NSW Ministry Health

Early Intervention & Innovation Fund

Summary of key findings and implications for policy and practice

Project title: Continuing Care Project: A randomised controlled trial of a continuing care telephone intervention following residential substance use treatment

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Background and Rationale – what problem were you solving?

A priority area in the field of alcohol and other drug (AOD) treatment is reducing the rates of relapse. Studies in the United States have demonstrated that telephone delivered continuing care interventions are both clinically effective[1-3] and cost effective[4,5] when delivered as a component of outpatient treatment. McKay and colleagues have developed a standardised continuing care telephone intervention[6]. The purpose of the current project was to provide important information on the clinical effectiveness of including the McKay telephone delivered continuing care intervention as part of NSW non-government residential AOD services. This project also aimed to determine the feasibility of a call centre model, in which the continuing care program was delivered from a centralised call centre (rather than by continuing care workers based onsite at the residential services). Consumers' interest in participating in continuing care, as well as the continuing care workers' experience in delivering the program were also evaluated as part of the broader project.

Summary of Key Research Findings

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

The Continuing Care Project: A multi-arm randomized controlled trial of a continuing care telephone intervention following residential substance dependence treatment.

Introduction and aims: This study assessed the effectiveness of a telephone-delivered continuing care intervention for people exiting residential AOD treatment. It was conducted as a multi-centre prospective, randomised controlled trial. It compared three study arms (12-session, 4-session, Control) where continuing care workers were based at the residential treatment sites to promote participant engagement. A concurrent feasibility trial was also conducted, where continuing care workers were based at a call centre (randomised to 12-sessions or 4-sessions).

Methodology: A total of 277 residents (20 – 71 years; *M* = 38 years, *SD* = 10.4; 58% male) attending treatment for at least 4 weeks were randomised. The study was conducted in collaboration with The Salvation Army (Dooralong Transformation Centre, William Booth House) and We Help Ourselves (New Beginnings, Gunyah). The feasibility trial included 154 participants from residential treatment.

Results: At 6-months follow-up, the odds of being completely abstinent in the past month was not significantly different between the three study arms. Participants across all arms were more likely ($p < 0.001$) to be completely abstinent compared to baseline [12-session OR = 12.86 (5.4, 30.9); 4-session OR = 9.52 (4.0, 22.4); Control OR = 7.02, (3.4, 14.7). For the feasibility trial, outcomes were consistent with the main trial. However, there were much lower rates of engagement with participants once they left the residential facilities (29%) compared to the main trial where workers were based at the sites (70%).

Conclusions: The results suggest that the residential programs are having a positive long-term impact on participants. The addition of telephone continuing care of different lengths did not result in significantly higher abstinence rates compared to the control condition. However, the pattern of the results was in the hypothesised direction. Participant outcomes between the 'call centre' approach and the main trial were similar. However, the major challenge with using this approach is re-engaging participants once they leave the residential facility. Further work is required to promote greater update of these protocols once people leave residential treatment.

Implications for policy and practice

Policy and practice implications for key government stakeholders

1. There was not a statistically significant difference in AOD use between either of the treatment arms (i.e., 12-session, 4-session) and the control arm within the main trial. Subsequently, any wide scale dissemination of the intervention may be premature and not add substantially to positive outcomes. That said, abandoning such initiatives is also not

warranted for several reasons. Firstly, the control comparison was with "treatment as usual" following discharge. This typically involves encouragement and support to attend mutual support groups or other recovery programs. Secondly, there were non-significant trends towards improved outcomes in the two treatment conditions. Whilst efforts were made to recruit a sufficient sample size (i.e., target of 360 participants), only 277 people were randomised. Since we were unable to obtain the sample size needed to detect changes from baseline to follow-up between the different intervention groups, the findings of the main RCT should be interpreted with caution. It is possible that with an increased sample size we may have observed statistically significant differences. Likewise, a further limitation of the current studies was the low rate of completed telephone sessions by participants (4-session condition *M* = 2.46 session; 12-session condition *M* = 5.04 sessions). The low rates of session completion potentially reduced the impact of the interventions. Future research should certainly examine strategies to increase session completion (see Recommendation 5).

2. It is likely that a sector approach that offers a range of continuing care options, including telephone delivered continuing care, would be the most beneficial strategy. This helps to address individual preferences and the unique needs of individuals, and considers the existing services available in the persons region. Likewise, it is important to consider that these preferences and needs may change overtime for individuals.

3. A 'call centre' model shows some limited promise. It was possible to deliver the intervention at a high level (i.e. high fidelity in delivery of the intervention) and, once engaged following discharge, outcomes were consistent with the main trial. However, the major trade off with this approach was the large participant drop out. If this approach was to be pursued in the future, implementation research should consider ways to maximise engagement of participants. This might include using video conferencing or the 'call centre' staff having more regular contact with participants during their stay at the residential facility. Based on the engagement rates across the two randomised controlled trials in the current study, having continuing care workers based at the residential services was the most effective way to engage participants post-residential treatment.

4. Future practice initiatives should consider ways to improve continuing care procedures for Aboriginal participants. This should involve consultation with Aboriginal people attending AOD services, Elders, and Aboriginal Community Controlled Organisations.

