

# Change sensitivity and correlates of change on a measure of recovery following discharge from residential rehabilitation

*Emma L. Hatton<sup>1</sup>, Peter J. Kelly<sup>1</sup>, Alison Beck<sup>1</sup>, Laura Robinson<sup>1</sup> & Briony Larance<sup>1</sup>*

<sup>1</sup> School of Psychology, University of Wollongong, Australia.

# Acknowledgements

The authors wish to acknowledge the clients who accessed residential services and whose data was used in this research.

## Funding and conflict of interest statement

This work was supported by the National Health and Medical Research Council (NHMRC) Meaningful Outcomes in Substance Use Treatment Centre of Research Excellence. The overarching Continuing Care Project studies were funded by a competitive research grant from the Alcohol and Other Drugs Early Intervention Innovation Fund, NSW Health. NSW Health had no role in data collection, analyses, and interpretation, nor on the writing of outcomes detailed in this paper. EH was supported by an Australian Government Research Training Program (AG RTP) scholarship while conducting this research.

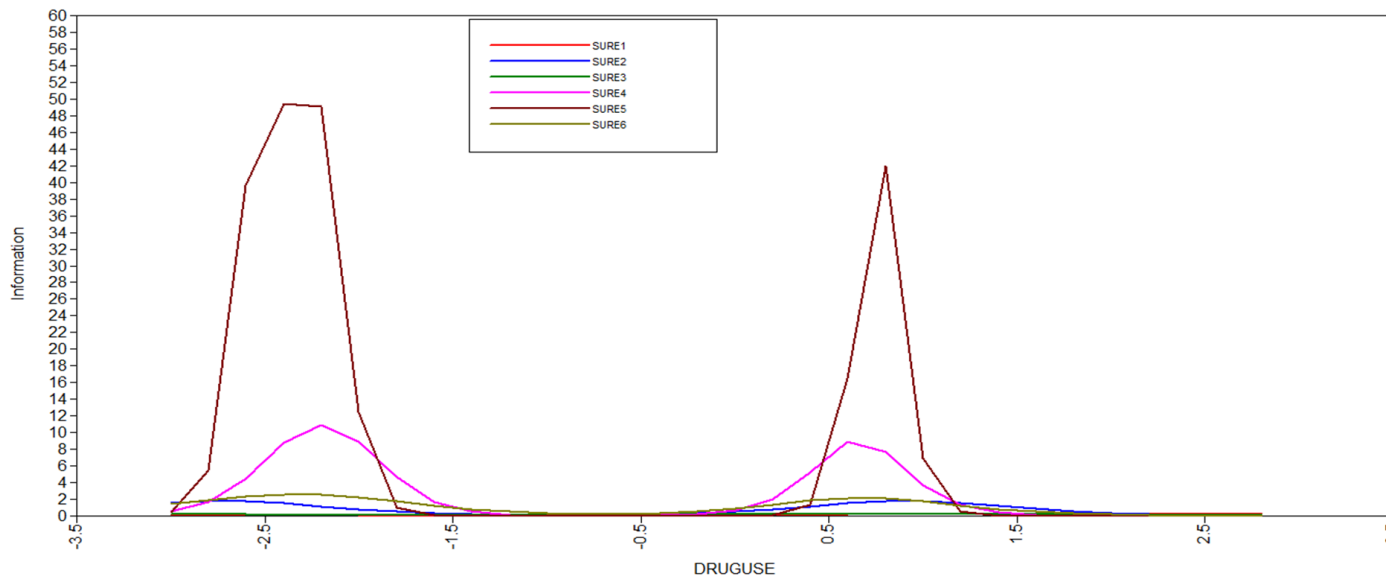
# Background

- Substance Use Recovery Evaluator (SURE) has 5 underlying factors (drinking and drug use, self-care, relationships, material resources, and outlook on life) and 21 items.
- The SURE was not previously validated for residential settings (Neale et al., 2016)
- Preliminary work on the scoring of the SURE for residential treatment clients

Under review: Hatton EL, Kelly PJ, Bruno R, Neale J, Larance B. Measuring recovery among people who have completed residential rehabilitation: Factor structure and scoring of the Substance Use Recovery Evaluator. Manuscript submitted for publication 2024.

