



Abstracts

Implementation
Science Health
Conference Australia

Session Topic: Building implementation capacity for program scale up

O1

Sustaining health promotion interventions in real-world population settings

Melanie Crane¹

¹The University of Sydney, NSW, Australia

Background

Our understanding of what determines the sustainability of health interventions is derived primarily from studies of interventions in single settings and evaluated within 1-2 years of dissemination. This poorly depicts population health interventions and a long-term goal of sustainment. To improve implementation and sustainability we examined aspects of real-world population health interventions.

Methods

We used a systematic approach to identify interventions that have been disseminated to prevent chronic diseases through physical activity, nutrition or obesity prevention. We reviewed 90 population health interventions, using publicly available information to gather data on theoretical determinants of sustainment (intervention characteristics, provider level and delivery level factors, and the macro external environment).

Results

The interventions were from English speaking countries, delivered in various settings (schools, workplaces, community, etc) and had been sustained for 4-37 years (average 15 years). Those sustained for >15 years were more likely to be behaviour skills programs ($p=0.006$); and characterised as interactive innovations (i.e. face-to-face or digital) ($p=0.07$), had undergone modification ($p=0.069$). While interventions were mainly government funded ($n=45$; 54.9%), longer sustained programs were more likely commercially funded ($p=0.053$); and less likely delivered through partnerships ($p=0.071$) or community involvement ($p=0.011$).

O2

Understanding the role of blended facilitation to drive quality improvement in delirium practices

Lucylynn Lizarondo¹, Alexa McArthur¹

¹Joanna Briggs Institute, University of Adelaide, SA, Australia

Background

Facilitation has been described as both an individual role and a multifaceted process that enables individuals or teams to incorporate evidence into clinical practice and make changes to healthcare processes and outcomes. The aim of the study was to examine the internal and external facilitation activities that occurred during an evidence implementation initiative aimed at improving delirium practices in a tertiary hospital in New South Wales. We identified the specific facilitation activities performed from pre-implementation to implementation, and evaluation of processes and outcomes.

Methods

Using the Joanna Briggs Institute approach to evidence implementation, 11 wards/units in the hospital conducted an evidence implementation project to improve delirium screening, assessment, prevention, and management. We followed the sites as they planned, developed, and implemented their action plan to improve delirium practices in the hospital. We documented the meetings of the facilitators and held round table discussions following the pre-post period of the implementation project.

Results

Facilitation occurred internally via the delirium clinical champions and externally through implementation researchers who reviewed the evidence on delirium. Internal facilitation activities included education to staff, assessment of local practice through audits and barrier analysis, evaluation of practice change and peer support. External facilitation included provision of technical support and education on implementation science.

Conclusions

Internal and external facilitation activities were integral to the quality improvement of delirium practices. Blended facilitation may be an effective strategy to advance organisational capacity for evidence implementation and continuous quality improvement.

O3

Scaling and sustaining a successful delirium prevention program (Eat Walk Engage): strategies and challenges experienced in a 3-year state-wide implementation program

Prue McRae¹, Angela Byrnes¹, Karen Lee-Steere¹, Margaret Cahill¹, Adrienne Young^{1,2}, Alison Mudge¹

¹Royal Brisbane and Women's Hospital, QLD, Australia

²Centre for Research in Geriatric Medicine, University of Queensland, QLD, Australia

Background

Sustainment of effective health program is critical for long-term return on investment. Eat Walk Engage is an evidence-based delirium prevention program scaled up across Queensland public hospitals since 2019. The program facilitates continuous improvement in care of older people and sustainment is viewed as a continuing process.

Methods

Reflecting on program implementation and maintenance (sustainment) over 2019-2022 using the RE-AIM framework, we will describe the implementation and adoption of this ward-based program and how evidence-based factors for sustainment have been operationalised.

Results

Scale-up to 40 wards has been supported by a state-wide program management team with content and implementation expertise, in a phased approach. Costs of site implementation and state-wide team are supported by the Queensland Department of Health within a larger priority work program. Expert facilitators within the state-wide team train and mentor embedded facilitators and multi-professional assistants at each site. Key process measures are collected annually, with data management, site reporting and benchmarking supported by the state-wide team. Site visits, a virtual community of practice and regular teleconferences nurture relationships with opinion leaders and champions of multiple disciplines and levels. Reporting to a state-wide clinical network and an engaged Consumer Response Team supports organisational and community visibility. Challenges include high facilitator, champion and clinical lead turnover and adapting to dynamic contexts (such as the COVID-19 pandemic).

Conclusions

Sustaining a complex program at scale requires dedicated time and skills to maintain program visibility, develop rich relational networks across traditional governance structures, support staff and adapt to dynamic contexts.

O4

Building capacity to foster research translation: the Sydney Health Partners Implementation Science Program 2017-2021

Nicole Rankin¹, Tess Aungles^{2,3}, Don Nutbeam^{2,3}, Bandana Saini², Merran Findlay⁴, Adrian Bauman², Andrew Baillie²

¹ The University of Melbourne, VIC, Australia

² The University of Sydney, NSW, Australia

Background

Capacity building in Implementation Science requires strategic programs to foster growth of the discipline. A primary goal of capacity building is to prepare the research and clinical workforce in “how to” effectively implement robust interventions and scale up initiatives in practice. This presentation will describe Sydney Health Partners multi-faceted and strategic approach to building capacity.

Methods

Sydney Health Partners is an Australian Health Research Translation Centre, which invested in implementation science capacity building since its inception. We used the RE-AIM framework to report on program strategy, evaluation activities and reflect on lessons learned. We report on quantitative and qualitative evaluation data collected over a five-year period.

Results

Reach: our team invited international experts to lead annual Symposia and Conferences (>1000 participants) and established a state-wide Community of Practice (>640 members). Effectiveness: we delivered annual Masterclasses (>100 participants) and formed strategic alliances with government agencies and other Research Translation Centres. Adoption: we funded a Research Translation Fellowship Program to embed clinician-researchers across health services. Implementation: we established a pilot and seed grants program (>15 projects funded) to foster collaborative team research. Maintenance: we established an Academic Implementation Science Network to build capacity across the University of Sydney and Local Health Districts.

Conclusions

This strategic, multi-faceted program has built on international capacity building programs to address a significant demand for local offerings in Implementation Science. The program foundations are in place to engage clinician-researchers in implementation research and to measure its impact in the future.

O6

Strategies for sustainability: Implementation insights for long-term sustainment of programs that routinely collect Patient Reported Outcomes in cancer care clinical settings

Carolyn Mazariego¹, Monica Krzyzanowska², Mike Lovas³, Geoff Delaney⁴, Michael Jefford⁵, Raymond Chan⁶, Antoinette Anazodo⁷, Bena Brown⁸, Lesley Millar⁹, Natasha Roberts¹⁰, Bogda Koczwara¹¹

¹School of Population Health, Faculty of Medicine and Health, University of New South Wales, NSW, Australia

²Clinical Research Unit, Princess Margaret Cancer Centre, Toronto, ON, CAN

³Cancer Digital Intelligence Unit, Princess Margaret Cancer Centre, Toronto, ON, CAN

⁴Ingham Institute for Applied Medical Research, University of NSW, NSW, Australia

⁵Department of Health Services Research, Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

⁶Caring Futures Institute, College of Nursing and Health Sciences, Flinders University, Adelaide, SA, Australia

⁷University of New South Wales Kids Cancer Centre, Sydney Children's Hospital, Randwick, NSW, Australia

⁸University of Queensland, Southern Queensland Centre of Excellence in Aboriginal and Torres Strait Islander Primary Healthcare, Metro South Health, QLD Australia

⁹Medical School, University of Western Australia, Perth, WA, Australia

¹⁰Metro North Health Service, University of Queensland Centre for Clinical Research, Herston, QLD, Australia

¹¹Department of Clinical Oncology, Flinders Medical Centre, Flinders Health and Medical Research Institute, Flinders University, Adelaide, SA, Australia

Background

In order to promote longevity of health innovations, sustainability factors need to be understood. Despite the known evidence-based benefits of routinely collecting Patient Reported Outcomes (PROs) in cancer care clinical services, implementation has been uncoordinated and inconsistent in Australia. In Canada, PRO collections have been routine practice for 10+ years. As such, this study aimed to detail influencing factors that contribute to the sustainability of this health intervention (routine collection of PROs) in health services.

Methods

Key stakeholders in PRO collection programs across the 14 cancer centres in the province of Ontario, Canada were invited to participate in a qualitative interview. Using an implementation science-based approach through process mapping and semi-structured sustainability-focused interviews we explored factors influencing program longevity. The interview guide was designed using the domains of the Program Sustainability Assessment Tool. Influencing barriers and enablers were identified across recommendations for sustainability and development of an evolving sustainability framework.

Results

Twenty-four key stakeholders were interviewed. Recommendations to implement and sustain PRO collection programs were identified across four major themes which set out the evolving sustainability framework; planning for success, acute necessities, ironing out issues, long-term

essentials. Key recommendations included provision of a PRO implementation coordinator, selection of action-based outcome and process measures, and reiteration and feedback.

Conclusions

This study provides sustainability recommendations and insights from a mature PRO collection program. These insights, along with patient perspectives, should be considered in Australian efforts to implement similar PRO collection programs within cancer care clinical services.

07

Relationships, facilitation and framing: Real-world scale up

Angela Melder¹, Mandy O'Connor¹

¹Monash University, VIC, Australia

Background

The divide in implementation science between implementation research and implementation practice is a challenge. Constructs and processes where this divide is most prominent is in understanding trust and scale-up. Trust has been described as a critical factor for achieving implementation results and further research is required to explore trust in association with implementation strategies and outcomes, and, how practitioners foster and deepen trust among implementation stakeholders. A lack of scientific knowledge about scaling has clearly been articulated. While several scaling models exist, there is a persistent inadequacy in scaling improvements across health and social care system. We aimed to examine the prevailing constructs that emerge when undertaking scale-up in the real-world setting.

Methods

We applied an integrated knowledge translation model, whereby we partnered with implementation stakeholders to implement a complex, state-wide, Early Parenting Outcomes Framework intervention into practice. Methods included theory-driven implementation approaches with action-research methods.

Results

Our results provided insights into key constructs that lead to contexts that are conducive to productive scale-up processes. This includes: the need for developing relationships through prior consultation and development of the Outcomes Framework; facilitation performed by skilled Implementation Practitioners who ensure the development of trusting relationships, and leveraging a context framed within a staged approach to implementing across sites working with a broad, long-term vision of system change.

Conclusions

Foster relationships, sponsor skilled facilitation and frame system scale-up.

O8

Health facility readiness for implementation of an intravenous iron intervention for pregnant women with anaemia in the Bangladesh government health system

Ebony Verbunt¹, Bidhan Sarker², Quaiyum Rahman², Shamim Ahmed², Imrul Hasan², Jena Hamadani²

¹School of Population and Global Health, University of Melbourne, VIC, Australia

²International Centre for Diarrhoeal Disease Research, Maternal and Child Health Division, BD

Background

Bangladesh provides oral iron and folic acid supplementation for treatment of antenatal anaemia. However, due to low coverage and adherence to oral iron, it continues to remain a significant public health problem. An alternative treatment for antenatal anaemia is modern intravenous (IV) iron. IV iron is not available in the government health system. By conducting a health facility readiness assessment, we aim to ascertain the availability of resources required to screen for antenatal anaemia and administer IV iron, and to inform understanding of scalability of the intervention

Methods

An interview-administered questionnaire adapted from the WHO Service Availability and Readiness Assessment Standard tool was used to collect data from the 22 health facilities in Bandar Upazila. Data were verified by structured facility observation. Service readiness for anaemia screening was determined by mean readiness index (RI) scores across seven domains, as was service readiness for IV iron administration. Data analysis was conducted using Stata 16.

Results

Community Clinics had the lowest RI score for anaemia screening (15%), followed by UH&FWC and Union Health Sub Centre (UHSC) (50%), and Upazila Health Complex (UHC), Mother and Child Welfare Center (MCWC), and District Hospital (DH) (95%). For IV iron administration UHC, MCWC, and DH had the highest RI score (90%) compared to UH&FWC/UHC (40%).

Conclusions

Health facilities are not “ready” to screen for anaemia and administer IV iron. Healthcare providers will require guidelines and training. Haemoglobin screening tools are required, particularly for CCs, and equipment and medicines for IV iron administration at UH&FWCs/UHSCs.



Abstracts

Implementation
Science Health
Conference Australia

Session Topic: Ensuring public health interventions meet different community needs

O9

“Re-implementing” a Parent-Child Interaction Therapy (PCIT) in Aotearoa / New Zealand

Melanie Woodfield^{1,2}, Sally Merry¹, Sarah Hetrick¹

¹University of Auckland, Auckland, NZ

²Te Whatu Ora (Health New Zealand), NZ

Background

Parent-Child Interaction Therapy (PCIT) is an effective treatment for childhood conduct problems. Sustainment of evidence-based interventions in routine care environments is notoriously challenging, and relatively few clinicians deliver PCIT, despite having received intensive training. The aim of this research programme was to systematically develop and pilot a multi-component “re-implementation” intervention, targeting PCIT-trained clinicians who are not, or are rarely, using PCIT.

Methods

A series of sequential mixed methods studies included (1) a systematic review of existing PCIT implementation interventions, (2) a cross-sectional survey of PCIT-trained clinicians to explore implementation determinants, (3) focus groups with clinicians, managers and funders to prioritise determinants and shape an intervention, and (4) a randomised, controlled feasibility trial of this intervention.

