The Clinical Outcome and Quality Indicator (COQI) Framework project: Assessing validity and inter-rater reliability of the Client Complexity Rating Scale

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- South Eastern Sydney Local Health District Drug and Alcohol Service
 Central Clinical School, The University of Sydney
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 School of Medicine and Public Health, University of Newcastle
 National Drug and Alcohol Research Centre, University of New South Wales



Overview

- Clinical Outcomes and Quality Indicators (COQI) framework - the larger picture
- Need for standardised client complexity rating
- Developing the Clinical Complexity Rating Scale
- **CCRS** Validation pilot
 - methods
 - learnings
- Conclusions

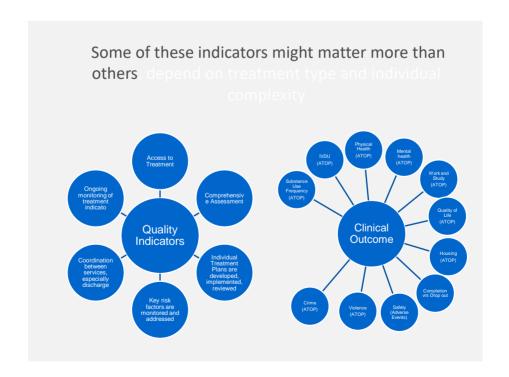


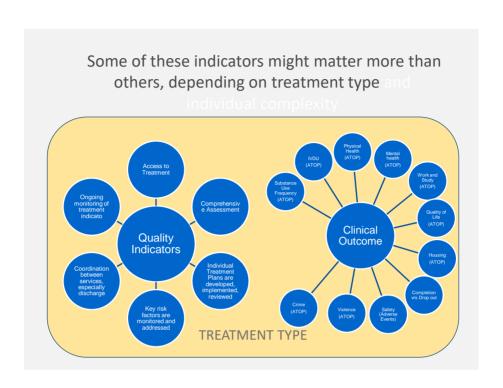
COQI Framework – the larger picture

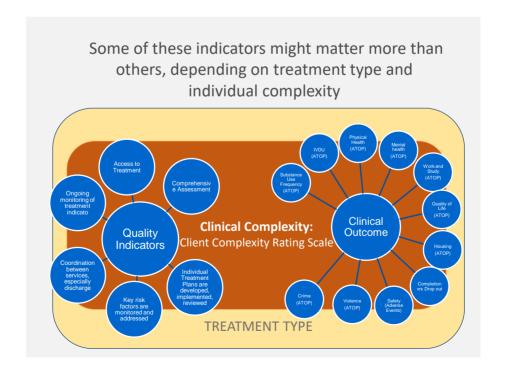
- A Project Team led by SESLHD D&A Services will develop, pilot and implement a COQI framework for NSW public Drug and Alcohol Services
- Monitoring in D&A predominantly on throughput, some baseline demographics and treatment cessation route

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?







Rating case 'complexity'

- Need to rate case complexity in a standardised way
 - 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)
- This led to development of Client Complexity Rating Scale (CCRS).

CCRS development story

- No 'complexity rating' scale specific to D&A treatment was identified in the research literature
- Multi-disciplinary group of senior D&A clinicians formed who reviewed the Minnesota Complexity Assessment Method and developed a scale for D&A.
- Held a workshop with senior clinicians and service managers across NSW to check domains reflected complexity – ensures good 'face validity'.
- Statewide consultation process of D&A sector
- CCRS incorporated into electronic medical record build for community health (incl D&A), rolled out from early 2015

Client Complexity Rating Scale (0-12)

Domain	Score
Substance use No active dependence Active dependence to one substance Active dependence >1 drug (excluding tobacco)	0 1 2
 Physical Health No or minor problems that do not regularly impair function or require assistance Problem that regularly impairs function but is being adequately addressed Problem that regularly impairs function and is not being adequately addressed 	0 1 2
Mental Health No or minor problems that do not regularly impair function or require assistance Problem that regularly impairs function but is being adequately addressed Problem that regularly impairs function and is not being adequately addressed	0 1 2
Cognitive function	0/1
Participation in social networks/social supports/ connectedness	
Concerns re: housing /residential safety, stability	
Concerns re: financial/economic safety, stability	
Parenting support required, child wellbeing / protection issues	
Major legal issues or recent prison release	

CCRS validation pilot study - methods

- Prospective recruitment of 120 clients of SESLHD DAS.
- Both new and continuing, with alcohol and opioids as principal drug of concern
- Each client was independently rated by two clinicians.
- Gold standard tools (Australian Treatment Outcomes Profile, and the Clinical Global Impression – Severity scale) used to assess concurrent validity.
- CCRS scores compared to assess inter-rater reliability (Krippendorf Alpha).

CCRS validation – Learnings from pilot

- After recruiting 53 client/clinician pairs, inter-rater reliability found to be only fair-to-moderate
- As well, researchers maintained a detailed log of queries from clinicians
- Indicated more specific guidelines needed to be developed to assist in assigning ratings across all domains
- Hands-on training in application of modified guidelines was also identified as a requirement.

CCRS training package

- A training package was developed, which is made up of:
 - Standardised scoring guidelines
 - 90-min interactive workshop with a series of case studies
 - To be developed into an online resource that will be available on the COQI framework website in early 2017.
- Although yet to start rollout of next wave of recruitment to CCRS validation, trainee feedback suggests more consistent ratings are being given with the new guidelines

Conclusions

- CCRS has good face validity and acceptance by clinicians
- Has potential to be a useful clinical outcome tool as can also be used to measure change over time
- Validation pilot resulted in improvement in scoring guidelines and development of training package
- Inter-rater reliability validation to be conducted as part of larger COQI framework project

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SESLHD COQI Team

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COQI Project Advisory Committee

NUAA; Population Health, MoH; NADA; ACI; InforMH, HSIPR; eHealth; MHDAO, MoH; PICH, SESLHD.

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CCRS Case study

- A 41 year old woman presents for help to cease alcohol use15 year history of drinking 5+SD most days. Has used alcohol twice only in past month, each time triggered by traumatic event.
- Requests to recommence acamprosate, therapy group
- Lives with parents in a privately owned house. No income as she lost her job, unable to look for more due to increasing anxiety. Supportive mother. No current legal problems, no children in her care.
- Bruising and lacerations from a fall while intoxicated, to be followed up with her GP. Currently prescribed medication for a peptic ulcer. She was involved in a road accident 3 years ago where she lost consciousness for several hours.
- Mental health: Background of PTSD and panic attacks. Her increasing anxiety resulted in her commencing fluoxetine through GP 2 weeks ago, slight reduction in anxiety currently.

CCRS Case study - cont.

CCRS domain scores:	
- Substance use:	0
- Physical:	1
- Mental:	1
- Cognitive:	1
Social support:	0
- Housing:	0
- Finances:	1
– Child protection:	0
- Legal:	0
- Total:	4