ASCOT
Adult Social Care Outcomes Toolkit

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Overview

• Why measure outcomes in social care?

• Our indirect measurement approach

• The outcome measures in ASCOT

• The definition of the domains and their levels

• The role of preference weights and their estimation

• Update on work in progress
**Why measure outcomes?**

- Outcomes tell us about the value of social care services

... a measure of value is needed for:

<table>
<thead>
<tr>
<th>Policy makers and performance managers</th>
<th>Identify whether policies are achieving aims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providers to best target resources</td>
<td>Improve services and focus efforts on what most in demand</td>
</tr>
<tr>
<td>Outcomes-based commissioning</td>
<td>Move away from needs based or historical allocations and focus on <em>cost-effective</em> services</td>
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<tr>
<td>Regulation</td>
<td>Move away from a focus on inputs and processes</td>
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<tr>
<td>National Accounting</td>
<td>Move away from cost-weighted measures</td>
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Why measure outcomes?

- Outcomes tell us about the value of social care services
- A measure of value is needed for

Guide deployment of services to give people what they really want from those services
**But measuring outcomes is not straightforward**

**Problems:**
- How much due to social care interventions?
- ‘Before’ often not true baseline
- People adapt to difficult circumstances
- Many service users unable to communicate
- Resource intensive and burdensome

**Approach:**
- Directly establish attribution in research
- Link validated measures to routine/low burden indicators
We have developed an indirect approach to measuring outcomes

• **Capacity for benefit**
  – What intervention *could* deliver
  – Number of beneficiaries
  – Potential outcome for beneficiaries

• **Quality**
  – Level of outcome achieved

• **Outcome gain:**
  \[ O = CfB \times Q \]
Capacity for benefit
What the ‘perfect’ intervention could deliver

\[ O = \text{CfB} \times Q \]

• Domains of outcome affected by intervention
• Degree to which users reliant on the intervention
• Difference between need level in absence of services and ‘perfect’ intervention
• Measure should reflect relative importance of domains and levels of need
• Individuals have capacity to benefit from intervention
Quality of services

What a given intervention achieves

\[ O = \text{CfB} \times Q \]

- Degree to which outcomes achieved
- Process quality
- ‘Objective’ vs ‘subjective’
- Service user perspective
- Context

RAND – e.g. financial circumstances, design of home
ASCOT should ...

- Generate valid and reliable measures of quality weighted outputs
- Apply across client groups & care settings
- Reflect changes in value of social care interventions
- Reflect user perspectives
- Create the right incentives
- Not be too burdensome
The toolkit has a number of components

• Variety of measures
  – Current state, expected needs, outcome, CtB
  – Self-completion/interview/observation

• Preference based weighting

• Map approach to
  – Routine data sources – e.g. CQC ratings
  – Low-burden indicators
Within ASCOT, ‘social care related quality of life’ is defined by a number of domains

- Personal cleanliness and comfort
- Food and nutrition
- Safety
- Social participation and involvement
- Control over daily living
- Clean and comfortable accommodation
### In combination these can cover a range of different policy outcomes

<table>
<thead>
<tr>
<th>Improved quality of life</th>
<th>Measured by</th>
</tr>
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<tbody>
<tr>
<td>Increased choice and control</td>
<td>• Control over daily life</td>
</tr>
<tr>
<td>Inclusion and contribution</td>
<td>• Social participation and involvement</td>
</tr>
<tr>
<td></td>
<td>• Occupation</td>
</tr>
<tr>
<td>Improved health and well-being</td>
<td>• Food and nutrition</td>
</tr>
<tr>
<td></td>
<td>• Meeting high level needs in all domains</td>
</tr>
<tr>
<td></td>
<td>• Other aspects not captured</td>
</tr>
<tr>
<td>Dignity and safety</td>
<td>• Personal care</td>
</tr>
<tr>
<td></td>
<td>• Clean and comfortable accommodation</td>
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<tr>
<td></td>
<td>• Dignity</td>
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<td></td>
<td>• Safety</td>
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Should the domains be defined to reflect capabilities or functioning?