Results

(1) The systematic review suggested that little research has explored the sustainment of PCIT. (2) Survey outcomes suggested that PCIT-trained clinicians view PCIT as both acceptable and effective, but barriers included lacking suitable equipment and PCIT-trained colleagues, and concerns about the use of time-out with children. (3) Analysis of focus group data utilising the Theoretical Domains Framework allowed for specification of hypothesised mechanisms of action of the proposed intervention components, which will be described, along with (4) preliminary results from the PCIT re-implementation pilot trial.

Conclusions

Where implementation has stalled or languished, “re-implementation” may be possible, and makes good sense fiscally and practically. Successful re-implementation requires a systematic exploration of context-specific determinants of practice, followed by theory-driven understanding of mechanisms of action to inform, prioritise and refine selection of intervention components.

O10

Assessing the scalability of evidence-based healthy eating and physical activity interventions in early childhood education and care services across Australia

Alice Grady^{1,2,3,4}, Jacklyn Jackson¹, Melanie Lum^{1,2,3}, Sze Lin Yoong^{2,5}

¹School of Medicine and Public Health, University of Newcastle, NSW, Australia

²Population Health, Hunter New England Local Health District, NSW, Australia

³Public Health Program, Hunter Medical Research Institute, NSW, Australia

⁴National Centre of Implementation Science, University of Newcastle, NSW, Australia

⁵Global Centre for Preventive Health and Nutrition, Institute for Health Transformation, Deakin University, VIC, Australia

Background

Despite public health and research investment, few early childhood education and care (ECEC)-based obesity prevention programs are implemented at scale. To maximise public health impact, interventions need not only be effective, but consider a range of scalability factors, such as reach, cost, end-user infrastructure, and local context. This study describes perceptions regarding the scalability of evidence-based healthy eating and physical activity interventions among Australian ECECs; and associations between intervention scalability and service characteristics.

Methods

453 ECECs across Australia completed a cross-sectional survey assessing the scalability of six evidence-based healthy eating (e.g. training educators to support child healthy eating), and six evidence-based physical activity (e.g. providing sufficient opportunities for child physical activity) interventions using items based on the Intervention Scalability Assessment Tool. Linear regression analyses were used to explore associations between intervention scalability and service characteristics.

Results

The mean scalability score for all interventions was 40.18 (out of 50). The highest scoring healthy eating and physical activity interventions were 'providing healthy eating education and activities for children', and 'providing sufficient opportunities for child physical activity', respectively. The lowest scoring were 'providing families with lunchbox guidelines' and 'engaging families in activities to increase child physical activity'. Services located in higher SES areas scored the scalability of 'having a physical activity policy' significantly higher than lower SES services; larger services, scored the scalability of 'training educators to support child healthy eating' significantly higher than smaller services; and services located in rural areas, scored the scalability of 'making healthy menu modifications' significantly lower than urban services.

Conclusions

Findings indicate number of healthy eating and physical activity interventions in ECEC are both evidence-based and scalable, and as such warrant wide spread implementation. Investigation into lower scoring interventions among smaller ECECs, and those located in rural and lower SES areas is warranted.

O11

Cracks in the Ice: A digital toolkit that improves attitudes and knowledge about crystal methamphetamine

Anna Grager¹, Steph Kershaw¹, Louise Birrell¹, Katrina Champion¹, Hannah Deen¹, Felicity Duong¹, Lexine Stapinski¹, Nicola Newton¹, Frances Kay-Lambkin², Maree Teesson¹, Cath Chapman¹

¹The Matilda Centre for Research in Mental Health and Substance, University of Sydney, NSW, Australia

²Hunter New England Research Institute, NSW, Australia

Background

Introduction: Cracks in the Ice (cracksintheice.org.au, CITI) is a digital initiative aiming to develop and disseminate evidence-based resources about crystal methamphetamine for people who use crystal methamphetamine, their families, health workers and communities. An online survey was conducted from February 2022 to April 2022 to evaluate whether CITI was meeting the needs of the community, as well as whether the redesign of the toolkit in 2021 improved site usability and engagement.

Methods

A national online cross-sectional survey was conducted among 736 Australian residents aged 18 years and over. To assess knowledge and attitudes regarding crystal methamphetamine, participants were asked to complete several validated scales. Those who had not used CITI prior to the study, were asked to interact with the site and complete a follow-up survey a month later, which included repeated baseline measures.

Results

Preliminary findings indicate that Cracks in the Ice is perceived as helpful, strong in its evidence base and non-stigmatising. 64% of participants who engaged with the site before and after the redesign reported that the new design improved the site. Preliminary results suggest that exposure to the site may be associated with an improvement in knowledge and a decrease in stigmatising attitudes. Interaction with CITI also lead to a higher likelihood of participants seeking help for either their methamphetamine use, or a friend or family members use.

Conclusions

The results of this study indicate that CITI is achieving its aim of disseminating evidence-based and useful resources to the community and may improve knowledge and reduce stigma.

O12

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

Adam Shoesmith^{1,3}, Alix Hall^{1,3}, Luke Wolfenden^{1,2,3}, Rachel C Shelton⁴, Cassandra Lane^{1,3}, Nicole McCarthy^{1,3}, Edward Riley-Gibson^{1,3}, Nicole Nathan^{1,2,3}

¹School of Medicine and Public Health, Faculty of Health and Medicine, University of Newcastle, NSW, Australia

²Hunter New England Population Health, Hunter New England Local Health District, NSW, Australia

³National Centre of Implementation Science, University of Newcastle, NSW, Australia.

⁴Department of Sociomedical Sciences, Mailman School of Public Health, Columbia University, NY, USA

Background

This study describes factors influencing sustainment of a school physical activity (PA) program and the application of theoretical frameworks to guide development of an intervention to sustain its delivery.

Methods

A multi-strategy intervention was co-developed with health and education policy makers and practitioners using the following steps:

1. Identification of sustainment determinants via: i) systematic reviews; ii) surveys with classroom teachers; and iii) interviews with school staff.
2. Identification of potential sustainment strategies: barriers were organised according to the Integrated Sustainability Framework. Potential sustainment strategies were identified through surveys with 200 teachers. Theoretical mapping was used to link possible strategies to key barriers.
3. Strategies were reviewed by key stakeholders to ensure their feasibility and acceptability. Final strategies were described according to a sustainment-explicit glossary.

Results

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. Strategies perceived most useful by teachers to support sustainment were the provision of PA 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.

Conclusions

This will be one of the first studies globally to test the effectiveness of a multi-component sustainability intervention to support sustainment of a school PA program.

O13

Scaling up an effective m-health lunchbox program targeting parents in NSW primary schools

Katie Robertson¹, Rachel Sutherland^{1,2,3}, Courtney Barnes^{2,3}, Lisa Janssen², Aimee Mitchell^{2,3}, Jannah Jones^{2,3}, Alison Brown^{2,3}, Daniel Groombridge¹, Nicole Nathan^{2,3}, Luke Wolfenden^{1,2,3}

¹Hunter New England Population Health, Hunter New England Local Health District, NSW, Australia

²School of Medicine and Public Health, Faculty of Health and Medicine, University of Newcastle, NSW, Australia

³National Centre of Implementation Science, University of Newcastle, NSW, Australia

Background

Over 85% of Australian primary school students bring a packed lunch to school containing more than 3 serves of discretionary food items, impacting on health and educational outcomes. We report on the development, pilot, optimisation and scale-up of the SWAP IT lunchbox program.

Methods

A seven-step program of work has been undertaken including: 1) formative research to identify parental barriers and behaviour change techniques (BCT) that underpinned the m-health intervention; 2) pilot RCT to evaluate acceptability, feasibility and potential efficacy; 3) intervention optimisation study prior to the fully powered trial; 4) hybrid effectiveness-implementation trial; 5) dose trial to identify core components and maximise cost-effectiveness ; 6) evaluation of dissemination methods; and 7) scale-up.

Results

The SWAP IT program was developed to address five common parental barriers to packing healthy lunchboxes: time, cost, convenience, child preference and knowledge. BCTs were incorporated into the intervention delivered via an existing school communication app, which was acceptable to 95% of parents during the pilot. Optimised lunchbox messages were then incorporated into the hybrid implementation-effectiveness trial in 36 schools across NSW which demonstrated a decrease in mean energy (kJ) content of discretionary foods packed in lunchboxes (-117.26kJ; $P < 0.01$; $n=3022$). Results from the dose trial demonstrated no significant change in the effectiveness of SWAP IT when program costs decreased from \$6.02 to \$0.07 per student, making SWAP IT appropriate for large-scale dissemination.

Conclusions

This scalable m-health intervention has the potential to improve the health of populations by enhancing the nutritional quality of school lunchboxes.

O14

A pilot randomised controlled trial to increase the sustainment of an indoor-outdoor free play program in early childhood education and care services following the introduction of outdoor free play guidelines

Noor Imad¹, Nicole Pearson², Alix Hall³, Adam Shoesmith³, Nicole Nathan³, Luke Giles², Alice Grady³, Adam Shoesmith³, Serene Yoong⁴

¹School of Health Sciences, Department of Nursing and Allied Health, Swinburne University of Technology, Hawthorn, VIC, Australia

²Hunter New England Population Health, Hunter New England Local Health District, NSW, Australia

³School of Medicine and Public Health, Faculty of Health and Medicine, University of Newcastle, NSW, Australia

⁴Global Centre for Preventive Health and Nutrition, Institute for Health Transformation, Deakin University, VIC, Australia

Background

Early Childhood Education and Care (ECEC) settings are an important environment to support child physical activity. As such, ECEC guidelines recommend that childcare services provide indoor-outdoor free play programs (periods of free play located in both the indoor and outdoor environments) as a way to increase outdoor free play opportunities. In 2021, such recommendations were supported by COVID-19 regulations, resulting in an increased uptake of this practice by ECEC services. As the context changes, research suggests that ECEC services could cease the implementation of such practices. Therefore, this pilot randomised controlled trial aims to examine the feasibility, acceptability, and impact of a sustainment strategy to ensure ongoing implementation (sustainment) of ECEC-delivered indoor-outdoor free play programs.

Methods

Twenty ECEC services located in New South Wales, Australia that have implemented indoor-outdoor free play programs since the release of COVID-19-related health advice will be recruited to participate. Services will be randomly allocated to receive either the sustainment strategy (intervention group) or usual care (control group). This program consists of eight strategies, developed to address key barriers and facilitators to the sustainment of health promotion programs in ECEC settings informed by the Integrated Sustainability Framework. The outcomes are feasibility, acceptability, and impact of the sustainment strategy, which will be measured at 6 months post-baseline.

Conclusions

This study will provide important data to support the conduct of a fully powered trial within Australian ECEC settings and inform the development of future strategies to sustain population health programs in the setting.

O15

Cross-sectional study describing factors of sustainment of physical activity and nutrition interventions in childcare services.

Noor Imad¹, Alix Hall², Nicole Nathan², Adam Shoosmith², Nicole Pearson³, Melanie Lum³, Serene Yoong⁴

¹School of Health Sciences, Department of Nursing and Allied Health, Swinburne University of Technology, Hawthorn, VIC, Australia

²School of Medicine and Public Health, Faculty of Health and Medicine, University of Newcastle, NSW, Australia

³Hunter New England Population Health, Hunter New England Local Health District, NSW, Australia

⁴Global Centre for Preventive Health and Nutrition, Institute for Health Transformation, Deakin University, VIC, Australia

Background

Many evidence-based physical activity and nutrition interventions exist within the childcare setting, however, they are not implemented in an ongoing way and thus are poorly sustained. There is a need to identify potential factors that may impact the sustainment of these interventions. The aim of this study is to identify and describe the factors related to the sustainment of physical activity and nutrition intervention in childcare services.

Methods

A cross-sectional study was undertaken with a nationally representative sample of 400 childcare services. Factors related to the sustainment of physical activity and nutrition interventions were assessed using a 29-item measure reflecting four domains of the Integrated Sustainability Framework (Outer Contextual Factors, Inner Contextual Factors, Processes and Characteristics of the Intervention) for interventions that supervisors reported as currently implementing. Participants responded using a 5-point Likert scale, with responses ranging from 1 (strongly disagree) to 5 (strongly agree). Domain scores were calculated for each service by averaging item responses.

Results

Preliminary data from 407 Australian childcare services nationally found that the domains; Processes (mean = 3.8), which includes factors of partnership/engagement and training/support/supervision and Outer Contextual Factors (mean = 3.8), which includes factors of policy and legislation, and socio-political context had the lowest mean scores.

Conclusions

This study suggests that factors related to the Processes and Outer Contextual Factors domains may need to be considered when developing an intervention to increase the sustainability of implementing physical activity and nutrition interventions in childcare settings.

O16

Exploring the impact of a dissemination strategy on family day care educators' adoption of outdoor free play guidelines introduced in response to COVID-19: A randomised controlled trial

Melanie Lum¹, Serene Yoong², Kathryn Reilly^{1,3}, Jacklyn Jackson¹, Heidi Turon¹, Luke Wolfenden¹, Alice Grady⁴

¹School of Medicine and Public Health, Faculty of Health and Medicine, University of Newcastle, NSW, Australia

²Global Centre for Preventive Health and Nutrition, Institute for Health Transformation, Deakin University, VIC, Australia

³Hunter Medical Research Institute, NSW, Australia

⁴Hunter New England Population Health, Hunter New England Local Health District, NSW, Australia.

