RTKW 11 - #EIE2023

Ride the Knowledge Wave 11

#112- Learnings from co-designing a complex intervention for children who have a parent with a mental illness to facilitate implementation in practice

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Research aim

Implementing evidence-informed family-oriented interventions in parental mental health care is challenging. We used a co-design approach involving local stakeholders to facilitate implementation of a screening and support program. Here, we describe the co-design process and the implementation outcomes of the program including the acceptability, engagement, and feasibility of the delivery.

Setting

The implementation project is inter-sectoral and includes the health and social sectors. Within these sectors, several settings are involved: the inpatient and outpatient mental health hospital setting, the medical and therapeutic community setting and the outpatient and outreach social sector. The project is located in the region Tyrol in Austria.

Method(s)

Description of the co-design process is based on the following data sources: documents produced as part of the co-design process, transcribed audio recordings from the co-design workshops, a participant survey and focus group, and structured reflections on practices applied throughout the process to address facilitators and barriers of co-design processes. For describing implementation outcomes, we use qualitative and quantitative data collected from practitioners and participating families, and data from log-books documenting the delivery of the program. We analysed the qualitative data using qualitative content analysis and the quantitative data using descriptive statistics.

Key finding(s)

During a series of six co-design workshops with local stakeholders we developed a concept for identifying children through parental treatment in adult mental health and primary care and supporting them by activating a support network. Sixteen providers committed to implement the screening. Thirty families progressed through the intervention, however a large decline and dropout rate was found. While participants described a high satisfaction with the intervention, delivery required more contact and time than originally planned, and parts had to be adapted to be delivered locally. The program did not continue to be funded beyond the pilot-phase.

Discussion

- What is your experience of using co-design approaches to facilitate implementation of an evidence-informed program into a local context?
- How can implementation science contribute to overcome barriers for sustainable funding of an evidence-informed program at the policy level (funding priorities, fragmented care system) and to promote ongoing research to evaluate a program after successful piloting?

Challenges

Dealing with Covid-19 containment measures that started when we began to implement the program; sustaining relationship with referrers and keeping them motivated; motivating families to participate in program and overcoming their hesitancy towards program components; creating an understanding of importance of research activities alongside program implementation in practitioners.

Key highlights

This study is the first to evaluate the implementation of a preventative family mental health intervention in Tyrol, co-designed in a research-community partnership. Drawing on similar results (Metz et al., 2022), the role of co-design in seeking 'successful' uptake of programs needs to be given more consideration in implementation research.

#148- Identification of barriers and application of a theoretical framework to co-develop strategies supporting sustainment of a physical activity intervention in Australian primary schools

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Research aim

This study aimed to describe: 1) factors influencing sustainment of a school physical activity intervention; and 2) the application of a theoretical framework to guide the co-development of strategies to sustain its delivery.

Setting

Primary schools across four Local Health Districts in New South Wales, Australia.

Method(s)

In consultation with implementation science content experts, and health education policy makers and practitioners, we co-developed a multi-strategy intervention to sustain schools' delivery of weekly physical activity through:

- a. Identifying sustainment determinants via: i) systematic reviews; ii) surveys with 240 classroom teachers; and iii) interviews with school staff.
- b. Identifying potential sustainment strategies: barriers were organised according to the Integrated Sustainability Framework. Potential strategies were identified through surveys with 200 teachers. Theoretical mapping was used to link strategies to key sustainability barriers.
- c. Strategy review by stakeholders to ensure their feasibility and acceptability and description according to a sustainment-explicit glossary.

Key finding(s)

- Aim 1: Key barriers to program sustainment were lack of organisational leadership and support, organisational readiness and resources, staff turnover, perceived policy alignment and workplace socio-cultural factors.
- Aim 2: Strategies perceived most useful by teachers to support sustainment were the provision of physical activity equipment packs (85%), a handover package to upskill new

staff (78%), and delivery of professional learning modules (78%). Following theoretical mapping, a multi-component intervention was developed, including: (i) centralized support; (ii) reminders; (iii) principal mandates; (iv) sharing local knowledge; (v) building coalitions to share resources; (vi) distributing educational materials; and (vii) involving end-users.

Discussion

- What are some similarities and differences in the types of strategies used, and their effectiveness in sustaining evidence-based interventions in clinical and community settings?
- How can we continue to monitor effectiveness of evidence-based interventions through: a) sustained implementation; and b) health impact long term?

Challenges

Given the disruptions to schools due to COVID-19, this caused delays to the commencement of our trial and lead to multiple iterations of intervention development. However, this also allowed us to conduct a more comprehensive strategy co-development process, ensuring strategies were theoretically informed, feasible and acceptable within the school setting.

Key highlights

- We undertook a comprehensive theoretical and collaborative process for strategy development.
- This work highlights to society that if we can sustain effective health programs, we minimise wastage of valuable resources, ensure the effects of programs are long-lasting, and build community trust and confidence in future program delivery.

#193- A rapid qualitative process evaluation on implementing cancer staging into a population-based cancer registry involving perceptions of diverse key breast and colorectal cancer stakeholders of the Cancer Staging Project in Western Australia.

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Research aim

A rapid qualitative process evaluation ran parallel to the Cancer Staging Project to gain insight from breast and colorectal cancer stakeholders into the barriers and enablers of implementing cancer staging utilising natural language processing and machine learning algorithms in the Western Australian Cancer Registry for routine and timely data collection.