• Functioning reflects what people actually do
  – e.g. actual level of socialising

• Capabilities reflect what people want to do
  – e.g. whether socialise as much as they want

• But both have problems:
  – Capabilities may reflect expectations/ adaptation to poor circumstances
  – Functioning does not pick up respondents’ views

• We have adopted a ‘combination’ approach
  – High level needs not acceptable whatever personal views
  – Reflect aspirations at higher levels of functioning
The levels of ‘need’ were defined to be sensitive to interventions

- **Dimensions:** with and in absence of care provided
  - Current need states
  - Needs in absence of care and support
  - Outcome difference between current and expected needs

- **Levels:**
  - No needs (Desired level)
  - All needs met (‘Mustn’t grumble’)
  - Low needs
  - High needs

Validated through surveys with service users

But not all improvements are valued equally, so desire to weight according to preferences
We have a number of phases of work focused on developing preference weights

• QMF preference study 2009 (MOPSU)
  – Best-Worst scaling
  – Population sample
  – Comparing 3 level LLI and 4 level OSCA measure

• OSCA preference study 2010 (ongoing)
  – Population and service user samples
  – Anchoring to ‘dead’ (generates QALY)

• Current version of ASCOT uses interim weightings
  – Measures and wording have moved on
  – Three vs four levels of need
We used a technique called best-worst scaling to calculate the weights for each domain level

• Best-worst scaling is a simple choice task

• Respondents are given a list of the domains, with each presented at one of their levels
  – They are then asked to indicate which of the domain levels they rate as best from the list
  – Followed by which is the worst

• The list is then refreshed with different levels for each of the domains and the task is repeated
(i) which of these nine aspects would you rate as the best?

<table>
<thead>
<tr>
<th>Aspect of life</th>
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<tbody>
<tr>
<td>1  My home is less clean and comfortable than I want</td>
<td></td>
</tr>
<tr>
<td>2  I feel as safe as I want</td>
<td></td>
</tr>
<tr>
<td>3  I don’t always eat the right meals I want, and I think there is a risk to my health</td>
<td></td>
</tr>
<tr>
<td>4  I feel much less clean than I want, with poor personal hygiene</td>
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<td>5  Sometimes I don’t feel I have as much control over my daily life as I want</td>
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<td>6  Sometimes I feel my social situation and relationships are not as good as I want</td>
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<td>7  I would be treated by other people with the dignity and respect that I want</td>
<td></td>
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<td>8  I don’t do any of the activities I want to do</td>
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<td>9  I sometimes feel worried and concerned</td>
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(ii) which of these eight aspects would you rate as the worst?

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(iii) which of these seven aspects would you rate as the next best?

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(iv) which of these six aspects would you rate as the next worst?

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In the QMF study we interviewed 1,000 members of the general public

• Face-to-face surveys

• Sought nationally representative sample
  – Sample found to be broadly representative on gender, age, social grade and marital status

• Study aimed to test some methodological issues over definition of domain levels
  – Half of the sample shown a version with four levels
  – Half of the sample shown a version with three levels

• Responses on diagnostic questions
  – 88% could put themselves in the imaginary situation
  – 97% understood the descriptions in the choices
Responses from the best-worst scaling allowed us to estimate preference weights

• A choice set of domains at their presented levels
  – An indication of which the respondent found to be the **best**
  – They have chosen the domain level with the **highest utility**

• Followed by a reduced choice set
  – With an indication of which the respondent found to be the **worst**
  – They have chosen the domain level with the **lowest utility**

• This data is amenable to the estimation of discrete choice (logit) models
  – Each domain is described by a utility function, with **coefficients** that represent the **weights placed on each domain level**
  – Probability functions for each domain along with data on chosen alternative allow construction of likelihood function
  – Model estimated using maximum likelihood estimation
The model coefficients provide estimates of the preference weights for each domain level.
We are interested in the value placed on differences in needs met within each domain.
The preference weights play an important role in the ASCOT measure

- Model shows that
  - Not all domains are equally important
  - And the transitions between the different levels of need are not valued equally

- Results used to weight capacity for benefit within the outcome measure

- Incorporating the preference weights in ASCOT allows the toolkit to reflect the relative importance of domains
This research is still ongoing

- Current phase of OSCA (Outcomes of Social Care for Adults) due to report in January
  - Larger sample for estimating population preference weights
  - Additional work to test extent to which preferences differ for service users
  - Anchoring of measure to scale of ‘death’ – ‘perfect life’

- Will provide a measure for social care equivalent to the QALY used in health
- Could allow similar resource allocation judgements to be made both between and across areas of public service delivery
What contribution does ASCOT make to evaluating social care interventions?

- Most quality ‘toolkits’ about process, ASCOT focuses on outcomes
- A common metric
  - Allows comparison across services
  - Potential for continuity when changing routine data
  - Variety of users and purposes
- Distinguishes what services could do and are doing
- Validated approach
- Incorporates population preferences
- Low burden?
  - Designed to be easy to use/answer. Uses markers existing data where possible e.g. Inspection data
http://www.pssru.ac.uk/ascot/

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