Making Sense of the Adult Social Care Survey Data

Social Services Research Group Conference
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Structure

- Analyses
  - Unacceptable outcomes
  - Benchmarking
  - Exploring differences & variations
  - Examining inequalities
- Future directions
Social Care ‘Outcome’ Measures

- Summary SCRQoL
  - equally weighted
  - preference weighted (see easy to use instructions on ASCOT website)
- 8 individual SCRQoL items
- Satisfaction with services
- Overall quality of life
Analysing the data

- Think about
  - Translating data into meaningful results
  - Communicating the results to colleagues/boards/the public
- Used national data & randomly picked CASSR
- Your views:
  - Do you do this already?
  - If not, would you be able to do this analysis? What prevents you from doing it?
  - Are these analyses useful?
  - Can you think of other things that would be useful?
Results for CASSR ‘X’

- Mean SCRQoL = 18.1 (var=15.3, max=24, min=6, median=19)
  - Scale takes values from 0 to 24

- TTO-weighted SCRQoL = 0.8 (var=0.04, max=1, min=0.04, median=0.83)
  - Scale takes values from −0.17 to 1, where <0 is worse than being dead!
Distribution of responses to the SCRQoL questions, CASSR 'X' 2011

<table>
<thead>
<tr>
<th>Category</th>
<th>Control</th>
<th>Personal Care</th>
<th>Food and Drink</th>
<th>Accommodation</th>
<th>Safety</th>
<th>Social Participation</th>
<th>Occupation</th>
<th>Dignity</th>
</tr>
</thead>
<tbody>
<tr>
<td>high needs</td>
<td>7.24</td>
<td>0.87</td>
<td>0.88</td>
<td>1.09</td>
<td>1.1</td>
<td>6.4</td>
<td>9.01</td>
<td>1.35</td>
</tr>
<tr>
<td>some needs</td>
<td>20.61</td>
<td>7.41</td>
<td>5.92</td>
<td>4.14</td>
<td>6.39</td>
<td>19.65</td>
<td>31.43</td>
<td>8.8</td>
</tr>
<tr>
<td>No needs</td>
<td>48.46</td>
<td>43.79</td>
<td>36.62</td>
<td>33.33</td>
<td>31.5</td>
<td>34.88</td>
<td>34.73</td>
<td>30.93</td>
</tr>
<tr>
<td>ideal</td>
<td>23.68</td>
<td>47.93</td>
<td>56.58</td>
<td>61.44</td>
<td>61.01</td>
<td>39.07</td>
<td>24.84</td>
<td>58.92</td>
</tr>
</tbody>
</table>

Percentage of respondents

Distribution of responses to the SCRQoL questions, CASSR 'X' 2011
Distribution of responses to the satisfaction question non LD only, CASSR 'X' 2011

Distribution of responses to the overall QoL question non LD only, CASSR 'X' 2011

- extremely dissatisfied
- very dissatisfied
- quite dissatisfied
- neither satisfied nor dissatisfied
- quite satisfied
- very satisfied
- extremely satisfied

- so bad, it could not be worse
- very bad
- bad
- alright
- good
- very good
- so good, it could not be better

<table>
<thead>
<tr>
<th>Series1</th>
<th>21.19</th>
<th>37.01</th>
<th>33.05</th>
<th>5.93</th>
<th>1.69</th>
<th>0.28</th>
<th>0.85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series1</td>
<td>3.06</td>
<td>12.26</td>
<td>32.03</td>
<td>39.55</td>
<td>7.52</td>
<td>3.34</td>
<td>2.23</td>
</tr>
</tbody>
</table>
What does the data tell us?

- No-one in a state considered to be worse than death!
- The mean score on SCRQoL scales is towards the high end of the scale
- Scores on SCRQoL scales are skewed towards the higher end, i.e. most people are better than the mean
- 75% report control over daily life (etc...)
- 91% satisfied, 21% extremely (non LD only)
- 47% consider overall QoL at least good (non LD)
- BUT... numbers by themselves not meaningful
Interpreting these findings

- Are there unacceptable responses?
  - e.g. high-level needs, dissatisfaction...
- What is the relationship between the measures?
  - SCRQoL and satisfaction/overall QoL
- How does CASSR ‘X’ compare to:
  - National results
  - General population
- What explains the differences or variations?
- Evidence of inequalities?
Unacceptable outcomes
e.g. no-one should have high-level needs

