NSW Ministry Health

Evaluation Intervention Innovation Fund

Summary of key findings and implications for policy and practice

Project title: Routine outcome monitoring (ROM) plus feedback in SMART Recovery Australia: A feasibility study examining Smart Track

Lead investigator and organisations: Mr Ryan McGlaughlin (Smart Recovery Australia) in collaboration with A/Prof Peter Kelly (University of Wollongong)

Other investigators and organisations: Prof Frank Deane and Dr Alison Beck (University of Wollongong); Prof Amanda Baker (University of Newcastle); Prof Anthony Shakeshaft (University of NSW); Prof Leanne Hides (University of Queensland); Prof John Kelly (Harvard University); Prof Joanne Neale (King's College London), Dr Christopher Oldmeadow and Prof Andrew Searles (Hunter Medical Research Institute), Dr Angela Argent (SMART Recovery Australia)

Additional investigators and organisations: Dr Briony Larance (University of Wollongong); A/Prof Victoria Manning (Monash University); Prof Carla Treloar and Dr Rebecca Gray (University of NSW).

Background and Rationale - what problem were you solving?

Mutual support groups play an extremely important role in the treatment of alcohol and other substance use disorders (1, 2). SMART Recovery Australia is a non-government organisation (NGO) that helps to support the training and dissemination of SMART Recovery groups throughout Australia (3, 4). A major limitation in developing a strong evidence base for mutual support has been the lack of routine outcome data. Routine outcome monitoring (ROM) is specifically recommended for use in alcohol and other drug treatment settings (1, 2). ROM data is important for treatment planning, quality assurance (1, 5-7) and allows organisations to understand, evaluate and improve service delivery (7, 8). From a research perspective, ROM data provides insight into which clients receive the most benefit from services and how variations in care may impact engagement and outcomes (7). Despite the importance and popularity of mutual support groups, there have been no systematic attempts to implement and evaluate routine outcome monitoring in these settings. The purpose of this project was to explore the feasibility and acceptability of using a purpose-built digital ROM and feedback platform as part of SMART Recovery groups.

Summary of Key Research Findings

Please summarise findings from the research below in abstract format (maximum 300 words)

Aims: This study was designed firstly, to develop an engaging, user-friendly Smart Phone App that a) supports SMART Recovery participants to regularly enter self-monitoring data across a range of domains (e.g. substance use, mental health, wellbeing) and b) uses this data to provide participants with tailored feedback. Secondly, we sought to evaluate the feasibility and acceptability of using this tool for ROM and feedback in SMART Recovery groups

Methods: Qualitative interviews were conducted with SMART Recovery participants and facilitators. Findings were integrated into a user-centric, theory-informed approach to the design, development and beta-testing of 'Smart Track', a Smart phone app for ROM and feedback. The feasibility and acceptability of Smart Track was evaluated using a pre-post pilot study with nested qualitative evaluation and cost analysis.

Results: We successfully developed a high-quality, innovative, engaging and user-friendly Smart-Phone app for ROM and feedback. Qualitative and quantitative findings support the feasibility and acceptability of Smart Track and lend insight into avenues for enhancing sustained engagement. SMART Recovery Participants were willing to use Smart Track, demonstrated repeated use across the eight-week follow-up interval, engaged most with the two main progress screens and experienced Smart Track as useful and consistent with SMART Recovery principles and strategies. Qualitative feedback, usage patterns and varied and declining rates of ROM completion suggest that the utility of Smart Track would be improved by minor changes to app functionality and improved attention to implementation strategies.

Conclusions: Smart Track offers an innovative platform that participants can use to self-monitor their progress and receive tailored feedback across a range of important domains (e.g. substance use, mental health and recovery). Minor updates to functionality are expected to enhance and sustain engagement. 'Champions' (e.g. SMART Recovery participants and/ or facilitators) will be central to promoting uptake of and ongoing participant engagement with Smart Track.

Implications for policy and practice

Implications for policy

Smart Track should be implemented by SMART Recovery as a routine component of SMART Recovery groups. Broader implications are also apparent (e.g. to NSW Health Policy). The ROM data captured by Smart Track has direct bearing on quality assurance and improvement activities (9), for both SMART Recovery and the broader AOD sector. ROM is also integral to evidence-based healthcare (10). However completion rates are variable (11, 12) and time is an oft-cited barrier (13, 14). Smart Track could therefore be recommended as a complementary mechanism for ROM and feedback alongside more traditional clinician completed measures (9, 15). The holistic, multi-dimensional and client centric nature of Smart Track is also consistent with the tenants of Recovery Oriented Practice (16). Accordingly, Smart Track could be recommended as a novel mechanism for engaging participants in treatment planning and evaluation (9, 16). If Smart Track were to be rolled out the relevant cost considerations would be the specific implementation costs, such as app hosting (estimated at \$1200 per annum); infrastructure and maintenance (estimated at \$12000 per annum), and training costs (estimated at \$15000 to develop a training module, video tutorial and written materials to support facilitator implementation of Smart Track).

