 10 mths

Difficulty exiting home

Difficulty showering

- Occupational therapists
- Elderly
- Physically disabled

- Odds ratio of one fall: Level 2 vs. Level 1
- Wait time 10 mths: 10 months
Findings

Occupational therapists’ perspectives (n=11)

• Safety and physical integrity above all, due to lack of time

• Protecting limited healthcare resources

  “Falls will mean broken bones which will mean hospital stays, which will mean increased money, which will mean rehab and eventually back to us. So if we can prevent a fall and prevent a fracture, fall prevention is the best thing.”

• Torn between these institutional values and their professional values (client-centredness, holistic view of the person)

  “It’s terrible, but it’s as if it doesn’t appear in our… You know, we know it as OTs, and we want our client to be integrated as long as possible, active and all that, but when we prioritize… it’s not what stands out.”
  “It reduces the scope of occupational therapy, it threatens all that we are, in fact.”
Findings

Elderly people’s perspectives (n=10)

- Need to be able to exit the home in order to remain active
- Fear of falling and of losing their independence
- Emphasize their own responsibility in maintaining their independence

« A lot of people give up. [...] But as long as you can, you have to tell yourself « No, I’m gonna try to do this by myself. [...] I don’t want to stop. I’m going to go as long as I’m able to. »
Findings

Physically disabled adults’ perspectives (n=9)

• Less afraid of falling
• Felt excluded from services because their safety is less at risk
• Preoccupied with social participation, inclusion, freedom and dignity
• Importance of being able to exit the home to have a place in society

“You know, I’m a person, I can make a difference in certain people’s lives, and it’s just, I’m a citizen, and give me a chance to flourish instead of parking me in a corner ».
Discussion

• This study has shown that the way referrals are prioritized by home care occupational therapists does not correspond to the priorities of their target clientele.
  – However, the therapists are generally not comfortable with their own prioritization system.

• Who is right?
  – Waiting list prioritization is a professional decision that should take into account: problem severity, effectiveness of interventions, and available resources.
  – This study gives a deeper understanding of the issues at stake in “problem severity”
Discussion

- safety
- inclusion
- freedom
- independence
- right to access services
- social participation
- dignity
Discussion

- safety
- independence
- right to access services
- freedom
- social participation
- inclusion
- dignity
Discussion

• Possible solutions
  – Reduce number of prioritization categories
  – Ensure maximum wait time benchmarks for all clients
  – Increase health promotion and prevention

• Limitations
  – Target clientele samples not representative of actual clients or general elderly/disabled population
    • Predominantly female, more educated
    • Elderly people in better health
    • Related to difficulty of questionnaire
Conclusion

• When making decisions about priorities in healthcare, it is worth the time and effort to seek the opinions of the target clientele and the perspectives of the clinicians.

• Can deepen our understanding of the underlying issues at stake.

• Great potential for improving quality of care.
References

- Carrier 2010 thèse doctorat.
Acknowledgements

Study participants

Université de Montréal’s Statistical consulting services

Contact: marie.helene.raymond@umontreal.ca
<table>
<thead>
<tr>
<th>Sex (n,%)</th>
<th>Occupational therapists (n=241)</th>
<th>Elderly people (n=226)</th>
<th>Physically disabled adults (n=247)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>219 (92%)</td>
<td>178 (79%)</td>
<td>154 (62%)</td>
</tr>
<tr>
<td>Age group (n, %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-39</td>
<td>138 (57%)</td>
<td>27 (11%)</td>
<td>105 (43%)</td>
</tr>
<tr>
<td>40-59</td>
<td>99 (41%)</td>
<td>105 (43%)</td>
<td>106 (43%)</td>
</tr>
<tr>
<td>60-79</td>
<td>1 (0.4%)</td>
<td>190 (84%)</td>
<td></td>
</tr>
<tr>
<td>80+</td>
<td>36 (16%)</td>
<td>9 (4%)</td>
<td></td>
</tr>
<tr>
<td>Years of professional experience in home care (avg ± SD)</td>
<td>9.6 ± 7.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Education level (n, %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College or university</td>
<td>-</td>
<td>171 (75%)</td>
<td>133 (54%)</td>
</tr>
<tr>
<td>High school or less</td>
<td>-</td>
<td>53 (24%)</td>
<td>111 (44%)</td>
</tr>
<tr>
<td>Has received occupational therapy services in the past (n, %)</td>
<td>-</td>
<td>40 (18%)</td>
<td>210 (87%)</td>
</tr>
<tr>
<td>Perceived health status (n, %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent, very good or good</td>
<td>-</td>
<td>204 (91%)</td>
<td>123 (50%)</td>
</tr>
<tr>
<td>Average or bad</td>
<td>-</td>
<td>20 (9%)</td>
<td>121 (50%)</td>
</tr>
<tr>
<td>Reports limitations in (n, %)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walking at home</td>
<td>-</td>
<td>6 (3%)</td>
<td>161 (67%)</td>
</tr>
<tr>
<td>Showering</td>
<td>-</td>
<td>10 (4%)</td>
<td>158 (65%)</td>
</tr>
<tr>
<td>Entering/exiting the home</td>
<td>-</td>
<td>11 (5%)</td>
<td>143 (59%)</td>
</tr>
</tbody>
</table>
Preference heterogeneity

• Influence of age for occupational therapists:
  – Therapists aged 50 or over:
    • Less strongly prioritized falls (p=0.035)
    • More strongly prioritized people who are unable to exit the home (p=0.004)

• Influence of experience for occupational therapists:
  • Therapists with less than 5 years of experience more strongly prioritized “One fall” (p=0.049) than therapists with 5-10 years of experience

• Sex and frequency of prioritization were not significantly associated with preference choices.
Preference heterogeneity

• Elderly respondents who had received occupational therapy services in the past more strongly prioritized (p=0.016) people who had been waiting 18 months.

• Age, sex, level of education and perceived health status was not significantly associated with preference choices.
• Physically disabled respondents who had received occupational therapy services in the past more strongly prioritized scenarios where the person was unable to exit the home (p=0.0011) or had been waiting 10 months (p=0.0263).

• Respondents who were in very good or excellent health more strongly prioritized people who had been waiting 10 months than respondents who reported good, average or bad health (p=0.0124).

• Age, sex and level of education were not associated with preference choices.