Background

Guidelines for early childhood education and care settings recommend allowing children to access outdoor areas during free play sessions to reduce the risk of transmission of COVID-19, corresponding with existing recommendations to increase children's physical activity. Effective dissemination strategies are required to ensure guideline implementation at scale. This randomised controlled trial explored the impact of dissemination of guidelines via video resource (intervention) compared to text-based (usual care control) on family day care educators' intentions to adopt outdoor free play guidelines.

Methods

Family day care educators (n=255) in Hunter New England region of New South Wales were randomised to receive a video (intervention) or text-based (usual care) resource via email describing guidelines recommendations to allow children to access the outdoor areas during all free play sessions. Educators were invited to participate in a survey at five weeks follow-up assessing intentions to adopt guidelines, implementation of guidelines, acceptability of resource and intervention reach. Intention-to-treat linear regression analyses were performed to assess the difference in outcomes between groups.

Results

There were no statistically significant differences in educators' intentions to adopt guidelines between groups ($\beta=0.01$ [95% CI -0.50 to 0.52], $p=0.97$). There were no statistically significant differences between groups for secondary outcomes. Sixty-nine percent of intervention participants reported viewing the video.

Conclusions

Conclusions: Dissemination via video resource did not have an impact on educators' intentions to adopt guidelines compared to control. Further research is needed to identify effective dissemination strategies in family day care.



Abstracts

Implementation
Science Health
Conference Australia

Session Topic: Successfully implementing novel practices in health care

O17

Implementing genomics into practice within nongenetic paediatric settings using implementation science and transdisciplinary co-production

Hossai Gul¹, Stephanie Best², Janet Long³, Ellenore Martin⁴, Lucinda Murray⁵, Vanessa Fitzgerald⁶, Frances Rapport³, Mike Field⁵, Jeffrey Braithwaite³

¹SPHERE, TD School, University of Technology, Sydney, NSW, Australia

²Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

³Australian Institute of Health Innovation, Macquarie University, Sydney, NSW, Australia

⁴Australian Genomics, VIC, Australia

⁵Hunter New England Health, NSW, Australia

⁶NSW Ministry of Health, NSW, Australia

Background

Genomic mainstreaming is the implementation of genomic testing as routine practice within nongenetic settings. The aim of this body of work was to conduct a holistic implementation needs assessment that would guide the development of evidence-informed implementation strategies in support of real-world genomic mainstreaming efforts within nongenetic paediatric settings via an integrated model of care involving clinical genetics services.

Methods

A sequence of three studies were conducted via a mixed method methodology and structured by the process model Implementation Mapping (IM) to guide the development of implementation strategies. The research approach was informed by a complex adaptive systems lens and guided by transdisciplinary co-production.

Results

Study one began with an implementation needs assessment within genetics services via qualitative semi-structured interviews (n=14 participants, clinical genetics professionals), with resultant data analysed using (1) the Interactive Systems Framework (ISF) for mapping the implementation system, (2) pathway mapping techniques to visualise changes required in processes and practices, and (3) the Consolidated Framework for Implementation Research (CFIR) to assess the barriers and facilitators to implementation within genetic services. In study two an implementation needs assessment was conducted within paediatric services via a cross-sectional survey (n=114 respondents, paediatricians) analysed using descriptive statistics and semi-structured interviews (n=22) analysed using the TDF framework.

Conclusions

In study three, using a combination of five implementation science tools, the findings from studies one and two were integrated to develop forty evidence-informed, discrete implementation strategies with specifications ready to be used by groups across health systems involved in real-world implementation efforts.

O18

Developing an implementation strategy for routine collection of patient-reported outcome measures (PROMS) in multidisciplinary teams

Laura Jolliffe¹, Nadine Andrew¹, Velandai Srikanth¹, Richard Beare¹, Kate Noeske¹, David Snowdon¹

¹Peninsula Health, VIC, Australia

Background

Little is known about implementing patient reported outcome measures (PROMs) in multidisciplinary settings. To date, developing implementation approaches for PROMs have largely focused on single-disciplines with an assumption that clinicians can forecast potential implementation barriers and enablers. Our study aimed to develop a large-scale theory-informed implementation approach after 12-months of routine PROM collection.

Methods

Semi-structured interviews were completed with allied health clinicians who were involved in the routine collection of PROMs in a multidisciplinary community rehabilitation program (across three sites of a large public health service). Data from interviews were independently coded by two authors, and mapped against the Theoretical Domains Framework (TDF) and the Behaviour Change Wheel (BCW). We applied the APEASE (Acceptability, Practicability, Effectiveness, Affordability, Side-effects, and Equity) criteria and used a consensus approach to refine the multifaceted strategies.

Results

21 interviews were conducted, and four themes emerged: (1) The Impact of PROMS on patient centred-care; (2) Considerations for validity of PROMS; (3) Service-level impact of embedding PROMS; and, (4) Practical issues of embedding PROMS within the service. These mapped against seven TDF domains, and five hypothetical strategies were developed. Key behaviour change techniques underpinning the strategies include: restructuring the physical environment, incentivisation, persuasion and education, enablement, and, social support.

Conclusions

The implementation approach highlights the importance of automating processes, engaging with site champions, routinely reporting PROM data to clinical teams, and empowering clinicians to use this data to inform service provision.

O19

Development of an implementation focused logic model framework: a practical example of use to design and support complex care provision for children with a hard-to-treat-cancer

Skye McKay¹, Carolyn Mazariego¹, Joseph Elias¹, JordanaMcLoone^{2,3}, Christina Signorelli^{2,3}, Claire E Wakefield^{2,3}, Richard Cohn^{2,3}, Natalie Taylor¹

¹School of Population Health, UNSW Medicine and Health, UNSW Sydney, NSW, Australia

²Behavioural Sciences Unit, Kids Cancer Centre, Sydney Children's Hospital, Randwick, NSW, Australia

³School of Clinical Medicine, UNSW Medicine & Health, Discipline of Paediatrics, UNSW Sydney, NSW, Australia

Background

Usage of implementation research logic models (IRLMs) enable better transparency of implementation science research and intended outcomes. Complex clinical interventions can benefit from novel resources to support implementation, with some requiring a granular level of strategy development. Existing IRLMs do not capture all three layers, making it challenging to delineate between influencing factors and mechanistic effects. Here we demonstrate a novel IRLM designed for ProCure, a database to streamline the novel medicines access pathways for paediatric oncology healthcare professionals (HCPs)

Methods

The implementation science team used a consensus-based approach to amend a Smith, JD et al (2020) IRLM template to demonstrate inter-relationships between the clinical intervention, implementation intervention, and implementation strategies. Analysis of 17 HCP interviews enabled coding of contextual barriers and facilitators (i.e., determinants) to the Consolidated Framework for Implementation Research (CFIR).

Results

Precision medicine is the IRLM 'Clinical Intervention', directly impacting patient outcomes, implementation context, and ProCure design. As the 'Implementation Intervention', ProCure aims to facilitate the medicines access pathway in precision medicine. Factors influencing ProCure implementation are stratified as CFIR coded determinants and targeted by Expert Recommendations for Implementing Change (ERIC) implementation strategies. Relationships between hypothesised mechanism of action and intended outcome(s) are represented using superscripts.

Conclusions

This IRLM provides a tailored theoretical model to capture the complexity between a clinical intervention, an implementation intervention, and deployed implementation strategies, using ProCure as an example. The causal relationships will be tested and refined throughout the study and measured with meaningful outcomes to enhance transparency, reproducibility and scale-up.

O20

Process evaluation exploring implementation outcomes and barriers and facilitators of a Healthy Lifestyle for low back pain Program (HeLP) Intervention embedded in clinical care.

Emma Robson^{1,2}, Cassandra Lane², Steven Kamper³, Jenna Hollis², Simon Davidson², Christopher Williams³, Priscilla viana da Silva², Connor Gleadhill², Rebecca Hodder²

¹Hunter New England Population Health, Hunter New England Local Health District, NSW, Australia

²University of Newcastle, NSW, Australia

³University of Sydney, NSW, Australia

Background

We describe implementation outcomes of 1) fidelity; 2) adoption; 3) acceptability, appropriateness and feasibility; and 4) barriers and facilitators of engagement and delivery of a Healthy Lifestyle Program (HeLP) for low back pain.

Methods

The RCT included 346 adults with chronic low back pain and at least one health risk factor randomised to HeLP or guideline care. HeLP included: consultations, resources, and referral to telephone services for lifestyle risk factors, over 26 weeks. We used a sequential mixed methods design to evaluate HeLP participant and clinician data. We collected quantitative data via fidelity checklists, administrative records, and surveys. We collected qualitative data via semi-structured interviews and focus groups with participants and clinicians. We used descriptive statistics to analyse quantitative data, thematic analyses for qualitative data, and triangulation to integrate data and identify meta-themes.

Results

Intervention fidelity was high (>90% delivered). Participants attended a mean 3.2 consultations, 54% engaged with telephone services and 26% used online resources. Clinicians and participants found the intervention acceptable and addressing lifestyle factors was considered appropriate for back pain management. Perceptions varied on the acceptability and appropriateness of telephone services, and whether parts of the program met individual patient needs. Clinicians' delivery barriers included low self-efficacy in behaviour change communication skills, while enablers were behaviour change communication skills training and practice observation and feedback.

Conclusions

Participants and clinicians appeared satisfied with HeLP, however adoption of discrete components varied. Adaptations to improve clinicians' behaviour change communication skills and individualisation of care may optimise future implementation.

O21

A clinical implementation trial to inform successful genomic medicine strategies in practice: improving tumour testing and genetic services referral for Lynch syndrome at 7 major hospitals in Australia

Julia Steinberg¹, Priscilla Chan², Sarsha Yap¹, April Morrow², Gabriella Tiernan², Yoon-Jung Kang¹, Emily He¹, Rhiannon Edge¹, Emily He¹, Emily He¹, Rhiannon Edge¹, Deborah Debono³, Bonny Parkinson⁴, He No¹, Karen Canfell¹, Finlay Macrae⁵, Kathy Tucker², Emily Hogden², Natalie Taylor²

¹The Daffodil Centre, University of Sydney, NSW, Australia

²University of NSW, NSW, Australia

³University of Technology, Sydney, NSW, Australia

⁴Macquarie University, NSW, Australia

⁵The Royal Melbourne Hospital, Melbourne, VIC, Australia

Background

To inform implementation of effective genomic medicine, current gaps and successful strategies to support clinician practice change for well-established applications can provide important insights. Lynch syndrome (LS) causes 3-5% of colorectal cancers (CRCs), with long-standing guidelines recommending LS tumour testing of all CRC patients, but substantial heterogeneity in practice. Our trial compared the effectiveness of two structured implementation approaches (theory-based/non-theory-based) to improve risk-appropriate LS tumour testing and referral to genetics services.

Methods

Seven major Australian hospitals were randomly allocated to two trial arms. Hospital and genetics services data for 01/01/2017-31/12/2018 were used to identify hospital-specific practice gaps (total n=1,624 CRC patients). At each hospital, a health service professional was trained in evidence-based implementation to form stakeholder teams to identify target behaviours for change and associated barriers (using process mapping, questionnaires, focus groups), then co-design and implement targeted strategies. Trial arms differed only in the use of theory to identify barriers and design strategies.

Results

Pre-trial, risk-appropriate LS tumour testing and referral was complete \approx 2 months post-resection for 76.5% and 74.9% of patients in theory-based and non-theory-based arms, respectively (aRR=1.02, 95%CI 0.74-1.41). Clinical practice differed in six key areas, including multidisciplinary input and application of testing guidelines. With implementation of site-specific strategies, risk-appropriate tumour testing and referral \approx 2 months post-resection increased to 89.1% of patients in the theory-based arm but decreased to 65.9% in the non-theory arm (aRR 1.31, 95%CI 1.16-1.47). Hospital-level changes were variable and likely affected by COVID-19.

Conclusions

Findings suggest theory-based implementation science approaches might support successful integration of genomics into clinical care.

O23

Hey Vocera, call the doc: Evaluation of the Vocera Badge communication device

Jacky Hanh¹, Tony Tu¹, Olivia King¹, Shona Hanson¹, Adeola Bamgboje-Ayodele², Melissa Baysari², Aaron Jones¹

¹Sydney Local Health District, Sydney, NSW, Australia

²University of Sydney, Sydney, NSW, Australia

Background

Increased COVID-19 hospital admissions with greater clinical complexity during the Delta wave resulted in changes to ward layouts and reliance on isolation rooms. Maintaining infection control practices introduced challenges to existing communication methods and created complex barriers to effective patient care. The Vocera Badge was identified as a potential solution because it enables portable hands-free voice-activated communication to other staff, landlines and mobiles, while being worn underneath personal protective equipment. This project aimed to evaluate whether Vocera improved staff communication efficiency, user perceptions of the device, and device implementation strategies at a tertiary metropolitan hospital.

Methods

Vocera was implemented for medical, nursing and clerical staff within the emergency department. The facility Bed Manager and After-hours Operational Nurse Manager were also strategically included. Scenario-based usability testing was performed to measure communication efficiencies gained. User perceptions of Vocera and its implementation were evaluated with surveys, focus groups and usage data analyses.

