Examining outcomes and the quality of services in D&A treatment.

Professor Nicholas Lintzeris MBBS, FACHAM, PhD
Director D&A Services, South East Sydney LHD
Clinical Director, The Lambert Initiative in Cannabinoid Therapeutics, University of Sydney
Acknowledgements

Clinical Outcomes and Quality Indicators Project

- Project Team: SESLHD, HNELHD, UTas, NDARC
  N Lintzeris, Jennifer Holmes, Kristie Mammen, Adrian Dunlop, Tony Jackson, Vi Hunt, Rachel Deacon
  Raimondo Bruno, Anthony Shakeshaft, Michael Farrell
- 3 Yr project funded by MHDAO, NSW Health
Overview of workshop

- What are the key elements of a performance framework for health services?

- How do we
  - describe our services and our clients?
  - know whether services are being delivered well?
  - know whether services are achieving good client outcomes?
  - get consumer input?

- Making a system work
  - Clinical information systems
  - Clinical tools / data instruments
  - Key features of a sustainable system
Performance frameworks for health services

- Three broad components:
  - **Governance / quality framework**: accredited health services, appropriately skilled & credentialed workforce, efficiently delivering treatment according to good practice standards & guidelines, with systems to enhance quality.
  - **Measures of throughput**: how many & what types of services provided, and to whom
  - **Outcome framework**: measures the clinical outcomes associated with treatment: do clients get better?
Why do we need a performance framework?

- Services providers
  - Greater clarity re: expectations, identify ‘priorities’
  - Quality improvement processes
  - Benchmarking of outcomes across services
- Clients & carers
  - Better clarity re: service processes and outcomes, informing decision making
- Funding bodies
  - Greater clarity re: what services they are purchasing - quality services at an efficient price resulting in good outcomes.
- Community
  - General expectation that ‘someone’ knows the outcomes associated with services
Why now?

- **Development of clinical information systems**
  - The ‘mechanics’ of any good performance framework is good data systems.
  - Development of electronic clinical information systems within, and across sectors
  - Standardisation of information and data

- **The diversification of service providers**
Increasing diversity of service providers

- Three broad layers of service providers:
  - state government sector
  - NGO sector, commissioned by Commonwealth or state governments
  - private practitioners funded by Medicare, private insurance, client fees
    - doctors (GPs, psychiatrists, FACHAMs)
    - allied health (AOD Workers, psychologists, social workers, pharmacists)
    - nurses (nurse practitioners, practice nurses)

- Different mix of service systems in different jurisdictions.
  - Many governments keen to diversify service providers
  - Diversity also likely to be affected by PHNs, NDIS

- Need performance framework that includes quality & outcome parameters in order to avoid funding only on price ("the cheapest quote")
Why is an outcome framework for D&A services difficult to develop?

- Chronic relapsing condition & patients usually require multiple ‘types of services’ in order to achieve long term outcomes
  - e.g. detox followed by counselling, ± medications, self help etc....
  - to which service do you ascribe outcomes?

- Different types of services have different objectives & outcomes
  - e.g. detox outcomes ≠ OTP outcomes

- Different objectives & expected outcomes within service types
  - counselling the abstinent patient to prevent relapse ≠ counselling active user aiming to reduce harms

- Whose perspective re: what is a good outcome matters?
  - community, clients, clinicians, funders?
Why is an outcome framework for D&A services difficult to develop?

- Different complexity of patients: medical, psychiatric, social & cultural conditions that impact upon resources required & outcomes achieved by DA treatment
  - How to factor not only ‘problems’, but patient’s strengths / resources (social supports, existing services for other problems)

- DA treatment may only have minimal immediate impact upon ‘secondary’ outcomes (e.g. employment), or outcomes may be more related to other treatment / services (e.g. surgery, housing support, mental health services)
DESIGNING AN OUTCOMES AND QUALITY FRAMEWORK
Key Principles

An outcome & quality framework should:

A. Describe client characteristics: who is being treated?

B. Are treatment services “delivered well”

C. Are treatment services achieving “good outcomes” for clients
A: Describing which services for which clients

- National Minimal Data Set for AoD Services
  - Number of different types of services
  - Substances used
  - Demographics
  - Minimal co-morbidity, treatment process or outcome data
Who is being treated
Rating case ‘complexity’