# Substance Use Recovery Evaluator (SURE) in Residential Settings

- Used IRT and CFA to evaluate scoring for post-discharge residential clients
- Confirmed 5 factors and 21 items with binary rescoring



Hatton, E. L., Kelly, P. J., Neale, J., Bruno, R., & Larance, B. (2023, May 11-12). *Using the Substance Use Recovery Evaluator to measure recovery among residential treatment clients: Advice for clinicians and clinician-researchers* [Poster Presentation]. NADA Conference 2023: Creating Safe Spaces, Sydney, NSW, Australia.

Updated Residential Rescoring:	2	1			
Original Rescoring:	3	2	1		
	Amount of the time				
Item Wording (selected example items only)	All	Most	Fair	Little	None
I have been taking care of my mental health	1	2	3	4	5
I have been getting on well with people	1	2	3	4	5
I have had stable housing	1	2	3	4	5
I have felt happy with my overall quality of life	1	2	3	4	5

# Current Study Aims

Using binary rescaling of the SURE for residential treatment samples, in terms to:

- Evaluate internal consistency, concurrent validity and change sensitivity;
- Identify indices of reliable and clinically significant change for the SURE scores for benchmarking;
- Examine correlates of improvement and deterioration in recovery.

# Sample & Measures

## Participants

- N = 247
- 59.1% male
- 95.1% aged over 25 years

## Assessments

- 14 weeks after discharge
- 26 weeks after discharge

*Note: all participants were discharged between 2018 and 2020.*

## Measures

- Substance Use Recovery Evaluator (SURE)
- Kessler 10 Psychological Distress Scale (K10)
- Eurohis Quality of Life Index (EQoI-8)
- Desires for Alcohol Questionnaire (DAQ-6)
- Timeline Follow-back for Substance Use (TLFB)
- Drug Taking Confidence Questionnaire (DTCQ)

# Results – Reliability

- Total SURE -  $\alpha = .91$  – Excellent
  - Drinking and Drug Use -  $\alpha = .86$  - Good
  - Self-Care -  $\alpha = .80$  - Good
  - Relationships -  $\alpha = .85$  - Good
  - Material Resources -  $\alpha = .50$  - Poor
  - Outlook on Life -  $\alpha = .81$  - Good

The internal consistency for the Material Resources subscale was marginally improved by removing item 18 (“I have been managing my money well”) from the subscale ( $\alpha = .61$ ), however removing this item did not improve the total SURE internal consistency ( $\alpha = .91$ ) so it was retained in the total score.

# Results – Concurrent Validity

- The total SURE score was;
  - Positively correlated with quality of life, drug-taking confidence, and abstinence (all  $p < .001$ ); and
  - Negatively correlated with psychological distress and craving (all  $p < .001$ ).



# Results – Change Over Time

- Total SURE was sensitive to change over time between 14 and 26 weeks after discharge.
- Self-care, Relationships, and Material Resources and Outlook on Life remained relatively stable between 14- and 26-weeks after discharge.
- We used a measure of reliable change:
  - Total SURE – 3.18
  - Reliable change [ $RC = (1.96 \times SE_{diff})$ ] using the standard error (SE) [ $SE_{diff} = SDBaseline \times \sqrt{2} \times \sqrt{(1 - \alpha)}$ ].

# Results – Predictors of Change Over Time

- Using reliable change indicators for the total SURE we grouped people into:
  - Improving
  - Deteriorating
  - No change
- Increases in recovery were associated with:
  - Higher abstinence, higher quality of life and non-attendance at employment services.
- Decreases in recovery were associated with:
  - Reporting stimulants as primary substance of concern.

# Limitations & Conclusions

- No assessment taken at intake.
- Recruitment for the current study was closed early due to COVID-19
- We were not evaluating more or less positive outcomes, we were only evaluating whether the measure was sensitive to change and what was predictive of those changes.

## CONCLUSIONS

- The SURE provides valuable insights across multiple domains and can be helpful for ongoing monitoring after residential discharge.
- Benchmarking after discharge can help to provide prompts for service re-entry.

# Thank you!

**Contact: Emma Hatton**  
**[elh985@uowmail.edu.au](mailto:elh985@uowmail.edu.au)**