Policy and practice implications for service delivery

5. Reports from CCWs indicated that the telephone sessions were particularly helpful in identifying people who were at-risk (e.g., had returned to substance use, victims of domestic violence), and supporting these individuals to (re)engage with appropriate services. It is likely that 'check-in' calls with individuals leaving residential treatment will help to provide a 'safety net' for people. Likewise, it also provides an opportunity to reinforce an individual's own continuing care plans (e.g., remind participants about mutual support groups in their own area, encourage attendance at telephone delivered care).

6. As demonstrated in the current study, participants engage with a range of continuing care options. The tailoring of continuing care to individual needs and preferences is likely to be particularly important. We would recommend the use of continuing care plans to help identify and tailor continuing care needs to the individuals. Continuing care plans were well received across the current project.

7. The current study used an approach where participants randomised to a treatment condition were offered up to 4 or 12 telephone sessions. However, as reported by the continuing care workers (CCWs), there were instances where it may have been beneficial to provide more sessions for participants, and other instances where the CCWs believed that a reduced number of sessions may have helped to keep participants engaged. There was consensus amongst CCWs that delivery of continuing care needs to be individually tailored to clients, with the number of sessions and frequency of telephone calls suited to the individual clients' needs and preferences.

8. Participants were more likely to engage in continuing care if they completed the residential program. Future research should consider strategies to work with those participants who leave the residential programs early (e.g., within the first 4-weeks). It is suggested that continuing care plans are discussed very early on in the treatment process and updated as people move through the residential program. It is likely that these participants are at the most risk of poor outcomes. It is likely that more active follow-up of participants will be needed. Based on the results from the main trial and the feasibility trial, it is likely that CCWs based at the sites will be more effective in promoting engagement of these participants.

9. For service providers and funding bodies considering implementing similar telephone delivered continuing care protocols, there are a number of lessons that could be learnt from the current study. As detailed in the qualitative study, there are a number of organisational factors (e.g., prioritising continuing care within the service, providing sufficient training and ongoing clinical supervision, flexible working hours) and staff attributes (e.g., strong

engagement and motivational interviewing skills) that should be considered when implementing telephone delivered continuing care.

Further research implications

10. The current studies were limited to 6-month follow-up post residential treatment. Further research should examine longer-term treatment outcomes for participants. This could examine the potential benefits of providing participants with either ongoing telephone calls (as required) or structured 'booster' sessions with participants.

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

- The project utilised the expertise of managers and staff of the NGOs, as well as leading researchers in the field. A number of students were also involved in the Continuing Care Project, including four psychology honours students, two psychology PhD students, and a number of early career researchers. This highlights the investment of NSW Health in giving back to the sector, by providing opportunities for upskilling, training and experience for prospective and emerging researchers in the drug and alcohol field.

Research Impact

Has this research study led to further investigations or collaborations that led to other funding applications?

YES ☒ NO ☐

If yes, please detail what further investigations or collaborations this research study has led to.

Our research group were recently awarded an NHMRC Centre of Research Excellence: Alcohol and Other Drug sector capacity building for outcome focused, evidence based and cost-effective care.

Please send completed reports to:

Dr Joanne Ross, Senior Research & Evaluation Officer, Centre for Alcohol and Other Drugs, NSW Ministry of Health

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Research Outcomes

Presentations

- Kelly, P.J. The Continuing Care Project: Three-month outcomes from a randomised controlled trial of a continuing care telephone intervention following residential substance dependence treatment (2021). 44th Annual Research Society on Alcoholism Scientific Meeting. Virtual conference. June 19th 2021.

- Kelly, P.J. The Continuing Care Project (2021). NSW Health and Network of Alcohol and Other Drug Agencies (NADA) webinar series: https://youtu.be/X9zOT4O-Kts

Published manuscripts

- Degan, T., **Kelly, P.J.,** Deane, F.P., Robinson, L., and Baker, A.L. (2021). Health literacy and healthcare service utilisation in the 12-months prior to entry into residential alcohol and other drug treatment. Addictive Behaviors. Vol 123, 107111. https://doi.org/10.1016/j.addbeh.2021.107111

- Kelly, P.J., Deane, F.D, Baker, A.L, Byrne, G., Degan, T., Osborne, B., Townsend, C., McKay, J., Robinson, L., Oldmeadow, C., Lawson, K., Searles, A., & Lunn, J. (2020). Study protocol the Continuing Care Project: a randomised controlled trial of a continuing care telephone intervention following residential substance dependence treatment. *BMC Public Health, 20*(107). https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-020-8206-y

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specialist residential alcohol and other drug treatment. Addictive Behaviors. 117, 106840. https://doi.org/10.1016/j.addbeh.2021.106840

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3 McKay, J. R. Continuing care research: What we have learned and where we are going. *Journal of Substance Abuse Treatment* **36**, 131-145, doi:10.1016/j.jsat.2008.10.004 (2009).

4 Shepard, D. S., Daley, M. C., Neuman, M. J., Blaakman, A. P. & McKay, J. R. Telephone-based continuing care counseling in substance abuse treatment: Economic analysis of a randomized trial. *Drug and Alcohol Dependence* **159**, 109-116, doi:10.1016/j.drugalcdep.2015.11.034 (2016).

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6 McKay, J. R. The effectiveness of telephone-based continuing care for alcohol and cocaine dependence: 24-month outcomes. *Archives of General Psychiatry* **62**, 199-207, doi:10.1001/archpsyc.62.2.199 (2005).