- In addition to NMDS, need system that can rate case complexity in a standardised way, enabling comparisons across services, assist benchmarking & service evaluation
  - Complexity must address broad range of substance use, medical, psychiatric, cognitive and social factors
  - How to factor not only ‘problems’, but patient’s strengths / resources (social supports, existing services for other problems)

- Diagnostic coding systems (e.g. ICD-10) too clumsy (need specialised workforce, differential diagnoses, problem focus)
Rating client/case complexity

- Global clinician rating systems
  - GAF (0-100)
  - Clinician Global Impression Severity

- D&A approaches
  - Addiction Severity Index

- Multiple individual scales
  - SDS, AUDIT, ASSIST
  - K-10, DASS-21, QoL scales, SF-12
Exercise: 10 minutes

List key client characteristics that you think impact upon client ‘complexity’ in terms of delivering D&A treatment services and impacting upon clinical outcomes
## Client Complexity Rating Scale (CCRS)

<table>
<thead>
<tr>
<th>Domain</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Substance use</strong></td>
<td></td>
</tr>
<tr>
<td>No active dependence</td>
<td>0</td>
</tr>
<tr>
<td>Active dependence to one substance</td>
<td>1</td>
</tr>
<tr>
<td>Active dependence &gt;1 drug (excluding tobacco)</td>
<td>2</td>
</tr>
<tr>
<td><strong>Physical Health</strong></td>
<td></td>
</tr>
<tr>
<td>No or minor problems that do not regularly impair function or require assistance</td>
<td>0</td>
</tr>
<tr>
<td>Problem that regularly impairs function but is being adequately addressed</td>
<td>1</td>
</tr>
<tr>
<td>Problem that regularly impairs function and is not being adequately addressed</td>
<td>2</td>
</tr>
<tr>
<td><strong>Mental Health</strong></td>
<td></td>
</tr>
<tr>
<td>No or minor problems that do not regularly impair function or require assistance</td>
<td>0</td>
</tr>
<tr>
<td>Problem that regularly impairs function but is being adequately addressed</td>
<td>1</td>
</tr>
<tr>
<td>Problem that regularly impairs function and is not being adequately addressed</td>
<td>2</td>
</tr>
<tr>
<td><strong>Cognition or other disability impairing function</strong></td>
<td>0 / 1</td>
</tr>
<tr>
<td><strong>Concerns re: housing /residential safety, stability</strong></td>
<td>0 / 1</td>
</tr>
<tr>
<td><strong>Concerns re: financial/economic safety, stability</strong></td>
<td>0 / 1</td>
</tr>
<tr>
<td><strong>Parenting support required, child wellbeing / protection issues</strong></td>
<td>0 / 1</td>
</tr>
<tr>
<td><strong>Major legal issues or recent prison release</strong></td>
<td>0 / 1</td>
</tr>
<tr>
<td><strong>Participation in social networks/social supports/ connectedness</strong></td>
<td>0 / 1</td>
</tr>
</tbody>
</table>
B. Are services “delivered well”?

- Organisational elements
  - Quality & safety governance (incident reporting, QI systems)
  - Credentialed and skilled workforce capable of delivering services
  - Corporate governance (resource management, organisational risk management)

- Consumer feedback & engagement systems

- Fidelity to evidence-based interventions c/w guidelines, standards, models of care & service specifications

- Ensure that core treatment processes are adhered to.
Exercise: 10 minutes

List the core treatment elements that should be expected to occur in every D&A treatment episode

– Irrespective of type of treatment (withdrawal, counselling, OTP)
Core treatment processes c/w ‘good clinical practice’

- **Comprehensive assessment**: identify presenting problems, goals, substance use, medical, psychiatric, social issues & key risk factors

- **Individual treatment care plans** developed, implemented and reviewed, in response to key problem areas, goals and related actions. Developed in collaboration with the client, other service providers and carers (as appropriate)

- **High risk factors are identified and addressed** including child protection, DV, overdose, injecting risks, suicide, housing. Risk factors should be tailored to treatment type (e.g. withdrawal, OTP)

- **Monitoring over time**

- **Co-ordination between services**, particularly upon discharge or transfer between service providers.
Have we delivered services well?