Results

Preliminary results from usability testing found reductions in communication delay times from 70 seconds to 18 seconds. Communications with delays of less than 15 seconds improved from 0% to 46%. This equated to time savings of 92 hours over a 4-week period. Analyses of the surveys, focus groups and usage data are currently in progress.

Conclusions

This project demonstrated significant increases in communication efficiency with Vocera. Planned analyses of surveys, focus groups and Vocera usage data will elucidate effective implementation strategies. These findings will guide large scale implementation across the health district and more broadly across NSW and Australia.

O24

Implementing improvements for complex rare conditions: the neurofibromatosis networked model of care in NSW

Hossai Gul¹, Sue-Faye Siow², Jane Fleming², Suzana Milosavljevic², Martin Good², Manoj Menezes³, Tina Gonzalez², Sally Maspero², Kristi Jones³, Yemima Berman²

¹ SPHERE, TD School, University of Technology, Sydney, NSW, Australia

²North Sydney Local Health District, NSW, Australia

³Westmead Children's Hospital, NSW, Australia

Background

The neurofibromatoses are a group of genetic conditions associated with multisystemic complications resulting in complex care needs. Delivery of care is fragmented due to local health district boundaries, and subspecialist services are unable to be duplicated due to the highly specialised nature of treatments. The aim of this study was to identify and implement the model of care that would provide neurofibromatosis patients in NSW the highest quality care.

Methods

A sequential mixed method of survey and semi-structured interviews were conducted with identified health professionals delivering adult and/or paediatric services for patients with NF1, NF2 and schwannomatosis. Survey results were analysed using descriptive statistics and qualitative data was analysed using thematic analysis.

Results

Surveys were completed by 47 participants, representing a diverse cohort of health professionals from specialist physicians, specialist surgeons, to allied health professionals covering services across 17 local health districts within NSW. Of these 21 opted-in for semi-structured interviews. The findings showed a pre-existing networked model of care whereby a variety of health professionals conversant with neurofibromatosis deliver subspecialist services across the lifetime and across the different types of neurofibromatoses with two concentrations of services (1 adult and 1 children) within the state. The main areas in need of improvement were identified: transition from paediatric care to adult care, a need for a centralised platform for resources and services, and better referral pathways/protocols. Interventions were put in place across the model of care and data is being collected on effectiveness and implementation in parallel.

Conclusions

Improvements within rare complex models of care requires mapping of the system and intervening within key leverage points to develop and implement evidence-informed interventions on a continuous basis.

O25

Lung cancer screening in Australia: using implementation science frameworks to accelerate translation

Nicole Rankin¹, Rachael H. Dodd^{2,3}, Kate L.A. Dunlop^{2,3}, Henry M. Marshall^{4,5}, Joel Rhee⁶, Mei Ling Yap⁷, Sue McCullough⁶, Sarah York², Emily Stone^{6,8}

¹University of Melbourne, VIC, Australia

²University of Sydney, NSW, Australia

³Daffodil Centre, University of Sydney and Cancer Council NSW, NSW, Australia

⁴The Prince Charles Hospital, QLD, Australia

⁵The University of Queensland, QLD, Australia

⁶The University of New South Wales, NSW, Australia

⁷Liverpool and Macarthur Cancer Therapy Centres, Ingham Institute, The University of New South Wales, NSW, Australia

⁸St Vincent's Hospital, Sydney, NSW, Australia

Background

Lung cancer screening in high-risk populations, using low dose computed tomography has the potential to save thousands of lives by detecting early-stage curable disease. Significant progress towards implementation includes a recommendation that the Australian Government fund a national program, feasibility trials, government-commissioned scoping work and implementation research. This presentation aims to describe how implementation science frameworks are being utilised in generating pre-implementation evidence.

Methods

We conducted two qualitative studies about lung cancer screening acceptability and feasibility. Study 1) semi-structured telephone interviews were completed with 39 individuals from the International Lung Screening Trial who had participated or declined to screen; we used the COM-B model of behaviour change for analysis. Study 2) we conducted 24 focus groups with 84 key stakeholders (e.g., healthcare professionals); we used the Consolidated Framework for Implementation Research for analysis. The CFIR-ERIC matching tool was used to identify potential implementation strategies.

Results

The COM-B framework showed that motivation alone is insufficient to engage high-risk participants in screening; opportunity and capability must inform selection of implementation strategies that target individual behaviour change. The focus groups analysis elicited determinants that were mapped to CFIR constructs, of which “readiness for implementation”, “planning” and “executing” were most relevant. The matching tool identified at least 12 potential implementation strategies at health system, provider, participant and policy levels that should be considered.

Conclusions

Implementation science frameworks should be utilised in pre-implementation research. The findings provide an evidence-based foundation for selecting and designing implementation strategies for a national lung cancer screening program.

O26

Using process mapping to capture variability within paediatric cancer survivorship services: understanding factors influencing implementation of the Engage program

Skye McKay¹, Carolyn Mazariego¹, Joseph Elias¹, Jordana McLoone^{1,2}, Christina Signorelli^{1,2}, Claire E Wakefield^{1,2}, Richard Cohn^{1,2}, Natalie Taylor¹

¹School of Population Health, Medicine & Health, University of NSW Sydney, NSW, Australia

²Behavioural Sciences Unit, Kids Cancer Centre, Sydney Children's Hospital, Randwick, NSW, Australia

Background

Process mapping can provide an in-depth understanding of clinical processes, necessary for successful implementation of evidence-based clinical interventions. The Engage program innovates a distance-delivered multi-disciplinary model of survivorship care. Process mapping was applied at three hospital sites to understand existing survivorship care delivery and identify factors influencing implementation of Engage at each stage of the care pathway.

Methods

Survivorship-service healthcare professionals (HCPs) were invited to participate in semi-structured interviews guided by the Consolidated Framework for Implementation Research (CFIR). A draft process map facilitated step-by-step discussion of the clinical practices involved from the time a patient completes treatment to commences survivorship care. Interviews explored how core components of Engage could be integrated into existing practices.

Results

Data from 16 HCPs interviews produced three distinct survivorship service process maps and identified unique and shared factors impacting implementation of Engage. Common barriers include: patient identification; obtaining GP referrals; scheduling multidisciplinary team (MDT) meetings and compiling the MDT letter. However, underlying contextual causes for these shared barriers often differed between sites, requiring implementation strategies to be tailored to fit site-specific needs. Key facilitators to implementation included an experienced survivorship care team and established telehealth services.

Conclusions

Process mapping successfully identifies site-specific variation in complex clinical processes and facilitates a shared understanding of the current systems and factors that affect implementation. This deeper knowledge allows for the development of a suite of implementation strategies, which can be adapted to support implementation and scale-up at additional sites.

O27

Capturing variability in the Lynch syndrome genetic referral pathway

April Morrow¹, Julia Steinberg², Priscilla Chan¹, Gabriella Tiernan¹, Elizabeth Kennedy², Natasha Erogo³, Desiree Hilton⁴, Lucien Sankey⁵, Rebecca Venchiarutti¹, Anne Hayward¹, Amy Pearne², Skye McKay¹, Deborah Debono⁷, Emily Hogden¹, Natalie Taylor¹

¹University of NSW, Sydney, NSW, Australia

²Daffodil Centre, University of Sydney, NSW, Australia

³The University of Newcastle, NSW, Australia

⁴Westmead Hospital, NSW, Australia

⁵Monash Health, VIC, Australia

⁶The Royal Melbourne Hospital, VIC, Australia

⁷University of Technology, NSW, Australia

Background

Successful implementation requires in-depth knowledge of the clinical processes targeted for change. Genetic referral for Lynch syndrome (LS) exemplifies complex clinical pathways, involving multiple behaviours and hospital departments. We aimed to: a) use process mapping to gain an in-depth understanding of LS testing and referral practices in Australian hospitals and support identification of target behaviours for change, b) explore if barriers to target behaviours could be inductively captured and theoretically coded through process mapping focus group data, and c) demonstrate pandemic-induced transition from in-person to virtual interactive process mapping methods.

Methods

At seven hospital networks across three Australian states, LS clinical stakeholders participated in interactive in-person or virtual focus groups to develop site-specific “process maps”. Content analysis was used to develop the maps, then interpreted alongside clinical audit data to highlight potential target behaviours for change. Proposed target behaviours were reviewed with stakeholders. Secondary thematic analysis explored barriers to identified target behaviours, coded against the Theoretical Domains Framework (TDF). The transition from in-person to pandemic-induced virtual process mapping methods was documented.

Results

In person and virtual process mapping highlighted six key areas of clinical practice variation across sites. Site-specific target behaviours for change were identified. Key barriers to identified target behaviours emerged, categorised to seven TDF domains.

Conclusions

Process mapping provided valuable insights about clinical practice variations surrounding LS referral between sites. Incorporating qualitative perspectives enhances the value of process mapping by facilitating identification of target behaviours for change and associated barriers. Virtual process mapping focus groups enabled the development of comprehensive maps.

O28

How to effectively implement preoperative anaemia and iron deficiency screening, evaluation and management pathways using the CFIR-ERIC approach

Alana Delaforce¹, Shannon Farmer², Jed Duff³, Judy Munday³, Kristin Miller⁴, Lynne Glover⁴, Chris Corney⁴, Gareth Ansell⁴, Naadir Gutta⁴, Haitham Tuffaha⁵, Janet Hardy⁴, Cameron Hurst⁶

¹Commonwealth Scientific and Industrial Research Organisation (CSIRO) , ACT, Australia

²Department of Haematology, Royal Perth Hospital, WA, Australia

³Centre for Healthcare Transformation, School of Nursing, Queensland University of Technology, QLD, Australia

⁴Mater Health Services, QLD, Australia

⁵Centre for the Business and Economics of Health, University of Queensland, QLD, Australia

⁶Charles Sturt University, NSW, Australia

Background

Implementation of pathways to screen surgical patients for preoperative anaemia and iron deficiency remains limited. Implementation science offers theories, models and frameworks that support the uptake of evidence-based practices, but testing is needed to prove their utility in real-world settings. This study sought to measure the impact of a theoretically informed, bespoke change package derived using the CFIR-ERIC approach on improving the uptake of a Preoperative Anaemia and Iron Deficiency Screening, Evaluation and Management Pathway (PAIDSEM-P).

Methods

A pre-post interventional study using a type-two hybrid-effectiveness design evaluated the impact of the change package using patient, provider, cost and implementation measures. Four hundred (400) medical record reviews provided the dataset (200 pre-implementation, 200 post). Propensity score-adjusted analyses determined the effect of the intervention on clinical outcomes, and an economic evaluation determined cost. Validated surveys facilitated data collection of implementation measures.

Results

For the primary outcome, compliance improved significantly post-implementation (Odds Ratio 10.6 [95% CI 4.4-25.5] $p < 0.000$). In secondary outcomes, adjusted analyses showed clinical outcomes were not significantly changed for the proportion of patients with anaemia on day of surgery (Odds Ratio 0.792 [95% CI 0.5-1.3] $p = 0.32$), red cell transfusion (Odds Ratio 0.86 [95% CI 0.41-1.78] $p = 0.69$) and length of stay (Hazard Ratio 0.96 [95% CI 0.77-1.18] $p = 0.67$). Cost savings of \$13,340 per patient were realized. Implementation outcomes were favourable for acceptability, appropriateness and feasibility.

Conclusions

The change package significantly improved compliance with the PAIDSEM-P supporting the utility of the CFIR-ERIC approach. The non-significant difference in clinical outcomes was likely due to sampling."

O29

Impact of core versus enhanced implementation strategies on adherence to a clinical pathway for managing anxiety and depression in cancer patients in routine care: A cluster randomised controlled trial¹

Heather Sheperd¹, Susan Wakil², Phyllis Butow², Mona Faris², Joanne Shaw², Patrick Kelly³, Marnie Harris², Jessica Cuddy², Lindy Masya², Liesbeth Geerligts², Brian Kelly⁴, Afaf Girgis⁵, Nicole Rankin⁶, Philip Beale⁷, Thomas Hack⁸, Laura Kirsten⁹, Haryana Dhillon², Peter Grimison¹⁰, Rosalie Viney¹¹, Josephine Clayton¹², Tim Schlub²

¹The University of Sydney, Sydney, NSW, Australia

²School of Psychology, Psycho-Oncology Co-operative Research Group, The University of Sydney, Sydney, NSW, Australia

³Sydney School of Public Health, Faculty of Medicine and Health, The University of Sydney, Sydney, NSW, Australia

⁴School of Medicine and Public Health, University of Newcastle, NSW, Australia

⁵University of New South Wales, Kensington, NSW, Australia

⁶Centre for Health Policy, Faculty of Medicine, Dentistry and Health Sciences, Melbourne, NSW, Australia

⁷Concord Hospital, Sydney Local Health District, NSW, Australia

⁸University of Manitoba, Winnipeg, Manitoba, CAN

⁹Nepean Blue Mountains Local Health District, NSW, Australia

¹⁰Chris O'Brien Lifecare, Camperdown, NSW, Australia

¹¹Centre for Health Economics Research and Evaluation, University of Technology, Sydney, NSW Australia

¹²The Palliative Centre, Greenwich Hospital, NSW, Australia

Background

Optimal strategies to facilitate implementation of evidence-based clinical pathways are unclear. We evaluated a core and an enhanced implementation strategy to facilitate implementation of a clinical pathway for the management of anxiety and depression (A/D) in patients with cancer (ADAPT CP).

