Untimely access to care in community dwelling people with dementia: does it affect costs?

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**Background**
Dementia is a neurodegenerative disease, contributing to estimated worldwide costs of $818 1. As the disease progresses demands for (family) caregivers increase 2, starting with some help in IADL activities to around the clock supervision. Formal services are therefore often needed 2.

Timing of these services is important 3 as this could help delay nursing home placement and reduce caregiver stress 4. However, access to formal care is not always timely and several barriers exist. No studies examined consequences in terms of costs of untimely access to formal care.

**Methods**

**Definition:** Untimely Access = Unmet need

- Camberwell Assessment of Need for Elderly (CANE) instrument
- 22 need items (e.g. self-care)

**Analyses**
Backwards mixed model examining significant related needs with total costs, controlled for possible confounders.
- Using log transformed costs as outcome
- Country and participant as random factor

**Hypothesis**
Unmet needs are associated with higher total mean costs compared to met needs.

**Results (preliminary)**

<table>
<thead>
<tr>
<th>CANE (need) item</th>
<th>Unmet (€)</th>
<th>p-value</th>
<th>No need (€)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Sig.</td>
<td>B Sig.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Accommodation</td>
<td>-2.440</td>
<td>0.482</td>
<td>-6.797</td>
<td>0.000</td>
</tr>
<tr>
<td>2 Looking after the home</td>
<td>1.565</td>
<td>0.580</td>
<td>-5.311</td>
<td>0.005</td>
</tr>
<tr>
<td>6 Daytime activities</td>
<td>-2.709</td>
<td>0.052</td>
<td>-4.173</td>
<td>0.008</td>
</tr>
<tr>
<td>7 Memory</td>
<td>-4.307</td>
<td>0.007</td>
<td>-687</td>
<td>0.842</td>
</tr>
<tr>
<td>15 Information</td>
<td>-380</td>
<td>0.870</td>
<td>-4.686</td>
<td>0.005</td>
</tr>
</tbody>
</table>

- Backwards mixed model identified five need items significantly related with total costs over time
- Using met need as the reference category
- Met needs are more expensive compared to unmet needs and no needs
- IADL and ADL (covariates) showed to be significantly related with total costs: less impairment on IADL or ADL = lower costs

**Conclusion**
- Hypothesis falsified: unmet needs are less expensive than met needs
- Significant covariates showed that need items only are not associated with total costs.

**Discussion**
- Need = disease severity?
- Other words: include these as covariates?
- We assumed costs occurred directly with a change in level of need
- Could occur on a longer period of time
- 1-year follow up may be too short
- Are costs a good outcome, or is quality of life a better outcome? (up next)

**References**