Implications for practice i.e. services and programs

The design, development and content of Smart Track has been informed by evidence-based principles and strategies applicable to both SMART Recovery and the broader AOD sector, including validated outcome measures commonly employed within the AOD sector (17). Smart Track provides a contemporary, portable and non-stigmatising mechanism for enhancing self-monitoring and self-management. The process of self-monitoring engenders awareness (18). Tailored feedback data could be used by the client and/ or shared with clinicians to tailor treatment and/ or action plans (17). By offering a resource that could be used to monitor progress before, during and after accessing treatment, Smart Track has the potential to influence continuity of care. For example, ROM and feedback provides a foundation for ensuring that earlier action is taken to minimize the likelihood of relapse (19). The portability of Smart Track has implications for expanding access to progress monitoring and feedback amongst individuals who might not otherwise choose to and/ or be able to access services (e.g. due to sigma and/ or access issues).

	Please comment on the	particular significance	of this project to	NSW including	a customer focus
--	-----------------------	-------------------------	--------------------	---------------	------------------

SMART Recovery Groups are highly integrated with both NGO and government delivered health services, with more than 100 groups being delivered to more than 600 participants in NSW each week, across more than 50 different organisations. Smart Track offers these participants and organisations an innovative, purpose built mechanism for monitoring progress and supporting self-management, and for the first time, provides SMART Recovery with a wealth of outcome data to understand the impact of this important source of mutual support. This has direct implications for quality improvement and service planning.

Has this research study led to further investigations or collaborations that led to other funding applications?			
YES	NO		

Dissemination Activities completed and planned

Completed:

Oral Presentations

- The Network of Alcohol and other Drugs Agencies (NADA) Annual Conference, 2018
- The Victorian Alcohol and Drug Association (VAADA) Annual Conference, 2018
- The Australian Association for Cognitive and Behaviour Therapy Annual Conference, 2019
- SMART Recovery Australia Board Meeting, Dec 2018
- SMART Recovery Australia Board Meeting, Dec 2019
- Webinar for SMART Recovery Australia https://youtu.be/qMih9KPPgoY

Publications in Peer Review Journals

Kelly PJ, Beck AK, Deane FP, Larance B, Baker AL, Hides L, Manning, V., Shakeshaft, A., Neale, J., Kelly, J.
 F., Oldmeadow, C., Searles, A., Palazzi, K., Lawson, K., Treloar, C., Gray, R. M., Argent, A. & McGlaughlin, R
 Feasibility of a Mobile Health App for Routine Outcome Monitoring and Feedback in SMART Recovery Mutual

- Support Groups: Stage 1 Mixed Methods Pilot Study. J Med Internet Res. 2021;23(10):e25217, doi:10.2196/25217.https://www.jmir.org/2021/10/e25217
- Gray, R. M., Kelly, P. J., Beck, A. K., Baker, A. L., Deane, F. P., Neale et al. (2020). A qualitative exploration
 of SMART Recovery meetings in Australia and the role of a digital platform to support routine outcome
 monitoring. *Addictive Behaviors*, 101, 106144. https://doi.org/10.1016/j.addbeh.2019.106144
- Kelly, P. J., Beck, A. K., Baker, A. L., Deane, F. P., Hides, L., Manning, V., Shakeshaft, A., Larance, B., Neale, J., Kelly, J., Oldmeadow, C., Searles, A., Treloar, C., Gray, R. M., Argent, A., & McGlaughlin, R. (2020). Feasibility of a Mobile Health App for Routine Outcome Monitoring and Feedback in Mutual Support Groups Coordinated by SMART Recovery Australia: Protocol for a Pilot Study, *Journal of Medical Internet Research: Protocols*, 9(7):e15113. doi: 10.2196/15113
- Beck, A.K., Kelly, P.J., Deane, F.P., Baker, A., hides, L., Manning, V., Shakeshaft, A., Neale, J., Kelly, J.F., Gray, R. M., Argent, A., McGlaughlin, R., Chao, R. & Martini, M. (Under Review). Developing a mHealth Routine Outcome Monitoring and Feedback App ("Smart Track") to Support Self-Management of Addictive Behaviours, Frontiers in Psychiatry 12(820) https://doi.org/10.3389/fpsyt.2021.677637

Media Releases

The University of Wollongong, in collaboration with SMART Recovery, GHO and NSW Health generated and circulated media releases about Smart Track and the feasibility study. The following is a summary of resultant media coverage:

- B&T (Sept 3), CX Agency GHO Launches App To Help Manage Addiction, https://www.bandt.com.au/advertising/cx-agency-gho-launches-app-help-manage-addiction
- Mirage News (Sept 2), New app being trialled to manage addiction recovery, https://www.miragenews.com/new-app-being-trialled-to-manage-addiction-recovery/
- OpenGov (Sept 11), Smart app trial will help manage addiction recovery, https://www.opengovasia.com/smart-app-trial-will-help-manage-addiction-recovery/
- Illawarra Mercury (Sept 2), UOW leading SMART Track app to help those with addiction, https://www.illawarramercury.com.au/story/6361151/uow-looking-for-recruits-to-trial-new-app-to-curb-addiction/

Other

- GHO has published a case study detailing the development of Smart Track, https://ghosydney.com/work/building-a-smart-way-to-help-manage-addiction/
- A summary of the project was developed and disseminated to SMART Recovery participants and facilitators.