Methods

Twelve cancer services were cluster randomised to a Core versus Enhanced implementation strategy for 12 months. Core strategy included a Lead Team with champions, awareness campaigns, staff training, feedback reports, telephone/online support. Enhanced strategy added monthly meetings, proactive advice, tailored awareness campaigns. Patients were introduced to the ADAPT CP as routine care, completed screening, and allocated an A/D step of 1-5 (minimal/mild/moderate/severe/very severe), with referral for additional support. Multi-level mixed-effect regression analyses examined impact of implementation strategy on ADAPT CP adherence (binary primary outcome: adherent: >70% ADAPT CP components achieved; or non-adherent: <70% achieved), continuous adherence was a secondary outcome. Interaction between implementation strategies and A/D step severity was explored.

Results

Of 1,280 registered patients, 696(54%) completed screening, 1,323 screening events in total (883 Core, 440 Enhanced). The main effect of implementation strategy on adherence was non-significant in binary and continuous analyses, however, A/D step was significant. Adherence was higher for

Step 2 than other steps ($p=0.001$). Interaction between implementation strategy and A/D step was significant ($p=0.02$) in the continuous adherence analysis: adherence with the enhanced strategy was significantly higher (7.5%points) for Step 3 ($p=0.048$) and trending to significance for Step 4.

Conclusions

Results support ongoing implementation effort for the first year of implementation to ensure uptake and sustainment of clinical pathways in over-burdened clinical services.

O30

How actionable are infection prevention and control guidelines in residential aged care? A document analysis based on a behaviour specification framework

Joanne Tropea^{1,2}, Jill Francis², Lyn-li Lim³, Noleen Bennett³, Kwang Lim^{1,2}, Kirsty Buising^{1,2}, Deirdre Fetherstonhaugh⁴, Sanne Peters²

¹Royal Melbourne Hospital, Melbourne, VIC, Australia

²School of Health Sciences, University of Melbourne, Melbourne, VIC, Australia

³VICNISS, Peter Doherty Institute, University of Melbourne, VIC, Australia

⁴Australian Centre for Evidence Based Aged Care, La Trobe University, VIC, Australia

Background

Older people living in residential aged care are susceptible to transmissible infections such as influenza, COVID-19, and gastroenteritis. Effective infection prevention and control (IPC) practice in residential aged care is therefore imperative. To enable this, national and aged care provider-level IPC guidelines need to be specific enough to be actionable by residential aged care staff and organisations. Aim: To assess the actionability of IPC national guidelines and residential aged care policies and procedures. We chose to examine the guidelines around healthcare associated infection (HAI) surveillance in residential aged care.

Methods

A content analysis of the Australian IPC guidelines, and IPC policies and procedures from Victorian residential aged care facilities was conducted. Data extraction, coding and interpretation of findings were directed by the action-actor-context-target-time (AACTT) framework.

Results

National guidelines did not specify recommendations related to HAI surveillance but include general statements of support for data collection on HAI and outbreaks, suggest best epidemiologic principles that should be applied in data collection, and suggest that data should be fed back to appropriate staff groups and administrators. Provider-level policies and procedures varied in specificity.

Conclusions

While it is recommended that aged care providers undertake HAI surveillance, national guideline recommendations are open to interpretation, and are not specific or actionable. Provider-level guidelines also need improving to facilitate actionability. To increase uptake of effective HAI surveillance in residential aged care, local policies and procedures need to be written with greater behavioural specificity.

O31

The expected value of implementation: The use of iterative expert elicitation and scenario analyses within decision-analytic models of health services.

Andrew Partington^{1,2}, Jonathan Karnon²

¹NHMRC Partnership Centre for Health System Sustainability, Flinders University, SA, Australia

²Macquarie University, NSW, Australia

Background

Health economists can inform the management of integrated services, rather than merely the adoption of discrete and disjointed products e.g., pharmaceuticals and devices. But this is not so simple. During ex-ante value-based planning of interventions, consideration is required of implementation fidelity within complex and dynamic systems. Potential misalignments require adaptations to resourcing, but also our expectations of effects and, therefore, cost-effectiveness i.e., value and success.

Methods

While embedded within Local Health Networks in South Australia, we conducted interviews and retroductive analyses to conceptualise decision problems and the logic behind interventions. We then conducted expert elicitation of quantitative estimates of expected future effects, which were used to model the expected cost-effectiveness of theorised service interventions. Finally, scenario analyses were used to explore the implementation costs necessary to minimise the likelihood of poor fidelity and sustainability.

Results

Expected effects include non-inferior outcomes, financial savings, and repurposed capacity. There have been moderate levels of disagreement among stakeholders regarding the scale and uncertainty of expected effects ex-ante. Theorised adaptations included the need for unscheduled meetings, backup/redundant equipment, and “exceptional circumstance” responsibilities. Steep learning effects are also expected regarding the “risk appetite” of referrers. Modelled cost-effectiveness is sensitive to scenarios of poor adaptation and patient selection.

Conclusions

Modelled evaluations feed into business cases and living analytical models. While value is context-dependent, methods are generalisable. We highlight the potential of a Value of Implementation equation to price-in resources or “operational slack” for expected adaptations based on acceptable likelihoods of realised and sustained costs and effects.

O32

Designing for implementation: co-design of a paediatric oncology medicines database (ProCure) to support complex care provision for children with a hard-to-treat cancer

Elijah Tyedmers¹, Carolyn Mazariego¹, Mark Dobson², Skye McKay¹, Lauren Kelada^{1,2}, Brittany McGill^{2,3}, Rebecca Daly^{2,3}, Claire Wakefield², David Ziegler^{2,3}, Natalie Taylor¹

¹School of Population Health, University of NSW Medicine and Health, Sydney, NSW, Australia

²Kids Cancer Centre, Sydney Children's Hospital, Randwick, NSW, Australia

³School of Clinical Medicine, University of NSW Medicine and Health, University of NSW, Sydney, NSW, Australia

Background

Co-design of technological interventions uses creative and participatory methods. In pediatric precision-medicine, treatment options identified by trials are often not approved and associated with ambiguous and time-consuming access pathways. This study aimed to use co-design methodologies to develop "ProCure", a novel medicines access database that streamlines the application process for compassionate-use cancer therapies.

Methods

To promote ProCure's implementation and ensure scalability, implementation science methodologies were used to guide the development and co-design process. Process mapping and implementation science frameworks were combined to explore healthcare professionals' (HCP) perceived barriers and facilitators to current access pathways and their perceived acceptability to ProCure. HCPs participated in semi-structured interviews, guided by a process map depicting current novel medicine access pathways. Qualitative interview data were coded to the Consolidated Framework for Implementation Research (CFIR) to identify contextual barriers, explore perceived acceptability of ProCure and identify end-user needs.

Results

Key barriers to the current process were identified (e.g., resource-intensive applications to access medicines, time-sensitive decision-making, complicated pharmaceutical information), informing the co-design of ProCure. Most HCPs expressed perceived value in ProCure and intention to use it. Implementation strategies will be developed using the CFIR-ERIC (Expert Recommendations for Implementing Change) matching tool to guide implementation at the pilot site.

Conclusions

ProCure is perceived as an acceptable resource with potential to streamline off-label medicines access. End-user testing will use a mixed-methods approach to evaluate implementation determinants of ProCure. Combining process mapping and CFIR succeeded in informing ProCure's co-design and readying the database for implementation and national scale-up.



Abstracts

Implementation
Science Health
Conference Australia

Session Topic: Sustaining change in health service processes and pathways

O33

Implementation gaps in the use of clinical decision support systems for chronic obstructive pulmonary disease (COPD): A systematic review

Adeola Bamgboje-Ayodele¹, David Borg², Steven McPhail², Melissa Baysari¹

¹Biomedical Informatics and Digital Health, School of Medical Sciences, Charles Perkins Centre, Faculty of Medicine and Health, University of Sydney, NSW, Australia

²Australian Centre for Health Services Innovation and Centre for Healthcare Transformation, School of Public Health and Social Work, Queensland University of Technology, Brisbane, Australia

Background

Clinical decision support (CDS) systems have the potential to improve safety, quality and efficiency of care in various clinical domains including asthma, but the evidence regarding the use of CDS systems for patients with chronic obstructive pulmonary disease (COPD) in hospital or hospital-in-the-home settings has not yet been systematically reviewed. We aimed to describe existing COPD CDS systems and their impact on outcomes, and identify barriers and facilitators to their implementation.

Methods

Databases (Medline, Embase, CINAHL, Scopus, Web of Science) were searched to identify relevant studies. Studies describing clinician-facing COPD CDS systems designed for, or implemented in, hospitals and hospital-in-the-home settings were included. A qualitative narrative synthesis was undertaken, guided by the RE-AIM framework (Reach, Effectiveness, Adoption, Implementation, Maintenance).

Results

Twelve studies reporting the use of CDS in hospital (n=7) and hospital-in-home (n=5) settings were included. Implementation efforts to REACH target users were scanty reported and low-to-medium ADOPTION rates were observed. The reported EFFECTIVENESS of the CDS systems was mixed. Only one study reported facilitators to the IMPLEMENTATION of CDS systems, none reported on barriers to the implementation of CDS systems and none reported any information on successful strategies to MAINTAIN implementation of CDS systems.

Conclusions

CDS systems offer enormous potential to facilitate clinical decision making, but this is yet to be capitalised for the management of COPD. Many opportunities to optimise and evaluate the implementation and use of COPD CDS systems in hospital settings remain, including robust evaluation of their impact on patient, clinician and health-service outcomes.

O34

The implementation of best practice guidelines for incontinence-associated dermatitis in six hospitals in five Local Health Districts in New South Wales

Michelle Lai^{1,2}, Shifa Basjarahil³, Jayne Campbell⁴, Michelle Cunich^{1,2}, Gary Disher¹, Samara Geering⁶, Natalie Ko⁷, Catherine Leahy⁸, Thomas Leong¹, Eve McClure¹, Melissa O'Grady¹, Joan Walsh³, Kate White^{1,2}, Fiona Coyer^{9,10}

¹Sydney Local Health District, NSW, Australia

²University of Sydney, NSW, Australia

³The Sutherland Hospital, NSW Australia

⁴Hunter New England Local Health District, NSW, Australia

⁵New South Wales Ministry of Health, NSW, Australia

⁶South Western Sydney Local Health District, NSW, Australia

⁷Concord Repatriation General Hospital, NSW, Australia

⁸Western New South Wales Local Health District, NSW, Australia

⁹Queensland University of Technology, QLD, Australia

¹⁰Royal Brisbane and Women's Hospital, QLD, Australia

Background

Incontinence-associated dermatitis (IAD) is skin damage associated with exposure to urine/stool. In 2015, IAD best practice guidelines were published to improve prevention and management. From 2020, the IMBED study implemented these guidelines in New South Wales (NSW).

Methods

IMBED was conducted in six hospitals (four metropolitan, two regional/rural). At a macro level, the NSW Ministry of Health, Agency for Clinical Innovation, Clinical Excellence Commission, and Continence Foundation of Australia oversaw the design, provided access to new funding and promoted adaptability, implementation, and scalability of the intervention in the project's course. At a meso level, each hospital developed an implementation strategy to enhance scalability and sustainability across their hospital, including planning for pre-implementation education, intervention adherence audits, post-implementation monitoring and reporting to the hospital's skin integrity lead. Needs analyses were conducted at a micro level in each ward to understand readiness for change, barriers and facilitators to implementation which informed the hospital's implementation strategy.

Results

Comparing pre- to post-implementation, hospital-acquired IAD prevalence lowered by 36.3%. Clinician knowledge of IAD aetiology and risk, classification and diagnosis, and prevention and management significantly improved. There was significant decrease in costs associated with the use of products not evidence-based to prevent or manage IAD, including creams such as zinc, and extra under-pads. Clinicians reported greater confidence with managing and preventing IAD.

Conclusions

IMBED has proven to be a successful exemplar of the adoption, implementation, scaling and sustaining of best practice guidelines to improve IAD prevention and management at a macro, meso and micro level.

O35

Implementing a ward-based programme to improve care for older inpatients: process evaluation of the cluster randomised CHERISH trial

Alison Mudge^{1,2}, Prue McRae², Adrienne Young^{3,4}, Irene Blackberry⁴, Karen Lee-Steere¹, Sally Barrimore⁶, Tara Quirke⁷, Gillian Harvey⁸

¹Royal Brisbane and Women's Hospital, QLD, Australia

²University of Queensland Medical School, QLD, Australia

³Centre for Research in Geriatric Medicine, University of Queensland, QLD, Australia

⁴John Richards Centre for Rural Ageing Research, Latrobe University, VIC, Australia

⁶The Prince Charles Hospital, QLD, Australia

⁷Dementia Training Australia, Australia

⁸College of Nursing and Health Sciences, Flinders University, SA, Australia

Background

Eat Walk Engage is a ward-based improvement programme using the i-PARIHS implementation framework to improve care of older people. It significantly reduced delirium in the four-hospital CHERISH cluster trial. The objective of this process evaluation was to understand how Eat Walk Engage worked across trial sites.

Methods

Prospective multi-method implementation evaluation on medical and surgical wards in four hospitals implementing Eat Walk Engage January 2016-May 2017. We assessed context, implementation (core components, implementation strategies and improvements) and mechanisms (practice changes measured through older person interviews, structured mealtime observations and activity mapping) at each site.

