4.11 Outcome questions

Overall, Q28 and Q29 performed better and were more unique than Q30 or Q31. These latter two questions could be removed from the survey unless there is a policy imperative for their inclusion.

The survey included four outcome questions used as dependent variables to test the importance of experience questions. These outcome questions also include aspects of recovery. The four questions in the survey were:

- **Q28. Overall, how would you rate your experience of care with this service in the last 3 months?**
- **Q29. The effect the service had on your ability to manage your day to day life.**
- **Q30. The effect the service had on your hopefulness for the future.**
- **Q31. The effect the service had on your overall well-being.**

To determine the relative value of each outcome question to the survey, several factors were considered, including missing data, correlation and contribution to regression models.

In relation to missing data, the proportion of data missing for each question was equivalent (ranging from 11% to 12%).

Correlation between the questions revealed that they are all significantly and highly correlated. Questions 30 and 31 were the highest correlated (Table 22).

### Table 22: Correlation matrix (outcome questions)

<table>
<thead>
<tr>
<th>Question</th>
<th>Q28</th>
<th>Q29</th>
<th>Q30</th>
<th>Q31</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q28. Overall, how would you rate your experience of care with this service in the last 3 months?</td>
<td>1</td>
<td>.726</td>
<td>.772</td>
<td>.818</td>
</tr>
<tr>
<td>Q29. The effect the service had on your ability to manage your day to day life</td>
<td>.726</td>
<td>1</td>
<td>.759</td>
<td>.769</td>
</tr>
<tr>
<td>Q30. The effect the service had on your hopefulness for the future</td>
<td>.772</td>
<td>.759</td>
<td>1</td>
<td>.854</td>
</tr>
<tr>
<td>Q31. The effect the service had on your overall well-being</td>
<td>.818</td>
<td>.769</td>
<td>.854</td>
<td>1</td>
</tr>
</tbody>
</table>

Base = 193 – 198, Overall questions: All results are sig (p<.000)

In regression modelling with experience questions, Q28 and Q29 both had higher adjusted r-square scores meaning they explain a greater proportion of the variance in the data (Table 23).
Table 23: Regression model summaries

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q28. Overall, how would you rate your experience of care with this service in the last 3 months?</td>
<td>.862</td>
<td>.743</td>
<td>.705</td>
<td>.6908</td>
</tr>
<tr>
<td>Q29. The effect the service had on your ability to manage your day to day life</td>
<td>.830</td>
<td>.689</td>
<td>.643</td>
<td>.6985</td>
</tr>
<tr>
<td>Q30. The effect the service had on your hopefulness for the future</td>
<td>.781</td>
<td>.610</td>
<td>.552</td>
<td>.8336</td>
</tr>
<tr>
<td>Q31. The effect the service had on your overall well-being</td>
<td>.798</td>
<td>.636</td>
<td>.582</td>
<td>.7920</td>
</tr>
</tbody>
</table>

4.12 Demographics questions

This analysis questions the value of asking clients if they are first time users of the service as their response made no difference to their ratings on experience or outcome questions.

The frequency distributions for rating questions (experience and outcome questions) were analysed against the demographics questions using Chi-Square to identify significant differences in rating by demographic characteristics (Table 24). This information can be used to review the value of each demographic question to the survey as it demonstrates the capacity of demographics to explain the ratings provided by consumers. That is, it identifies consumer groups that have difference experiences so that quality improvement programs can better target service improvements.
In summary, across the 31 questions, the demographic characteristics of respondents made a significant difference (<.05) to their answers on 30 occasions:

- Status made a significant difference to eight questions (Q42)
- Length of care made a significant difference to seven questions (Q41)
- Indigenous status made a significant difference to six questions (Q38)
- Age made a significant difference to five questions (Q39)
- Gender made a significant difference to four questions
- First time service consumer made a significant difference to no questions (Q40)
- Main language made a significant difference to no questions (Q37)
As the survey was conducted in English only it is not surprising that language was not found to have a significant impact on any questions.

4.13 Conclusions

The National Consumer Experience of Care survey instrument as used in the Proof of Concept Trials in late 2012, demonstrated sound psychometric properties:

**Response rates:** The response rates demonstrate that consumers had a high level of participation in the survey, comparing favourably to other similar surveys of mental health consumers in Australia. The sample was found to be representative of the population of consumers from which it was drawn.

**Survey administration method:** There was minimal interaction between the survey administration method and survey results, with the exception of Q22 where iPad users gave higher ratings to the activities available in inpatient settings. It may be that the iPad was seen as an activity or that people who selected iPads were more likely to seek other activities in their environment.

**Survey length:** The proportion of data missing increased in relation to the number of questions asked. As the variance in the data provided did not increase as a function of questions order, the increase in missing data may demonstrate that the more questions asked, the more likely the respondent is to be interrupted, particularly where surveys are completed before appointments or structured activities. There is no indication of a need to dramatically reduce the survey length. **Rating scales:** Generally the rating scales performed well. The use of positively loaded scales helped reduce positive skew in the data with most questions normally distributed.

While the distribution of inpatient scores on the performance scales demonstrated some characteristics of kurtosis, this was not found to impact on analyses.

**Not Applicable:** The availability of Not Applicable for a subset of questions worked well. The availability of Not Applicable did not affect the proportion of questions left blank, suggesting that the option filled a different need.

**Distance between points on the scales:** The analysis suggests that the scales are interval scales and can be assigned numeric properties.

**Reliability:** Reliability was measured through two test-retest surveys with community mental health consumers: firstly with respondents in the main study and secondly via separate group of consumers using a different community mental health service. This analysis found that two thirds of consumers had an event between the completion of the test and retest surveys (such as contact with the mental health service, changes in medication or change in personal circumstances). This may account for the moderate levels of correlation found between the test and retest surveys.

**Construct validity:** The sample and subsample (by service setting) produced domains that matched the theoretical model used to develop the questionnaire and explained more of the variance in the data than the initial theoretical model.

**Criterion-related validity:** Consumer experience of care is the antecedent to outcome ratings. That is, there is a strong relationship between consumer ratings of care experience and care outcomes. The outcome questions are functioning as intended.

**Experience questions:** Most experience questions work well. However, a small number were found to be of low value and should be deleted or modified through cognitive interviews.

**Outcome questions:** While all outcome questions performed well, overall, Q28 and Q29 performed better and were more unique than Q30 or Q31.
Demographics questions: The analysis demonstrated that all but two demographic questions were important in understanding consumers’ answers to experience questions. One question relating to ethnicity was retained as potentially relevant if the survey is available to a more diverse group of consumers while a question aiming to identify first time service consumers should be deleted.