Planned

Oral Presentations:

 The Network of Alcohol and other Drugs Agencies (NADA) Annual Conference, 2020 (postponed due to COVID-19)

Research publications

- Gray, R. M., Kelly, P. J., Beck, A. K., Baker, A. L., Deane, F. P., Neale et al. (2020). Qualitative findings for the feasibility and acceptability of a mobile health application for routine outcome monitoring in SMART Recovery mutual support groups, Target Journal: Addiction
- Gray, R. M., Kelly, P. J., Beck, A. K., Baker, A. L., Deane, F. P., Neale et al. (2020). Self-agency and mutual support, Target Journal: Addictive Behaviours

References

- 1. National Institute for Health and Care Excellence. NICE Quality standard for drug use disorders. NICE quality standards QS23. London: National Institute in Health and Clinical Excellence; 2012.
- 2. National Institute for Health and Care Excellence. Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence. London: National Institute for Health and Clinical Excellence; 2011.
- 3. Horvath AT, Yeterian J. SMART Recovery: Self-Empowering, Science-Based Addiction Recovery Support. Journal of Groups in Addiction & Recovery. 2012;7(2-4):102-17.
- 4. Kelly PJ, Deane FP, Baker AL. Group cohesion and between session homework activities predict self-reported cognitive-behavioral skill use amongst participants of SMART Recovery groups. J Subst Abuse Treat. 2015;51:53-8.
- 5. National Institute for Health and Care Excellence. NICE: Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence. London: National Institute for Clinical Excellence; 2011.
- 6. Lambert MJ, Shimokawa K. Collecting Client Feedback. Psychotherapy. 2011;48(1):72-9.
- 7. Kelly JF, Mee-Lee D. Chapter 15 Quality, Accountability, and Effectiveness in Addiction Treatment: The Measurement-Based Practice Model. In: Danovitch I, Mooney LJ, editors. The Assessment and Treatment of Addiction: Elsevier; 2019. p. 207-17.
- 8. Boswell JF, Constantino MJ, Kraus DR, Bugatti M, Oswald JM. The Expanding Relevance of Routinely Collected Outcome Data for Mental Health Care Decision Making. Administration and Policy in Mental Health and Mental Health Services Research. 2016;43(4):482-91.
- 9. Planning SRa. NSW State Health Plan: Towards 2021. Northern Sydney: NSW Health; 2014.
- Patient Reported Measures Team. Patient Reported Measures Program Overview. Chatswood: NSW
 Agency for Clinical Innovation; 2018.
- 11. de Beurs E, Warmerdam L, Twisk J. Bias through selective inclusion and attrition: Representativeness when comparing provider performance with routine outcome monitoring data. Clinical Psychology & Psychotherapy. 2019;26(4):430-9.
- 12. Burgess P, Pirkis J, Coombs T. Routine outcome measurement in Australia. international Review of Psychiatry. 2015;27(4):264-75.
- 13. Boswell JF, Kraus DR, Miller SD, Lambert MJ. Implementing routine outcome monitoring in clinical practice: benefits, challenges, and solutions. Psychotherapy Research. 2015;25(1):6-19.

- 14. Carlier IV, van Eeden WA. Routine Outcome Monitoring in Mental Health Care and Particularly in Addiction Treatment: Evidence-Based Clinical and Research Recommendations. Journal of Addiction Research & Therapy. 2017;08.
- 15. Health CfP. Drug and Alcohol Psychosocial Interventions Professional Practice Guidelines: Professional Practice Guidelines. North Sydney; 2008.
- 16. Health CfP. Alcohol and Other Drugs (AOD) Consumer Engagement Framework. Northern Sydney; 2019.
- 17. NADA. NGO Drug and Alcohol and Mental Health Information Management Project: Determining the Treatment Outcomes Data Collection Set. Strawberry Hills: NADA; 2009.
- 18. Holmes MM, Stanescu S, Bishop FL. The Use of Measurement Systems to Support Patient Self-Management of Long-Term Conditions: An Overview of Opportunities and Challenges. Patient Relat Outcome Meas. 2019;10:385-94.
- 19. Lambert MJ, Whipple JL, Kleinstauber M. Collecting and Delivering Progress Feedback: A Meta-Analysis of Routine Outcome Monitoring. Psychotherapy. 2018;55(4):520-37.