Results

Wards had varied contextual barriers which altered dynamically with time. Two experienced facilitators supported four novice facilitators through interactive training and regular structured reflection, data management, networking and organisational influence. Novice facilitators used many implementation strategies to facilitate 45 discrete improvements at individual, team and system level. Patient interviews (42 before, 38 after) showed better communication about program goals. Observations of 283 meals before and 297 after implementation showed improvements in mealtime positioning and assistance. Activity mapping (85 patients before, 111 after) showed improvements in cognitive and social engagement but inconsistent changes in mobility. Observed improvements are plausible mediators of reduced delirium.

Conclusions

A multi-level enabling facilitation approach supported adaptive implementation to varied contexts to support mechanisms of change which partly achieved the programme goals. Contexts changed over time, suggesting the need for adequate time and continued facilitation to embed, enhance and sustain age-friendly practices on acute care wards.

O36

Exploring sustained receipt of recommended antenatal care for alcohol consumption, by pregnant women following an effective practice change intervention

Alix Hall¹, Emma Doherty², Nicole Nathan², John Wiggers², John Attia¹, Belinda Tully², Elizabeth Elliott³, Christopher Oldmeadow⁴, Simon Chiu⁴, Melanie Kingsland²

¹School of Medicine and Public Health, Faculty of Health and Medicine, University of Newcastle, NSW, Australia

²Hunter New England Population Health, Hunter New England Local Health District, NSW, Australia

³ Discipline of Child and Adolescent Health, Faculty of Medicine and Health, The University of Sydney, Sydney, Australia

⁴Hunter Medical Research Institute, New Lambton Heights, NSW, Australia

Background

Sustaining evidence-based care is essential for ensuring population benefits. However, the impact of effective implementation strategies may reduce over time. This study aimed to explore the ongoing receipt of recommended antenatal care for alcohol consumption by pregnant women, following an effective practice change intervention.

Methods

This was a secondary analysis of survey data collected from women receiving antenatal care from the largest sector of a randomised stepped-wedge trial. Interrupted time series of data collected across the 31-month study period was used to explore: the rate, time points and extent of change in women's reported receipt of recommended antenatal care for alcohol consumption, following the delivery of an effective practice change intervention.

Results

Data from 4,909 (82% consented) women were analysed. Receipt of recommended care reduced significantly per week for the 16.5 month post-implementation period, for outcomes: assessment of alcohol consumption (-0.66; 95% CI: -1.1, -0.26; p=0.002), advice not to consume alcohol during pregnancy and of potential risks (-0.63; 95% CI: -1.1, -0.22; p = 0.003), and complete care relevant to alcohol risk level (advice and referral) (-0.64; 95% CI: -1.1, -0.22; p = 0.003). A non-statistically significant reduction was also observed for: all guideline elements relevant to alcohol risk level (-0.36; 95% CI: -0.72, 0.00; p = 0.050). Despite a decrease in women's receipt of recommended care post-implementation, rates were still higher post-implementation than what was observed pre-implementation.

Conclusions

These findings highlight the need for ongoing monitoring of care delivery and the potential need for additional sustainability strategies.

O37

Reducing the overuse of proven ineffective interventions in infants with bronchiolitis: mixed method study to understand uptake and impact of adaptations to proven implementation strategies

Emma Tavender¹, Sharon O'Brien², Libby Haskell^{3,4}, Rachel Schembri¹, Franz Babl¹, Stuart Dalziel^{3,4}, Meredith Borland^{2,5}, First name Last name¹

¹Murdoch Children's Research Institute Departments of Paediatrics and Critical Care, The University of Melbourne, VIC, Australia

²Perth Children's Hospital, Perth, WA, Australia

³Starship Children's Hospital, Auckland, NZ

⁴The University of Auckland, Auckland, NZ

⁵School of Medicine, Divisions of Emergency Medicine and Paediatrics, University of Western Australia, WA, Australia

Background

A cluster randomised trial in 26 Australasian hospitals found targeted implementation strategies were effective at improving bronchiolitis care and reducing the use of five unnecessary therapies and management processes (salbutamol, adrenaline, corticosteroids, antibiotics and chest x-rays). We aimed to understand the uptake, adaptation and impact of these implementation strategies in a "real-world" clinical setting to inform national roll-out.

Methods

Implementation strategies were provided to four Western Australian Hospital Emergency Departments (EDs). We conducted a mixed methods process evaluation to track uptake and local adaptation processes with adaptation tracking forms and qualitative interviews with staff. Descriptive statistical analysis was used for quantitative data. Interview transcripts were coded using thematic content analysis. The Framework for Reporting Adaptions and Modifications-Enhanced (FRAME-I) informed data collection. We evaluated compliance of the 5 recommendations using retrospective data collection of 120 bronchiolitis patients pre-intervention (2019 season) and 120 post-intervention (2021 season).

Results

Twelve interviews were held over 2 months. All sites used a range of implementation intervention components including a combination of face-to-face education, audit and feedback and site-specific modifications of the education packages. Modifications included shortening and adjusting content/style of presentations for different target clinician groups. In 2019, adherence to guidelines was 357/457 infants (78.12%) in comparison with 379/443 (85.55%) in 2021, RD 7.43(95%CI - 0.59;15.46).

Conclusions

Provision of proven implementation strategies to four EDs resulted in improved bronchiolitis care. Maximising this benefit by providing guidance on how to adapt and effectively use the implementation strategies will enhance knowledge on scaling improvement and sustainable practice change.

O38

Improving and sustaining advance care planning (ACP) within oncology settings: Using the Theoretical Domains Framework (TDF) to identify the barriers and enablers

Lisa Guccione¹, Sonia Fullerton¹, Jill Francis²

¹Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

²Melbourne University, Melbourne, VIC, Australia

Background

Advance care planning (ACP) is the process of individuals discussing and recording personal values, beliefs, and preferences so that, in the event they lose capacity, a person receives care consistent with their preferences. Despite Department of Health recommendations, national rates of documentation for people with cancer are only 27%, well below the target of 50%. The aim of this study was to identify barriers to ACP across the care pathway, at a world-leading comprehensive cancer centre.

Methods

A mixed methods design was used to: (1) identify ACP touchpoints across the care pathway and (2) explore barriers and enablers of ACP. Twenty-two key stakeholders were recruited to the study including staff, and consumers. Two focus groups explored touchpoints and opportunities for ACP across the care pathway, to develop a process map. The “action, actor, context, target, time” (AACTT) Framework was used to specify behaviours. Semi-structured interviews explored barriers and enablers at each touchpoint. The TDF was used to guide the interviews and analysis.

Results

Process maps representing differing perspectives between consumers and hospital staff (medical, nursing, allied health, and administrative staff) identified 20 “actions” associated with ACP across the care pathway. The AACTT analysis clarified that 5 staff-roles were responsible for performing ACP-related behaviours. Barriers included perceived emotional consequences for patients and inadequate digital infrastructure for accessing ACP documentation at the point of care.

Conclusions

Using a theory-based approach, barriers for ACP across the care pathway were identified. To improve ACP uptake in oncology settings, interventions should target these barriers.

O39

Why is advance care planning underused in oncology settings? Systematic overview of reviews to identify benefits, barriers, enablers, and interventions to improve uptake

Lisa Guccione¹, Sonia Fullerton¹, Karla Gough¹, Amelia Hyatt¹, Sanchia Aranda¹, Jill Francis²

¹Peter MacCallum Cancer Centre, Melbourne, VIC, Australia

²Melbourne University, Melbourne, VIC, Australia

Background

Advance care planning (ACP) is the process of discussing and recording personal values, beliefs and preferences, to guide clinical decision-making in the event that a person loses capacity to make or communicate their treatment decisions. Despite existing guidelines, rates of ACP documentation for people with cancer are low. This overview of reviews synthesised published evidence in relation to five questions: how is ACP defined; what are the benefits; what are the known barriers and enablers for patients, clinicians and healthcare services; which interventions to improve ACP have been evaluated; and are these interventions effective?

Methods

A systematic overview of reviews was prospectively registered on PROSPERO. PubMed, Medline, PsycInfo, CINAHL, and EMBASE were searched for reviews related to ACP in cancer. Data were extracted using a structured form, analysed using content analysis and subject to narrative synthesis. The Theoretical Domains Framework (TDF) was used to code barriers and enablers of ACP, as well as the implied barriers targeted by interventions.

Results

Twenty-nine reviews met inclusion criteria. Definitions of ACP were inconsistent. Many benefits were proposed but not supported by empirical evidence. Barriers most frequently coded to TDF domains (knowledge, environmental context and resources, emotion, social/professional role identify, beliefs about consequences, and social influences) were not specifically targeted by stated interventions.

Conclusions

To improve ACP uptake definitions should include key categories that clarify the utility and benefits. Interventions that target healthcare providers and empirically identified barriers are likely to be more effective in improving uptake.



Abstracts

Implementation
Science Health
Conference Australia

Session Topic: What works, why and for whom when implementing programs in primary care and community settings?

O41

Do first impressions of trust predict therapeutic alliance and health outcomes for people presenting with musculoskeletal conditions?

Sonia Coates¹, Kerrie Evans¹, Claire Ashton-James², Eileen Boyle³, Darren Beales³, Kwangil Kang¹, Trudy Rebbeck¹

¹Faculty of Medicine and Health, University of Sydney, NSW, Australia

²Pain Management Research Institute, University of Sydney, NSW, Australia

³Faculty of Health Sciences, Curtin University, WA, Australia

Background

A positive therapeutic relationship between patients and their health care professionals (HCPs) is associated with improved health outcomes in musculoskeletal conditions however initial perceptions of HCP trustworthiness and their relationship to therapeutic alliance and health outcomes have not been evaluated. The aims of this study were to (i) determine the relationship between initial trust and therapeutic alliance and satisfaction with care at 3 months and, (ii) evaluate the relationship between initial trust and health outcomes at 3 months. Factors predicting perceptions of HCP trustworthiness such as profession and expertise were explored.

Methods

Prospective observational study nested within a randomised controlled trial. Participants presenting with low back, neck pain or knee osteoarthritis within 4 weeks of seeking care were eligible. Seven hundred and sixty-six participants completed baseline questionnaires and perceptions of trustworthiness in their self-nominated primary HCP. Outcomes assessed at three months included: therapeutic alliance (WAI-SR), satisfaction with care and health outcomes (GPE and pain-related disability). Associations between variables of interest were assessed using Spearman's Rho correlation coefficient and multivariate linear regression analysis.

Results

Initial trust predicted the therapeutic relationship (Adjusted $R^2=0.16$, $p<0.001$), satisfaction with care (Adjusted $R^2=0.08$, $p<0.001$), and pain-related disability at 3 months (Adjusted $R^2=0.01$, $p=0.003$) but not GPE. Perceptions of HCP trustworthiness were high and similar amongst medical and allied health professional groups.

Conclusions

Initial perceptions of HCP trustworthiness are moderately associated with trust, therapeutic alliance and satisfaction with care at 3 months and may predict health outcomes.

O42

The Implementing work-related Mental health guidelines in general Practice (IMPRovE)

intervention: Process followed towards planning for sustainability and scale-out

Vera da Costa¹, Samantha Chakraborty¹, Justin Kenardy², Bianca Brijnath³, Duncan Mortimer¹, Joanne Enticott¹, Michael Kidd⁴, Lyndal Trevena⁵, Sharon Reid⁵, Alex Collie¹, Danielle Mazza¹

¹Monash University, VIC, Australia

²The University of Queensland, QLD, Australia

³ National Ageing Research Institute, VIC, Australia

⁴Australian National University, ACT, Australia

⁵University of Sydney, NSW, Australia

Background

The IMPROvE trial is a hybrid III trial aiming to implement the “Clinical Guidelines for the diagnosis and management of work-related mental health conditions” in general practice. We applied the RE-AIM framework to design the trial and co-create an intervention that effects clinical and implementation outcomes necessary for achieving sustainability and scalability. This paper describes the process we used to evaluate the delivery of a complex intervention, and to understand which intervention components we should aim to sustain and scale-out.

Methods

GPs evaluation of their participation in an academic detailing session was gathered, and engagement activity in the virtual community of practice (VCoP) was tracked over a 72-week period. We used the Realist Evaluation model involving diaries from academic detailers, quantitative descriptive analysis of engagement activity by participants on the VCoP (tracked over a 72-week period), qualitative interviews with GP and patient participants to examine context, mechanism, and outcomes.

Results

We linked constructs of normalisation process theory with the Context-Mechanism-Outcome framework of realist evaluation, to evaluate how the intervention was implemented and adopted by GPs. We will review these outcomes in an upcoming stakeholder forum and prioritise aspects of the intervention that are amenable for scale-up or sustainability.

Conclusions

VCoPs and delivery of academic detailing are a novel and an increasingly popular learning vehicles for general practitioners. It is necessary to begin planning for sustainability and scale-out at the outset of a project in order to embed processes that can subsequently inform assessment of sustainability and scale-out.

O43

Using a reverse translation approach to identify factors contributing to sustainable adoption of peer support programs after brain injury

Marlena Klaic¹, Lauren Kosta¹

¹University of Melbourne, VIC, Australia

Background

The annual incidence of traumatic brain injury (TBI) in Australia is estimated to be 200,000, of which 10 percent will have a moderate to severe injury affecting cognition and function. Peer support programs offer survivors of brain injury with the opportunity to develop self-management skills as they learn from and with others living with a TBI. Brain Injury Matters (BIM) have been the leading provider of community-based peer support programs for several years in Victoria. Attendance rates are consistently high yet little is known about the factors contributing to this sustainable intervention. We used a reverse translation approach to explore how and why community-based peer support programs for survivors of TBI are successful. Reverse translation begins with a real-life clinical experience and works backward to identify factors influencing uptake.