<table>
<thead>
<tr>
<th></th>
<th>Frequency High level needs</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>control</td>
<td>33</td>
<td>7.2</td>
</tr>
<tr>
<td>personal care</td>
<td>4</td>
<td>0.9</td>
</tr>
<tr>
<td>food and drink</td>
<td>4</td>
<td>0.9</td>
</tr>
<tr>
<td>accommodation</td>
<td>5</td>
<td>1.1</td>
</tr>
<tr>
<td>safety</td>
<td>5</td>
<td>1.1</td>
</tr>
<tr>
<td>social participation</td>
<td>29</td>
<td>6.4</td>
</tr>
<tr>
<td>occupation</td>
<td>41</td>
<td>9.0</td>
</tr>
<tr>
<td>dignity</td>
<td>6</td>
<td>1.4</td>
</tr>
</tbody>
</table>
What next?

- Should we intervene? (ethics)
- Does our council have fewer people in the high-level needs category than the national average?
- Do the same people respond to the lowest category?
- Do people responding in the lowest category have anything in common?
Compared to the National Average...

<table>
<thead>
<tr>
<th></th>
<th>CASSR X</th>
<th>National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>control</td>
<td>33</td>
<td>7.2</td>
</tr>
<tr>
<td>personal care</td>
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<tr>
<td>food and drink</td>
<td>4</td>
<td>0.9</td>
</tr>
<tr>
<td>accommodation</td>
<td>5</td>
<td>1.1</td>
</tr>
<tr>
<td>safety</td>
<td>5</td>
<td>1.1</td>
</tr>
<tr>
<td>social participation</td>
<td>29</td>
<td>6.4</td>
</tr>
<tr>
<td>occupation</td>
<td>41</td>
<td>9.0</td>
</tr>
<tr>
<td>dignity</td>
<td>6</td>
<td>1.4</td>
</tr>
</tbody>
</table>
Do people have more than one high-need?

<table>
<thead>
<tr>
<th>No high needs/person</th>
<th>Basic domains</th>
<th></th>
<th>All domains</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>Percent</td>
<td>Frequency</td>
<td>Percent</td>
</tr>
<tr>
<td>0</td>
<td>434</td>
<td>97.1</td>
<td>348</td>
<td>82.5</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
<td>2.7</td>
<td>45</td>
<td>10.7</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>0.0</td>
<td>18</td>
<td>4.3</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>0.2</td>
<td>8</td>
<td>1.9</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>0.0</td>
<td>3</td>
<td>0.7</td>
</tr>
</tbody>
</table>
Are there any similarities?

- Those with high control needs, more likely to be...
  - Proxy respondents (so excluded these)
  - Vulnerable people
  - Receive home care
  - Bad self-perceived health
  - Inability/difficulty doing ADLs
  - Report poorly designed home
  - Report don’t leave home
  - Report having help to complete questionnaire
What could be the responses?

- Invest in improving control, social participation and occupation
- Small numbers reporting multiple high needs – targeted action? (ethics)
- Aspects linked to control mostly around dependency/vulnerability of client
  - valuable to run regression to test interactions between variables
- Are we doing enough to improve felt control of most needy?
  - Could we improve design of homes?
  - Could we get people going outside?
  - Is there any technology (telehealth/care) we could test?
RELATIONSHIPS BETWEEN THE MEASURES
## SCRQoL & overall QoL (national)

<table>
<thead>
<tr>
<th>QoL response option</th>
<th>SCRQoL</th>
<th>SCRQoL TTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>so good, it could not be better</td>
<td>22.2</td>
<td>0.936</td>
</tr>
<tr>
<td>very good</td>
<td>21.1</td>
<td>0.911</td>
</tr>
<tr>
<td>good</td>
<td>19.2</td>
<td>0.838</td>
</tr>
<tr>
<td>alright</td>
<td>16.9</td>
<td>0.721</td>
</tr>
<tr>
<td>bad</td>
<td>13.9</td>
<td>0.550</td>
</tr>
<tr>
<td>very bad</td>
<td>12.6</td>
<td>0.461</td>
</tr>
<tr>
<td>so bad, it could not be worse</td>
<td>11.5</td>
<td>0.396</td>
</tr>
</tbody>
</table>
### SCRQoL & satisfaction (national)

