Data collection, use, from whom and potential value
Routine data can and should be used to:

- Describe the population of interest
  - Number of clients, sessions
- Examine the quality of care being provided
- Examine whether care is patient-centred
- Provide personalised treatment recommendations
- Evaluate the effectiveness of interventions
Group discussion points

• Who is the preferred source of information?
• What is the most cost-effective way of collecting data?
• What information should be routinely collected?
• Beneficial use of the collected information
Preferred source of information
Potential sources of client data

- Clinicians
  - Time poor
  - Diverts from treatment
  - Clinical rather than quality of care, broad health issues etc.

- Supportive others
  - Accuracy questionable

- The Client
  - Often more accurate
  - Provide an important viewpoint
  - Secondary screening possible
Consider collecting information directly from the client each time they appear in the clinic

- Prompting completion before consultation by reception; both verbal and written
- 10 min data completed at every clinic attendance
  - Allows different aspects to be examined i.e. first journey and time taken to get to clinic
  - Side effects or problems since last visit
  - Any problems with adherence
  - Other health issues screened
  - Feedback, education to clients
- Accuracy
  - Complex aspects of alcohol intake etc. can be assessed.
  - Standardised instruments i.e. Psychological disturbance Proms
- Acceptability
Cost-effective methods of data collection
Data collection sources

<table>
<thead>
<tr>
<th>Paper and pencil</th>
<th>Electronic</th>
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<tbody>
<tr>
<td>• Client completion</td>
<td>• Touch screen</td>
</tr>
<tr>
<td>• Interview by staff</td>
<td>• In the clinic</td>
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<tr>
<td>• Costs</td>
<td>• Via clients phone internet</td>
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<tr>
<td>• Problems include</td>
<td></td>
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<tr>
<td>• costs/errors associated with coding</td>
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<tr>
<td>• Error checks</td>
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</table>
Advantages of electronic data collection

- Information can be presented in various formats to account for varied levels of health literacy
  - Talking heads
  - Diagrams
  - Possible to alter font size

Hi, I'm Bree and I'm a researcher from the
Advantages of electronic data collection

- Simplification of complex assessment via branching
  - Allows questions to be tailored based on previous responses
  - Irrelevant questions can be easily skipped over
For example:

Have you consumed alcohol in the last two weeks?

- Yes
  - Question 4.3
  
  We would like to ask you more specifically about your drinking in the last 14 days. For each of the following days, starting with yesterday, please specify the number of standard drinks you consumed.

- No
  - Question 4.2
  
  Just to be sure, can you think of any times you drank any beer or wine, or any other alcohol between (start date) and today?
Alcohol Treatment Centre Survey - Client iPad Baseline

Have you consumed any alcohol over the past 2 weeks?

- Yes
- No

Logout
We'd like to ask you more specifically about your drinking in the last 14 days.
For each of the following days, starting with yesterday, please specify the number of standard drinks you consumed.
We understand that it might be difficult to remember exactly so for these questions please give your best estimates.
Please use the definitions of Standard Drinks above as a guide.

<table>
<thead>
<tr>
<th>Tuesday 23 Aug</th>
<th>Monday 22 Aug</th>
<th>Sunday 21 Aug</th>
<th>Saturday 20 Aug</th>
<th>Friday 19 Aug</th>
<th>Thursday 18 Aug</th>
<th>Wednesday 17 Aug</th>
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<table>
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<tr>
<th>Tuesday 16 Aug</th>
<th>Monday 15 Aug</th>
<th>Sunday 14 Aug</th>
<th>Saturday 13 Aug</th>
<th>Friday 12 Aug</th>
<th>Thursday 11 Aug</th>
<th>Wednesday 10 Aug</th>
</tr>
</thead>
</table>
Advantages of electronic data collection

- Improving provision of clinical care through Point-of-Care Feedback
- Client self-report data used to generate individualised feedback for both the clinician and the client
- Can include recommendations for actions to be taken
- Gives clients and clinicians “permission” to raise sensitive issues
Advantages of electronic data collection

• High acceptability among patient populations and providers
  • 98% of GP patients found touchscreen easy to use (Paul et al 2013)
  • 98% of hospital outpatients found touchscreen survey easy to complete (Fradgley et al 2014)
  • 71% of patients attending an Aboriginal Community Controlled Health Service were willing to complete a touchscreen survey (Noble et al 2014)
Advantages of electronic data collection

- Additional benefits for the system include:
  - Reduces burden on clinic staff in streamlining data collection
  - Low cost for adaptive software
  - No time lag from data collection to data provision
Purposely developed software is available

- QuON is a Web-based survey software application
- Allows creation and implementation of complex and personalised survey questions.
- Can be administered on any internet-connected device
- The University of Newcastle can assist with survey design and development
Storage and security of iPads

- Several cost effective options available:

  - iPad anti-theft floor stand $99.95
  - iPad anti-theft counter stand $79.95
  - Rotate | Fusion Free Standing Tablet Kiosk $233.20
  - Fusion Floor Stand Rotate Tablet Enclosure $321.20
What information should be collected?
Criteria against which the data can be judged

- Completion rate
- Cost-effectiveness
- Accuracy
- Credible to major stakeholders
- Acceptability to client and providers
Advantages of all groups using standardised instruments

Comparison across centres, larger data sets can be used for common purposes such as resource justification
Instruments/questionnaires selected based on:

- Relevance to field
- Accuracy
- Sensitivity
- Potency for stakeholders
- State, national and international acceptance
Data can be used to

• Describe the client population
  • Sociodemographic factors
  • Alcohol, smoking, drug use etc.
  • Number and time of visits.
  • Number of sessions
  • Other health behaviours

• Examine the quality of care being provided
  • Define optimal evidence based care
  • Did it occur?
Why we should collect the information?
Overarching goal is to improve cost effectiveness of patient outcomes
Data can be used to:

• Describe the population being seen
• Examine the quality of care being provided
• Is patient centred care provided?
  • 6 domains derived from IOM
  • Occurred
  • Wanted
  • Valued

• Provide personalised treatment recommendations
  • Based on data collection provision of evidence based client advise
  • Can involve significant other

• Evaluate the effectiveness of interventions
  • New treatment
  • monitor fidelity
  • Effectiveness using multiple baseline design