Quality Indicators

- Individual Treatment Plans are developed, implemented, reviewed
- Key risk factors are monitored and addressed
- Coordination between services, especially discharge
- Ongoing monitoring of treatment indicators
- Comprehensive Assessment
C. Are services achieving “good outcomes” for clients

- EXERCISE: 10 minutes

- Which factors are important in identifying whether a client has achieved a good outcome from an episode of D&A treatment
3. Are services achieving “good outcomes” for clients

- Treatment outcomes need to reflect a combination of
  - *Process outcomes* (e.g. treatment completion, drop out, adverse events/complications)
  - *Clinical outcomes* - for D&A treatment need to reflect
    - Primary outcomes: measure of primary substance use
    - Secondary outcomes: broader range of measures
      - Other substance use
      - Measures of physical and mental health, social functioning (employment, education, violence), QOL
- How much ‘change’ is meaningful
Some of these indicators might matter more than others, depend on treatment type and individual complexity.
Service Specific Outcome Templates

- Ambulatory & residential withdrawal management
- Counselling, Support and case management
- OTP
Some of these indicators might matter more than others, depend on treatment type and individual complexity.

Quality Indicators:
- Individual Treatment Plans are developed, implemented, reviewed
- Key risk factors are monitored and addressed
- Comprehensive Assessment
- Ongoing monitoring of treatment indicators
- Coordination between services, especially discharge

Clinical Outcome:
- IVDU (ATOP)
- Physical Health (ATOP)
- Mental health (ATOP)
- Work and Study (ATOP)
- Quality of Life (ATOP)
- Housing (ATOP)
- Completion vrs Drop out
- Crime (ATOP)
- Violence (ATOP)
- Safety (Adverse Events)

TREATMENT TYPE
Outcomes may vary according to client factors

- Levels of substance use at treatment entry
- ‘Co-morbidities’
- Client goals
Some of these indicators might matter more than others, depend on treatment type and individual complexity.
Overview of the DRAFT Clinical Outcomes and Quality Indicators Framework

**Clinical Complexity:**
Client Complexity Rating Scale

- Substance Use Frequency (ATOP)
- IVDU (ATOP)
- Physical Health (ATOP)
- Mental Health (ATOP)
- Work and Study (ATOP)
- Quality of Life (ATOP)
- Housing (ATOP)
- Completion vs. Drop Out
- Crime (ATOP)
- Violence (ATOP)
- Safety (Adverse Events)

**Quality Indicators**
- Comprehensive Assessment
- Ongoing monitoring of treatment indicators
- Coordination between services, especially discharge
- Individual Treatment Plans are developed, implemented, reviewed
- Key risk factors are monitored and addressed

**Ongoing monitoring of treatment indicators**
Factors and indicators

A. SUBSTANCE USE
1. Not drinking too much
2. Not using street drugs
3. Not experiencing cravings
4. Coping with problems without turning to drugs or alcohol
5. Managing pain & ill-health without misusing drugs or alcohol
6. Spending free time on hobbies & interests that do not involve drinking or drug use

B. SELF-CARE
7. Taking care of mental health
8. Taking care of physical health
9. Eating a good diet
10. Sleeping well
11. Having a good daily routine

C. RELATIONSHIPS
12. Getting on well with people
13. Feeling supported by people
14. Being treated with respect & consideration by other people
15. Treating others with respect & consideration

D. MATERIAL RESOURCES
16. Having secure housing
17. Having a regular income (from benefits, work, or other legal sources)
18. Managing money well

E. OUTLOOK ON LIFE
19. Feeling happy with overall quality of life
20. Feeling positive
21. Having realistic hopes & goals for oneself
Composite performance measures

- The combination of 2 or more indicators into a single number to summarize multiple dimensions of performance and to facilitate comparisons.
  - integrate a large amount of information in a format that is easily understood.
  - increasingly used to assess performance.
    - examples: Dow Jones Index, IQ, NAPLAN, SF-36
Composite Indexes in D&A treatment

- Challenge: To establish a measure that summarises multiple process & clinical outcomes associated with D&A treatment

- To be able to state for a particular program:
  - 56% patients had a good outcome
  - 27% had indifferent outcome
  - 17% had a poor outcome

- Allows identification of benchmarks by:
  - Drug type (alcohol, opiates etc...)
  - Treatment type (e.g. counselling, OTP, withdrawal etc...)
  - Patient factors (e.g. ATSI, age, rurality)
Composite Index for each episode

For each episode of care, profile of

- Overview of ‘how well services were delivered’?
  - Composite Index of extent to which Comp Assessment, ICP, Discharge Summary, Risk factors were completed

- Overview of ‘was a good outcome achieved’
  - Composite index that includes key process indicators achieved (e.g. completed treatment versus drop out) AND clinical outcomes that globally rate three options: ‘good outcome’, ‘indifferent’, ‘poor outcome’.