<table>
<thead>
<tr>
<th>Satisfaction response</th>
<th>non LD</th>
<th>SCRQoL</th>
<th>SCRQoL TTO</th>
</tr>
</thead>
<tbody>
<tr>
<td>extremely satisfied</td>
<td></td>
<td>20.2</td>
<td>0.861</td>
</tr>
<tr>
<td>very satisfied</td>
<td></td>
<td>18.9</td>
<td>0.820</td>
</tr>
<tr>
<td>quite satisfied</td>
<td></td>
<td>17.1</td>
<td>0.732</td>
</tr>
<tr>
<td>neither</td>
<td></td>
<td>15.0</td>
<td>0.613</td>
</tr>
<tr>
<td>quite dissatisfied</td>
<td></td>
<td>13.7</td>
<td>0.534</td>
</tr>
<tr>
<td>very dissatisfied</td>
<td></td>
<td>12.8</td>
<td>0.476</td>
</tr>
<tr>
<td>extremely dissatisfied</td>
<td></td>
<td>11.8</td>
<td>0.428</td>
</tr>
</tbody>
</table>
What do these relationships tell us?

- Something about the meaning of scores on SCRQoL scales
  - Score of 17 on SCRQoL or 0.7 on SCRQoL-TTO is average
- On average, people with low SCRQoL scores have low satisfaction with services – could services do more?
BENCHMARKING TO NATIONAL
Comparing to the National Survey Results

<table>
<thead>
<tr>
<th></th>
<th>SCRQoL (Mean)</th>
<th>SCRQoL TTO (Mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASSR ‘X’</td>
<td>18.1</td>
<td>0.775</td>
</tr>
<tr>
<td>National</td>
<td>18.6</td>
<td>0.796</td>
</tr>
</tbody>
</table>

Differences small & are not significant
Distribution of SCRQoL-TTO

Kernel density estimate

TTO-weighted current SCRQoL

-0.5 0 0.5 1
Density

whole sample
Normal density
CASSR 'X'

kernel = epanechnikov, bandwidth = 0.0194
National sample: Other distributional characteristics

- SCRQoL-TTO (national)
  - Maximum = 1 (i.e. scale max)
  - Minimum = -0.17 (i.e. scale min)
  - 128 (0.2%) people in a state worse than death!

- SCRQoL-TTO<0 clustered within CASSR
  - One CASSR has 11 people (0.9%) < 0
Comparing SCRQoL domains: personal care

- Ideal
- No needs
- Some needs
- High needs

National
CASSR X

QORU quality and outcomes of person-centred care policy research unit
Comparing SCRQoL domains:
Food and drink

- Ideal
- No needs
- Some needs
- High needs

National CASSR X
What do the national comparisons tell us?

- SCRQoL not different to national user population
- But, within domains there are differences
- Pattern across domains,
  - Fewer in ideal state
  - More in no needs state
- What explains these differences?
  - CASSR choices
  - Difference in quality
  - Differences in sample/user characteristics...
  - Differences in CASSR resources...
BENCHMARKING TO GENERAL POPULATION
## General Population Comparison: SCRQoL-TTO

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Population</td>
<td>0.86</td>
</tr>
<tr>
<td>CASSR ‘X’</td>
<td>0.76</td>
</tr>
<tr>
<td>National sample</td>
<td>0.8</td>
</tr>
</tbody>
</table>

Both CASSR and national sample are significantly different from the general population.

For data see: [http://www.pssru.ac.uk/ascot/applications.php](http://www.pssru.ac.uk/ascot/applications.php)
Comparing SCRQoL domains: Personal care
Comparing SCRQoL domains: Accommodation
Comparing SCRQoL domains: Occupation

![Bar Chart](chart.png)

- **Ideal**
  - Gen Pop: X
  - National: X
  - CASSR X: X

- **No needs**
  - Gen Pop: X
  - National: X
  - CASSR X: X

- **Some needs**
  - Gen Pop: X
  - National: X
  - CASSR X: X

- **High needs**
  - Gen Pop: X
  - National: X
  - CASSR X: X
What do the General Population Comparisons Tell us?