Methods

Data were collected from six groups, including one online platform using a mixed-methods approach consisting of semi-structured interviews and questionnaires based on the theoretical framework of acceptability and audit of routinely collected data.

Results

We found that acceptability of community-based peer support programs for survivors of TBI is high, particularly for perceived effectiveness, affective attitude and ethicality.

Conclusions

A reverse translation approach has the benefit of identifying factors that may impact on sustainable adoption of an intervention but are not usually captured in a clinical trial. This study found that peer support groups after a TBI are largely acceptable to both those providing and those receiving the intervention which we hypothesise is associated with feasibility and sustainability.

O44

Identifying healthy eating and physical activity evidence-practice gaps in early childhood education and care services across Australia: A cross-sectional study

Melanie Lum^{1,2,3}, Sze Lin Yoong^{3,4}, Luke Wolfenden^{1,2,3}, Alice Grady^{1,2,3}, Jannah Jones^{1,2,3}

¹School of Medicine and Public Health, University of Newcastle, NSW, Australia

²Population Health, Hunter New England Local Health District, NSW, Australia

³National Centre of Implementation Science, University of Newcastle, NSW, Australia

⁴Global Centre for Preventive Health and Nutrition, Institute for Health Transformation, Deakin University, VIC, Australia

Background

Early childhood education and care (ECEC) services are a key setting to improve healthy eating- and physical activity-related behaviours of children. Several practices in ECEC have demonstrated effectiveness in improving children's diet and physical activity (e.g. provision of various healthy eating education regularly). The current implementation of these practices across Australia is unknown. This study aims to describe the prevalence of implementation of evidence-based healthy eating and physical activity practices in ECEC services nationally and examine differences in the prevalence of implementation of these practices by service characteristics.

Methods

2,050 centre-based ECEC services across Australia were randomly selected and invited to complete a survey via telephone or online (August 2021-April 2022). Service characteristics and implementation of 18 evidence-based healthy eating and physical activity practices were assessed using items based on valid and reliable tools. Linear mixed regression analyses were performed to examine differences in implementation by service characteristics.

Results

993 (51.3%) eligible services consented to participate. Less than 18% of services provided training for either healthy or physical activity. Preliminary analyses indicate less than 50% of services are implementing 10 of the 18 practices assessed. Association analyses are expected to be completed early 2023.

Conclusions

The findings of this study demonstrate the current prevalence of implementation of evidence-based healthy eating and physical activity practices in ECEC services, and will identify differences in implementation rates by service characteristics. This study highlights several evidence-practices gaps, such as educator training, indicating that additional implementation support may be warranted for these practices.

O45

Scaling What Works: Protocol for evaluating the scalability of 16 programs designed to improve the mental health and wellbeing of men and boys

Anna Williamson¹, Chloe Ang¹, Chloe Jacobs¹

¹Centre for Evidence and Implementation, VIC, Australia

Background

Scaling What Works (SWW) is a funding program established by Movember to support the ongoing scaling, development, implementation, and evaluation of prevention and/or early intervention programs that have already shown promise in improving mental health and/or suicide prevention outcomes for boys and men across Australia, Canada, the United Kingdom, and Ireland.

Methods

A mixed methods evaluation has been developed to assess the impact and cost effectiveness of the projects funded as part of Scaling What Works, on both a project and a fund-level, and the implementation of each project. The Intervention Scalability Assessment Tool will be used as a framework to answer all evaluation questions and systematically assess the scalability of each of the funded projects over a two-year period.

Results

Sixteen projects were funded as part of Scaling What Works. Projects differed considerably in terms of target group, setting, scale, intervention, extent of planned adaptation, and place on the translational research pathway, necessitating a structured yet flexible approach to evaluation.

Conclusions

Scaling What Works will provide a unique opportunity to systematically explore the factors associated with scalability across 16 diverse projects aiming to improve the mental health of men and boys.

O47

Using the Implementation Research Logic Model (IRLM) to guide implementation and evaluation of eConsultant in Queensland

Jenny Job¹, Maria Donald², Breanna Lepre¹, Caroline Nicholson¹, Claire Jackson¹

¹Centre for Health System Reform and Integration, Mater Research, University of Queensland, QLD, Australia

²General Practice Clinical Unit, Faculty of Medicine, The University of Queensland, QLD, Australia

Background

eConsultant provides specialist input for general practitioners (GPs) via secure-messaging within 3-business days to support care for adult patient who would otherwise require an outpatient referral. GPs send a Request-for-Advice to the eConsultant and discuss the eConsultant advice at patient follow-up. Our evaluation of the implementation of eConsultant service in two Australian regions (Western Queensland, Brisbane South) is guided by the Implementation Research Logic Model (IRLM).

Methods

Our prospective mixed-methods observational study included tracking implementation activities and outcomes (effectiveness/adoption). Semi-structured interviews conducted with GPs/stakeholders to understand determinants of implementation, were analysed thematically guided by the Consolidated Framework for Implementation Research. Implementation activities were coded against 73 Expert Recommendations for Implementing Change implementation strategies. Adoption (enrolment/usage by GP practices/GPs) and effectiveness (time to specialist input) were assessed.

Results

To date 22 GP practices have completed enrolment in the program and 60 GPs have sent a total of 180 requests-for-advice (1.6 days mean specialist response time). Implementation was guided by 15 different implementation strategies. Qualitative interviews, conducted with 11 GPs and 4 stakeholders identified barriers to using eConsultant related to secure-messaging access, reliance on existing referral options and workforce issues. Key facilitators identified were engaging GPs, the positive response from patients to the program, and the relative advantage of eConsultant over other options.

Conclusions

IRLM enabled systematic use of frameworks which highlighted priorities for successful implementation state-wide including an improvement in secure-messaging access and operability in some settings and offering a greater variety of specialties to embed the eConsultant option in GP advice processes.

O48

Implementation of a GP:Physiotherapist partnership in primary care for chronic obstructive pulmonary disease improves case finding and evidence-based management

Lisa Pagano¹, Zoe McKeough¹, Sally Wootton², Andrew SL Chan³, Sriram Mahadev³, Nick Zwar⁴, Deborah Pallavacini⁵, Sarah Dennis¹

¹The University of Sydney, NSW, Australia

²Chronic Disease Community Rehabilitation Service, Northern Sydney Local Health District, NSW, Australia

³Department of Respiratory and Sleep Medicine, Royal North Shore Hospital, NSW, Australia

⁴Faculty of Health Sciences and Medicine, Bond University, QLD, Australia

⁵Sydney North Primary Health Network, NSW, Australia

Background

The aim of this study was to evaluate whether the implementation of a General Practice (GP):physiotherapist partnership model of care improves the diagnosis and management of COPD in primary care by improving implementation of key management guidelines.

Methods

A pre/post study was conducted including four general practices. Pre/post bronchodilator spirometry was performed by a cardiorespiratory physiotherapist placed in each general practice on “at risk” participants (aged >40 years, current/ex-smoker) or people with “existing” COPD. For those with confirmed airflow obstruction on spirometry (FEV1/FVC < 0.7), a management plan underpinned by evidence-based guidelines was implemented by the physiotherapist in collaboration with the GP including physical activity counselling, smoking cessation advice, referral to pulmonary rehabilitation (PR), initiation of a COPD action plan and GP referral for medical management. Intervention occurred at baseline, one-month and 3-months.

Results

148 participants (mean age 70 years (SD 11.1), 57% female) attended a baseline assessment (117 “at risk”, 31 “existing” COPD) from 748 people invited. Obstruction was confirmed in 17% of “at risk” and 77% of “existing” COPD. The physiotherapist correctly classified the level of obstruction in 98.6% of cases. Of those with airflow obstruction, all participants had smoking cessation interventions initiated, 78% (21/27) were referred to PR and 87% had an action plan initiated.

Conclusions

This GP:physiotherapist model of care indicates a rate of case finding similar to other studies and has the potential to improve early identification through case finding and implementation of evidence-based management components according to guidelines in primary care.



Abstracts

Implementation
Science Health
Conference Australia

Poster Presentations

P1

Health professionals' and patients' perspectives on the implementation of a predictive model of response to immunotherapies in advanced melanoma

James Wilmott, Andrea Smith, Rehana Abdus Salam¹, Tuba Gide, Anne Cust, Richard Scolyer, Georgina Long

¹University of Sydney, NSW, Australia

Background

Immunotherapies for advanced melanoma have led to improved cancer control and survival but almost half of the patients either do not respond or develop resistance. Predictive biomarker testing can ensure that the patient receives the most effective therapy however clinical uptake remains low. This study was conducted prior to a clinical validation study of routine predictive biomarker testing for patients with advanced melanoma to gain an insight into the factors associated with successful implementation and clinical uptake.

Methods

We conducted semi-structured interviews (n=25) with health professionals and patients guided by the EPIS (Exploration, Preparation, Implementation, and Sustainment) framework to understand enablers and barriers of implementation. Data analysis involved inductive and deductive thematic analysis using the Consolidated Framework for Implementation Research (CFIR).

Results

Health providers and patients consistently reported 'clinical utility of predictive biomarker test' as a major enabler recognising that the test would assist in predicting non-responders and consequently prevent unnecessary side effects and associated costs. Trust in data scientists, adaptability of the test platform, pre-existing organisational infrastructure, and supportive organisational implementation culture were also frequently highlighted as factors supporting implementation. Lack of validated predictive biomarkers, resources and costs required to implement the test, and health providers' knowledge, beliefs and concerns around the test were underscored as factors impeding implementation.

Conclusions

This study provides an insight on the factors associated with clinical implementation and potential implementation strategies to overcome barriers for ensure successful transition of predictive biomarkers from discovery to clinical utility. Findings also inform future implementation of comparable predictive biomarkers testing platforms for other cancers.

P2

Improving routine hepatitis C testing and treatment in inpatient mental health services: a pilot implementation trial

Judith Byaruhanga¹, Meghan Macdonald¹, Emily Pollock¹, Elizabeth Roberts², Suresh Sharma³, Cassandra Lane⁴, Benjamin Moran¹, Annette Slatter¹, Swathy G Manohar⁵, Paul McNab⁵, Josh Louis⁵, Lawrence Dadd², Hemalatha Varadhan⁶, Jane Drury⁷, Jonathon Holt⁸, Cath Wood⁹, David McLeod⁸, Lisa Brankley⁸, Anand Swamy⁸, Bron B Rose⁸, Fiona Murphy⁸, Bianca Prain¹⁰, John Wiggers¹, Melanie Kingsland⁸

¹Hunter New England Population Health, Hunter New England Local Health District, NSW, Australia

²Mater Mental Health, Hunter New England Local Health District, NSW, Australia

³Hepatology, Hunter New England Local Health District, NSW, Australia

⁴The University of Newcastle, NSW, Australia

⁵Manning Base Hospital, Hunter New England Local Health District, NSW, Australia

⁶Microbiology NSW Health Pathology, JHH, NSW, Australia

⁷NSW Health Pathology, NSW, Australia

⁸Hunter New England Health District, NSW, Australia

⁹HNELHD Mental Health, Hunter New England Health District, NSW, Australia

¹⁰NSW Ministry of Health, NSW, Australia

Background

Hepatitis C virus (HCV) disproportionately impacts individuals experiencing mental illness (19%) versus the general population (1.2%). This pilot project aimed to assess: i) feasibility and acceptability of routine HCV testing and treatment in mental health services (MHS); ii) efficacy of implementation strategies to increasing HCV testing; iii) barriers and enablers of implementation.

Methods

Pre-post mixed method study in two MHS in-patient wards in the Hunter New England, NSW. Implementation strategies (including executive support, site champion, staff training and prompts) supported delivery of the following model-of-care: all patients offered HCV testing; treatment access via a nurse-led remote-prescribing model. Medical records provided testing data; validated surveys and focus groups assessed clinician acceptability and explored implementation barriers and enablers.

Results

Over 7 months of implementation support, HCV testing increased by 34% (Taree: 35%; Mater: 32%). 75% of clients diagnosed, started treatment. 100% of surveyed clinicians agreed HCV-testing was important; 100% welcomed routine testing as usual care; And 90% of clinicians reported HCV testing is implementable. Barriers to HCV care included: clinician's self-efficacy to prescribe medication, staff turnover leading to inconsistent testing, and patient-level challenges (e.g., short stays, acutely ill). Prominent enablers were: clinician's motivation to test, curative treatment, and champion support.

Conclusions

Routine HCV care in MHS is feasible and acceptable and implementation support increased HCV testing in MHS units. Data on barriers and enablers to HCV care maybe used to refine implementation strategies to support mental health clinicians. These strategies should then be tested using more robust evaluation methods, via a randomised controlled trial.

P3

Evaluation of implementation of Bodyweight Supported Treadmill Training for clients with cerebral palsy according to RE-AIM and CFIR frameworks

Rex Chan¹, Eliza Collier¹, Sarah Reedman²

¹Cerebral Palsy Alliance, Australia

²University of Sydney, NSW, Australia

Background

Bodyweight Supported Treadmill Training (BWSTT) is a strongly recommended intervention according to international clinical practice guidelines for people with cerebral palsy (CP). Implementation status in Australian clinical practice is unknown. We aimed to evaluate current implementation and barriers/facilitators to implementation of BWSTT at Cerebral Palsy Alliance (CPA), a not-for-profit allied health provider.

