

PRACTICE BRIEF: ACADEMIC RESEARCH SUPPORTS TRANSLATION PATHWAYS FOR CLINICAL IMPACT IN STRUCTURED JOURNAL CLUBS

Sharon Mickan*1, Rachel Wenke²

- 1. Mosaic Health Consulting, Queensland, Australia
- 2. Allied Health and Rehabilitation Services, Gold Coast Health, Queensland, Australia

Correspondence: sharon.mickan@mosaichealthconsulting.com.au

INTRODUCTION

Academic research plays a pivotal role in creating and sustaining pathways for clinical impact. Over nine years, a series of collaborative research projects informed the translation pathway for structured journal clubs within a tertiary health service. This pathway included conceptualisation, implementation, sustainability and spread of research evidence into practice within the innovative journal club initiative. This brief identifies four key stages of the pathway, summarising the contribution of research to support ongoing practice transformation.

1. CONCEPTUALISATION: THE JOURNAL CLUB PROBLEM

The translation pathway began by identifying a knowledge-practice gap in journal club effectiveness. Discussions with a group of evidence-based practice (EBP) champions revealed significant variability in perceived impact of their journal clubs across a range of disciplines.

Research evidence was crucial to confirm the gap between research knowledge and current practice. A synthesis of two systematic reviews identified 11 key components of an effective journal club, of which only two were consistently practiced [1, 2]. Therefore, research was vital to establishing an evidence-based standard for evaluating current practice and informing future implementation plans.

2. IMPLEMENTATION: 'TREAT' STRUCTURED JOURNAL CLUB

As is often the case, the research evidence for effective journal clubs did not provide a clear implementation framework. To address this, the research evidence was shared with key stakeholders who were likely to be impacted by this change. From multiple conversations, individuals' barriers and enablers to change were analysed and the organisational readiness for change evaluated. Together, clinicians and researchers collaborated to integrate the 11 components into a practical, structured TREAT (Tailoring Research Evidence and Theory) journal club format [3].

A cluster randomised controlled trial was designed, with a nested focus group, to evaluate the effectiveness and feasibility of the TREAT format. After only 6 months, clinicians were more satisfied with using the TREAT format, however, they did not demonstrate significant improvement in their EBP skills, attitudes, knowledge or practice, when compared to the standard format [3]. This research study confirmed the feasibility of the structured format, but its effectiveness was still not clear.

3. SUSTAINABLE IMPLEMENTATION

A qualitative research project was designed to monitor and progressively improve the structured TREAT format. This allowed implementation strategies to be monitored across different contexts, given that the different interacting components and relationships of journals clubs are difficult

1

to predict or control. The study identified sustaining factors, reported by 19 clinicians from five different journal clubs who had maintained their journal clubs six months beyond the formal trial [4]. Participants distinguished and justified components of the TREAT format that were easy and more difficult to sustain. They also made suggestions of future implementation strategies [4].

These insights were crucial for the next study, a hybrid implementation-effectiveness study designed to further evaluate long term effectiveness, fidelity and impact on practice. Further, implementation strategies that had been identified in the previous study, were tailored to new and different organisational contexts, to determine if their perceived benefits were realised in different settings [5]. The study found structured journal clubs were shown to be effective in improving clinicians' EBP skills and confidence and in informing clinical practice changes. Further, specific implementation strategies were able to address local enablers and barriers across a range of different contexts.

While these research projects confirmed the fidelity of the structured TREAT format and identified important implementation strategies for the ongoing sustainability of this practice change, there were multiple requests from other health services to spread the format.

4. SPREAD OF THE TREAT JOURNAL CLUB

In order to spread beyond the same, albeit changing, health service, there was a need to evaluate the fidelity and effectiveness of this format in new contexts. Indeed, requests were being made across and outside the health service to implement the format. For example, during the COVID-19 pandemic, the TREAT format was adapted for hospital-wide use to address emerging trial data, and directly influence clinical decision-making. Regular journal

clubs emerged as a key mechanism for enabling clinical teams to change practice as soon as evidence had been appraised [6].

Further, a collaborative research grant has enabled the development of a web-based portal available at www.treatjournalclubs.com, which has facilitated global dissemination and enabled the development of a community of practice. This community is engaging in a global implementation study, which is evaluating the transferability of implementation strategies identified.

LEARNING

This practice brief illustrates the critical role academic research plays in advancing clinical practice through structured journal clubs. Over nine years, research provided key insights at every stage of the translation pathway.

Beginning with identifying a knowledge-practice gap, research highlighted the discrepancy between current and best practice and provided a benchmark for evaluating and improving clinical practice. In planning implementation, the research evidence provided the basis for the collaborative co-design of an implementation plan, by clinicians and researchers.

Sustaining practice change requires more than initial implementation. In complex systems, continuous adaptation is required, and an iterative process of research can refine and adapt interventions and identify actionable implementation strategies. Spreading the TREAT format required further research to evaluate its fidelity and adaptability in diverse environments. (see Figure 1)

FIGURE 1: TRANSLATION PATHWAY FOR CLINICAL IMPACT

Translation Pathway for Clinical Impact



This practice brief highlights the iterative nature of practice transformation, where clinicians and researchers used and designed research to create an ongoing cycle of implementation, monitoring and improvement.

IMPACT FOR PRACTICE

This initiative emphasises the critical role of academic research in clinical practice, in creating and sustaining pathways for clinical impact. The TREAT journal club initiative demonstrated that research collaborations between academics and clinicians can be a powerful driver of clinical practice improvement, fostering a culture of evidence-based decision-making and enhanced healthcare delivery. The iterative and collaborative approach demonstrated in this pathway serves as a model for integrating academic research with clinical practice. It highlights the dynamic interplay between generating evidence, adapting interventions, and embedding changes into complex healthcare systems.

References

- 1. Deenadayalan Y, Grimmer-Somers K, Prior M, Kumar S. How to run an effective journal club: a systematic review. J Eval Clin Pract. 2008;14(5):898–911.
- 2. Harris J, Kearley K, Heneghan C, Meats E, Roberts N, Perera R, et al. Are journal clubs effective in supporting evidence-based decision making? A systematic review. BEME Guide No. 16. Med Teach. 2011 Jan 1;33(1):9–23.
- 3. Wenke RJ, Thomas R, Hughes I, Mickan S. The effectiveness and feasibility of TREAT (Tailoring Research Evidence and Theory) journal clubs in allied health: a randomised controlled trial. BMC Med Educ. 2018 May 9;18(1):104.
- Wenke R, O'Shea K, Hilder J, Thomas R, Mickan S. Factors that influence the sustainability of structured allied health journal clubs: a qualitative study. BMC Med Educ. 2019 Jan 3;19(1):6.
- 5. Wenke R, Wiseman J, Brandenburg C, Stehlik P, Hughes I, Richards K, et al. Long term tailored implementation of structured "TREAT" journal clubs in allied health: a hybrid effectiveness-implementation study. BMC Med Educ. 2022 Apr 22;22(1):307.
- Wenke R, Stehlik P, Gerrard J, Mickan S, Henry D. Using a journal club to navigate a maze of COVID-19 papers in a front-line hospital service. BMJ Evid-Based Med. 2023 Jun 1;28(3):210–1.