- SCRQoL is on average significantly worse for service users than the general population
  - Could look to see whether some client groups/age groups etc are worse than others...
- Distribution of gen pop responses vary by domain
  - more with needs for Occupation c.f. personal care
- Many fewer service users in ideal category for all domains
DIFFERENCES AND VARIATIONS
Variations

- Where should we concentrate resources to improve?
- Are some groups of users doing better than others?
- What do those doing well/badly have in common?
  - Provider?
  - Care management team?
  - Area characteristics?
  - Service package?
  - User characteristics?
Explanatory measures in ASCS

- User characteristics (age, sex, ethnicity, etc)
- ADLs and IADLs
- Self-perceived health
- EQ5D measures of pain and anxiety/depression
- Practical help
- Getting around outside the home
- Self-perceived design of the home
- Purchase additional support/top-up care
- Service receipt, service intensity/cost
- Source and type of help to answer questionnaire
- Other unmeasured factors...
Self-reported design of home

meets needs very well
meets most of my needs
meets some of my needs
totally inappropriate
Effect of having help to answer

The box plots show the distribution of responses for different categories:
- by self
- care worker helped
- inside household help
- outside household helped

The plots indicate the range and central tendency of the responses for each category.
People with LD & care home better

SCRQoL

![Box plot comparing SCRQoL scores for standard and LD groups in the community and care home settings.](image_url)
Analyse different populations separately?

- People in care homes
  - More disabled (ADL score is higher)
  - Budget is higher (& doesn’t reflect intensity of care)
  - More likely to have help from a care worker

- People with LD
  - Different number of response options (q1&2)
  - Less disabled using ADLs (but doesn’t necessarily capture LD problems)
  - Budget is higher
  - More likely to have help to answer
What else may help interpret...

- Being able to identify a change in circumstance
  - Compare ADLs in survey to those on database?
  - Problems with informal carer, e.g. carer stress – linked carer survey
  - Significant events e.g. death
- Better picture of service receipt
  - Distinguish reablement services
  - Identify health services more accurately
  - Use of drop-in services
- More details about provider, care management
- More complex analysis
Regression models very powerful

- Can take several variables into account at the same time
- Control for interactions between variables as predicted by theory
- Example:
  - Receipt of home care = lower SCRQoL
  - Control for disability (adl score) – receipt of home care higher SCRQoL
(IN)EQUALITIES
No gender differences
Some age differences
Some ethnicity differences

- TTO adjusted ASCOT
- white
- mixed
- asain
- black
- other
Some religion differences

The graph shows box plots for different religions, including:
- none
- Christian
- Buddhist
- Hindu
- Jewish
- Muslim
- Sikh
- other

The x-axis represents the different religions, while the y-axis shows the adjusted ASCOT scores.
(In)equalities

- No real sex differential
- Worse SCRQoL at 50-64 yrs (U-shaped)
- Ethnicity – Asian worst
- Religion – Hindu, Muslim & Sikh worst
- Sexual identity – sample too small to analyse (only 8/561 not heterosexual)
- Ethnicity & religion should be explored further – may be difficult to analyse locally because of sample size
Current & future work

- ASCOT developments
  - Interpreting ASCOT scores
  - Identifying the Impact of Adult Social Care (IIASC) – to estimate the outcome from social care support
- More detailed analysis ASCS analysis
  - Effects of nonresponse
  - Effect of having help to complete on responses
  - Important factors (design of home, information)
  - Ethnicity & other inequalities
- Providing support to help LAs interpret results and explain results to managers etc
Your thoughts…

- Do you do this already?
- If not, would you be able to do this analysis?
- What prevents you from doing it?
- Are these analyses useful?
- Can you think of other things that would be useful? (national/local)
- How do you present your results?
Contact us with your thoughts

- Juliette Malley: j.n.malley@lse.ac.uk
- Diane Fox: d.fox@kent.ac.uk
- Clara Heath: c.l.heath@kent.ac.uk
Response rates to questions

- Response rates are high for all outcome variables

<table>
<thead>
<tr>
<th>Outcome Variable</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>satisfaction</td>
<td>94.9%</td>
</tr>
<tr>
<td>QoL</td>
<td>97.8%</td>
</tr>
<tr>
<td>control</td>
<td>97.5%</td>
</tr>
<tr>
<td>personal care</td>
<td>97.8%</td>
</tr>
<tr>
<td>food and drink</td>
<td>97.3%</td>
</tr>
<tr>
<td>accommodation</td>
<td>97.3%</td>
</tr>
<tr>
<td>safety</td>
<td>97.5%</td>
</tr>
<tr>
<td>social participation</td>
<td>97.4%</td>
</tr>
<tr>
<td>occupation</td>
<td>96.6%</td>
</tr>
<tr>
<td>effect of help</td>
<td>94.6%</td>
</tr>
<tr>
<td>dignity</td>
<td>94.3%</td>
</tr>
</tbody>
</table>