The 2 constructs are not necessarily the same / convergent

- Providing a service well does not necessarily mean there will be a good outcome for the client

Note: Patient characteristics (NMDS, case complexity ratings) need to be factored into any interpretation of outcomes
MAKING THE SYSTEM WORK
Electronic medical record systems

- A feasible Outcomes & Quality framework requires an electronic clinical information system
  - Routine clinical work = data collection
  - Avoids double entry
- Mechanisms to facilitate better clinical processes
  - E.g. Reminders
- Reports (data extracts) that can be tailored to question at hand
ATOP (Australian Treatment Outcome Profile, Ryan et al 2014)

- Single page, clinician administered, self-reported instrument asking about past 28 days
- Range of domains covered
  - Substance use
  - General health & well being
- Used for:
  - Clinical review & risk assessment
  - Assist in case management and treatment planning
  - Provides feedback to clients re: progress
  - Data re: clinical outcomes
# ATOP OUTCOME MODULE

**Section 1: Substance use**

<table>
<thead>
<tr>
<th>Substance Type</th>
<th>Ave qty per day</th>
<th>Units (most recent)</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td></td>
<td></td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
</tr>
<tr>
<td>Cannabis</td>
<td></td>
<td></td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
</tr>
<tr>
<td>Amphetamine type substances</td>
<td></td>
<td></td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
</tr>
<tr>
<td>Benzodiazepines (prescribed &amp; illicit)</td>
<td></td>
<td></td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
</tr>
<tr>
<td>Heroin</td>
<td></td>
<td></td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
</tr>
<tr>
<td>Other opioids</td>
<td></td>
<td></td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
</tr>
<tr>
<td>Cocaine</td>
<td></td>
<td></td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
</tr>
<tr>
<td>Other problem substance</td>
<td></td>
<td></td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
</tr>
<tr>
<td>Daily tobacco use</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Yes</td>
</tr>
</tbody>
</table>

Record number of days client injected drugs in the past four weeks (if no, enter zero and go to section 2)

<table>
<thead>
<tr>
<th>Injected</th>
<th>0-7</th>
<th>0-7</th>
<th>0-7</th>
<th>0-7</th>
<th>0-7</th>
<th>0-7</th>
<th>0-7</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0-28</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section 2: Health and Wellbeing**

Record days worked at college, school or vocational training for the past four weeks

<table>
<thead>
<tr>
<th>Work Type</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days paid work</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-28</td>
</tr>
<tr>
<td>Days at school</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-7</td>
<td>0-28</td>
</tr>
</tbody>
</table>

Record the following items for the past four weeks

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you been homeless?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have you been at risk of eviction?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>have been a primary caregiver for or living with any child/children</td>
<td>(i) under 5yo?</td>
<td>Yes</td>
</tr>
<tr>
<td>(ii) 5-15yo?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Have you been arrested?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Have you been violent (incl. domestic violence) towards someone?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Has anyone been violent (incl. domestic violence) towards you?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Client's rating of psychological health status</td>
<td>Poor</td>
<td>Good</td>
</tr>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client's rating of physical health status</td>
<td>Poor</td>
<td>Good</td>
</tr>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Client's rating of overall quality of life</td>
<td>Poor</td>
<td>Good</td>
</tr>
<tr>
<td>0 1 2 3 4 5 6 7 8 9 10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
System enablers

- Training of health providers
- Establishing & refining the system
  - What are appropriate benchmarks?
- Governance processes to ensure key stakeholders included in process
- Confidentiality / privacy issues for clients
- How is performance data used?
Considerations

- Short and easy to complete
- Views clients as more than their drug use
  - Look at variables including but not limited to substance use.
  - Includes quality of treatment delivered
- Multiple stakeholders with different needs
  - Clinicians: Useful for clinical reviews and treatment planning.
  - Clients: for reviewing their own treatment progress
  - Managers: service planning and benchmarking
  - MHDAO: benchmarking
- Integrated into eMR
  - Data entry
  - Extraction/reports
  - Reminders
Long term vision:

- Triangulate data
  - Patient details
  - Services provided
  - Outcomes achieved

- Allow us to inform decision making according to real world conditions, not solely on research study findings or strength of political advocacy
For more information re: COQI

Kristie.mammen@health.nsw.gov.au