Setting

Australia lacks standardised cancer staging collection. The Western Australian Cancer Registry is a population-based cancer registry that incidentally collects cancer staging data. The project used implementation strategies, including creating an academic partnership and project facilitation with Curtin University, using expert advisory boards and working groups and involving consumers as stakeholders.

Method(s)

Perceptions of breast and colorectal cancer stakeholders involved in the Cancer Staging Project were collected, including registry staff, clinicians, consumer representatives, data scientists, biostatisticians, healthcare staff, and health researchers. Online prospective and retrospective qualitative proformas (open-ended surveys) were employed towards the start and end of the first year of the Cancer Staging Project. The Consolidated Framework for Implementation Research (CFIR) guided data collection, analysis and interpretation embedded in a Participatory Action Research approach. Data analysis also incorporated Framework Analysis and an adapted version of grading qualitative data to explore the levels of positivity, negativity, and implementation concern managed in NVivo.

Key finding(s)

Twenty-nine pre-proformas and 18 post-proformas were completed online via REDCap. 'Complexity' (the perceived difficulty of the intervention) was the strongest barrier and 'tension for change' (the situation needing change) was the strongest enabler. Implementing cancer staging into the Western Australian Cancer Registry was considered crucial. Enablers included timely knowledge and understanding of various outcomes (e.g., cancer screening, healthcare interventions, health inequalities) and benchmarking nationally/internationally. Barriers included compatibility issues with current systems/workflows, departmental/higher managerial support, and future sustainment. Cancer staging is complex, takes considerable time, requires expert consultation, is tumour-specific and requires compatibility checks with existing workflows/processes.

Discussion

How do we determine where stakeholders' voices are in this complexity?
Employing a qualitative process evaluation, this study captured diverse stakeholders' perspectives of implementation success on a data-driven intervention utilising natural language processing and machine learning algorithms within the Western Australian Cancer Registry.
Information is power, but how do we put stakeholders in the driver's seat of cancer staging?
The participatory design and engagement helped to guide and disseminate co-creation (including co-design and co-production) of a complex intervention and population health initiative. Stakeholders were involved throughout the project and the research process through information sharing, reciprocity and mutual learning.

Challenges

Not all stakeholders participated, and there was a drop in participation with the post-proforma. Therefore, some barriers/enablers may not be identified. All stakeholders had the opportunity to review/discuss preliminary findings at meetings and via project reports.
Due to project timelines and to minimise burden, qualitative proformas were used.

Key highlights

Rapid qualitative proformas at different time points to evaluate and learn about adaption as change occurs can help predict implementation success and understand complex interventions that benefit population health initiatives.
The participatory action research approach to cancer staging was essential to tailoring the implementation and research, including considerations for progress.

#244- The Implementation-STakeholder Engagement Model (I-STEM) for improving health and social care services

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Research aim

The literature currently reports suboptimal stakeholder engagement in implementation science. Here we draw on the international large-scale ImpleMentAll (IMA) study to illustrate the development of the Implementation-STakeholder Engagement Model (I-STEM) for implementation of evidence-based care. I-STEM defines key considerations and activities for undertaking stakeholder engagement activities across an implementation process.

Setting

IMA used a stepped wedged randomised controlled trial design to evaluate the effectiveness of tailored implementation in integrating and embedding evidence-based e-mental health services in routine care in Europe and Australia. Tailored implementation was operationalised in the ItFits-toolkit, a self-guided platform including resources supporting comprehensive stakeholder engagement (e.g., surveying tool).

Method(s)

In IMA, a qualitative process evaluation was undertaken alongside the effectiveness trial that compared tailored implementation with implementation as usual activities. Over a trial period of 30 months, the ItFits-toolkit was introduced sequentially in twelve implementation sites across nine countries in Europe and Australia. We conducted 55 in-depth, semi-structured interviews and observed 19 implementation related activities (e.g., team meetings and technical support calls). The analytical process was informed by principles of first and third generation Grounded Theory, including constant comparative method. The I-STEM was derived from the analytical work undertaken in the qualitative process evaluation.

Key finding(s)

Our findings are presented as the substantive, generalisable I-STEM, consisting of five interrelated concepts: engagement objectives, stakeholder mapping, engagement approaches, engagement qualities, and engagement outcomes. Engagement objectives are goals that implementers plan to achieve by working with stakeholder in the implementation process. Stakeholder mapping involves identifying a range of organisations, groups, or people who may be instrumental in achieving the engagement objectives. Engagement approaches define the type of work that is undertaken with stakeholders to achieve the engagement objectives. Engagement qualities define the logistics of the engagement approach. Lastly, every engagement activity may result in a range of engagement outcomes.

Discussion

- The I-STEM represents potential avenues for substantial stakeholder engagement activity across key phases of an implementation process, providing a guiding structure

for how this work could be approached. What is the audience's experience with stakeholder engagement in implementation research and how does that relate or differ from I-STEM?

- How can I-STEM be applied alongside existing theories, frameworks and models of implementation to support the planning and evaluation of stakeholder engagement activities and thereby support the implementation of evidence-based care?

Challenges

The IMA process evaluation included participants from different countries who had different languages and varying levels of English abilities. To overcome the challenges associated with data interpretation we worked closely as a multinational research team to understand the different contexts and check our interpretations of participants' comments in the interviews.

Key highlights

The IMA study provided a unique opportunity to take an in-depth look at how stakeholder engagement work is done over time, and how implementers are appraising the different elements involved. The I-STEM can be applied to any activities aimed at improving services or processes that involve different groups and interests.