Methods

The RE-AIM (Reach, Effectiveness, Adoption, Implementation and Maintenance) and CFIR (Consolidated Framework for Implementation Research) frameworks were used to guide: informal interviews, a clinician survey, an equipment audit, and analysis of potential client need. The CFIR-ERIC (Expert Recommendations for Implementing Change) matching tool was then used for strategy design. This evaluation was co-designed with key stakeholders and took place over a period of 5 months, 12 months after BWSTT was first offered.

Results

Over 1400 clients may have benefited from BWSTT based on characteristics however actual reach was n=56 (4%). Twenty-five clinicians (n=17 physiotherapists, n=8 exercise physiologists, 36% response rate) responded to the clinician survey. Fifty barriers and 35 facilitators were categorized according to CFIR. The most frequently identified barrier was physical resourcing; out of 17 locations, 29% had sufficient equipment, 29% were partially enabled and 41% could not offer BWSTT. Most barriers related to the inner setting, particularly compatibility (evidence-based protocols did not match current scheduling practices). Notable facilitators included access to knowledge and information (BWSTT special interest group and institution-specific clinical practice guideline).

Conclusions

Implementation of BWSTT was suboptimal, however the evaluation revealed previously unknown barriers and enabled identification of strategies to address these.

P4

Health professionals self-rated competencies on the transfer of mosaic embryos: identify the learning needs by using a framework developed by ISCC

Lin Cheng^{1,2}, Bettina Meiser¹, Rajneesh Kaur³, Nancy Briggs¹, Edwin Kirk^{1,4}, Kristine Barlow-Stewart³, Debra Kennedy^{5,6}

¹The University of New South Wales, NSW, Australia

²University of Melbourne, VIC, Australia

³University of Sydney, NSW, Australia

⁴Sydney Children's Hospital, NSW, Australia

⁵IVF Australia, Australia

⁶Royal Hospital for Women, NSW, Australia

Background

Mosaic embryo is a common phenomenon during preimplantation genetic testing. However, there are no standard guidelines for transferring mosaic embryos, and health professionals may have inconsistent clinical practice consequently. Clinical practice can be influenced by self-rated competencies. It is not clear how health professionals perceive their ability to manage patients with mosaic embryos and their learning needs. This study aimed to identify health professionals learning needs by assessing their self-rated competencies.

Methods

We recruited Australian and New Zealand health professionals in obstetrics and gynaecology and assessed their self-rated competencies using surveys. We designed the surveys by using the framework developed by the Inter-Society Coordinating Committee (ISCC) for Physician Education in Genomics. Kruskal-Wallis tests and pairwise Dunn's post-hoc tests were performed to analyse data.

Results

Health professionals with different professional backgrounds varied in overall confidence in discussing the transfer of mosaic embryos ($\chi^2(4) = 11.01, p = .03$), practice-based learning and improvement ($\chi^2(4) = 9.72, p = 0.045$), and personal and professional development ($\chi^2(4) = 12.04, p = .02$). Post-hoc tests showed that obstetricians and gynaecologists had lower self-rated competencies in the former two aspects compared with geneticists and genetic counsellors. Those worked in reproductive medicine had a lower self-rated competencies in practice-based learning and improvement compared with geneticists and genetic counsellors.

Conclusions

This study identified the above learning needs and the groups of health professionals that need enhancement. A tailored training should be provided given the difference in self-rated competencies among health professionals.

P5

Application of Implementation Science Principles to Uplift Smoking Cessation Care in South Eastern Sydney Local Health District

Alice Cooper¹, Kat Richardson¹

¹South East Sydney Local Health District, NSW, Australia

Background

South Eastern Sydney Local Health District Population and Community Health (PaCH) clinical services offer healthcare to priority, high risk and disadvantaged groups. These groups typically have a disproportionately high smoking prevalence. The project aimed to uplift the smoking cessation care offered across PaCH clinical services by establishing a multidisciplinary working group to guide the improvement process.

Methods

A multidisciplinary working group from each clinical service was formed via invitation and support from their directors. Social network research method was used to map the stakeholders and then critically reflecting on the challenges to identify the problem areas. A collection of stories from stakeholders or testimonials were used to triangulate our analysis. Consensus building was used in an iterative process to identify and integrate potential solutions into clinical service workflows.

Results

The multidisciplinary collaboration resulted in several improvement strategies. Free Nicotine Replacement Therapy (NRT) for clients was identified as an important strategy to promote equitable access to smoking cessation care. Nurses and allied health staff were identified as being in a unique position to support clients to stop smoking. As such, a model of care was established to guide nurses and allied health staff to deliver smoking cessation care, including the provision of NRT. A tailored training package was delivered to upskill nurses and allied health staff to deliver the new model of care.

Conclusions

The project showcases the value of collaboration between clinical services in achieving standardised care provision, to ultimately improve client outcomes. The use of social network research and consensus building led to the developing solutions which are highly relevant and responsive to the local context.

P6

Visual needs of stroke survivors; How to identify vision deficits and when to refer?

Michelle Courtney-Harris¹

¹Discipline of Orthoptics, University of Technology Sydney, NSW, Australia

Background

It has been shown a significant proportion of stroke survivors do not receive appropriate or timely intervention for their visual problems. Contributing factors include the exclusion of trained eye care practitioners within the core multidisciplinary stroke team responsible for managing the patient. We aimed to develop an efficient and meaningful e-learning module to educate nurses and other non-eye care health practitioners (NECHP) working with stroke survivors.

Methods

To capture vision deficits experienced by stroke survivors, a validated bedside Vision Defect in Stroke Screening Tool (V-DiSST) was administered. In alignment with findings from V-DiSST validation, an eLearning module was developed and implemented supporting allied health professionals in the identification of deficits with a visual origin.

Results

Various NECHP (n=692) across 33 NSW Health Networks and Local Health Districts accessed the eLearning module. Of this cohort, 55% of registrants (n=373) completed the final quiz. Nurses comprised the largest cohort of registrants (61%) and completed the module within an average time of 35 minutes. Appropriate content, relevant for learning levels and patient context was reported in > 80% of NECHP. Overall, participants felt better able to identify visual conditions found in stroke survivors. Additionally, they felt better prepared to refer stroke survivors for their ocular conditions when using V-DiSST.

Conclusions

The eLearning module improved NECHP knowledge of stroke-related visual deficits, enhanced delivery confidence of V-DiSST and generates advanced referral decisions. Both resources target use for stroke survivors, however, there is potential to inform NECHP about the visual needs of other patients.

P7

Implementing exercise and nutrition services into standard oncology care in regional western Australia: a research protocol

Annie De Leo¹, Sara Bayes², Yvonne Zissiadis³, Mary Kennedy¹

¹School of Medical and Health Sciences, Edith Cowan University, Australia

²Australian Catholic College, Australia

³GenesisCare, WA, Australia

Background

Provision of evidence-based exercise and nutrition services in standard oncology care is rare despite national and international calls for widespread implementation. The resultant evidence-to-practice gap means most patients do not receive optimal care, especially in regional areas where accessibility is a known issue. Research is needed to understand and address implementation determinants for exercise and nutrition services in regional oncology care.

Methods

This mixed-methods study is a hybrid effectiveness-implementation trial of exercise and nutrition referrals in oncology care in the South West region of Western Australia. The three-year trial employs a Participatory Action Research (PAR) approach and is guided by the Exploration, Preparation, Implementation and Sustainment Framework (EPIS). Exploration: We will use clinical audits, patient surveys, interviews and focus groups to identify existing service gaps and elicit patients experiences of receiving care. Preparation: Using the information collected during the Exploration phase, and in consultation with a Stakeholder Advisory Committee, we will develop a referral system and supporting implementation and evaluation strategies to integrate exercise and nutrition services into standard oncology care. Implementation and Sustainment: We will test the effectiveness of the referral system in routine practice, monitoring for necessary adaptations to ensure best-fit solutions.

Conclusions

The study will assess the implementation and effectiveness of an integrated referral pathway for exercise and nutrition services in oncology care in regional Australia. Findings from this study have the potential to inform future efforts to provide optimal care and improve health outcomes for people receiving cancer treatment in regional settings.

P8

Enhancing the implementation of a digital fall prevention platform using the CFIR-ERIC approach

Alana Delaforce¹, Jane Li¹, Melisa Grujovski², Norm Good¹, Joy Parkinson¹, Rajiv Jayasena¹

¹Australian E-Health Research Centre, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

²Maitland Hospital, Hunter New England Local Health District, NSW Australia

Background

Falls are a major cause of Hospital Acquired Complications (HAC) and inpatient harm. Interventions to prevent falls exist, but it is unclear which are most effective and what implementation strategies best support their use. This study uses the CFIR-ERIC approach to develop an implementation enhancement plan to improve the uptake of a digital fall prevention platform.

Methods

A qualitative approach using focus groups/interview included 12 participants across four inpatient wards, from a newly built, 300-bed rural referral hospital. Interviews were coded to the Consolidated Framework for Implementation Research (CFIR) and then converted to barrier and enabler statements using consensus agreement. Barriers and enablers are mapped to the Expert Recommendations for Implementing Change (ERIC) tool to develop an implementation enhancement plan.

Results

Common CFIR enablers and barriers were revealed and mapped to the ERIC tool. Following this, six clusters of interventions were chosen for the implementation enhancement plan: Train and educate stakeholders, Utilize financial strategies, Adapt and tailor to context, Engage consumers, Use evaluative and iterative strategies, and Develop stakeholder interrelations.

Conclusions

Enablers and barriers identified are similar to those described in the literature. Given the close agreement between the ERIC consensus framework recommendations and evidence, this approach will likely assist in enhancing the implementation of the Rauland Concentric Care falls prevention platform and other similar workflow technologies and applications that have the potential to disrupt team and organisational routine.

P9

Advancing the implementation of a program for childhood cancer survivors - the role of logic models

Joseph Elias¹, Jordana McLoone², Christina Signorelli², Carolyn Mazariego¹, Claire Wakefield^{3,4}, Richard Cohn³, Natalie Taylor¹

¹School of Population Health, The University of New South Wales, NSW, Australia

²Discipline of Paediatrics & Child Health, School of Clinical Medicine, The University of New South Wales, NSW, Australia

³Behavioural Sciences Unit, Kids Cancer Centre, Sydney Children's Hospital, NSW, Australia

⁴University of New South Wales, NSW, Australia

Background

Childhood cancer survivors frequently report experiencing a number of "late effects" from cancer and its treatments, and thus require lifelong care. "Engage" is a complex intervention which aims to improve access to care using a remote-delivered and multidisciplinary approach. This program has many dynamic inputs, resources, components and underlying mechanisms of change. Our study aims to diagrammatically represent these interrelated factors by developing an intervention logic model for "Engage".

Methods

The first iteration of the intervention logic model was developed after a thorough examination of the Engage pilot study results, as well as the current trial protocol. The model was then co-refined with the program creators and evaluators.

Results

This intervention logic model represents a number of hypothesised relationships between the components, outputs and intended outcomes of Engage. Notably, the Engage program involves several distance-delivered telehealth consults, which allow survivors to easily access care and avoid long travel distances to clinic. From the logic model, it is expected that this output will result in the following outcomes: increased participation in survivorship care (short-term), increased adherence to health behaviour guidelines and participation in surveillance programs (medium-term), a reduction in the prevalence of survivors lost to follow up (long-term).

Conclusions

Ultimately, the "Engage" logic model will aid the development of an "Engage" implementation logic model to describe the causal pathways between "Engage", and the factors affecting its implementation, as well as implementation strategies, mechanisms and outcomes. Both models can be used together to inform scale-up across a wide-range of clinical settings.

P10

**What is needed to support implementation of Telehealth upper limb therapy for stroke survivors?
Development of a behaviour change intervention**

Lauren Christie¹, Nicola Fearn¹, Annie McCluskey², Natasha Lannin³, Jessamy Boydell⁴, Annie Meharg⁵, Anna Kilkenny⁶, Christine Shiner^{7,8}, Ella Howes⁹, Steven Faux^{7,8}, Sandy Middleton^{1,10,11}

¹St Vincent's Health Network, NSW, Australia

²The StrokeEd Collaboration, The University of Sydney, NSW, Australia

³Brain Recovery and Rehabilitation Group, Department of Neuroscience, Central Clinical School, Monash University, VIC, Australia

⁴Arm's Reach Occupational Therapy, Bristol, UK

⁵Harrison Training, UK

⁶Waikato Hospital, Hamilton, NZ

⁷Departments of Rehabilitation and Pain Medicine, St Vincent's Hospital Sydney,

⁸School of Clinical Medicine, University of New South Wales, Sydney

⁹ Centre for Behaviour Change, University College London

¹⁰St Vincent's Hospital Melbourne, VIC, Australia

¹¹Australian Catholic University

Background

Constraint-induced movement therapy (CIMT) is recommended in the Australian and New Zealand Clinical Guidelines for Stroke Management yet only 11% of eligible stroke survivors receive CIMT. Numerous barriers have been identified, including lack of therapist knowledge and resources but there has been limited research exploring strategies to overcome these barriers. Delivery of CIMT via telehealth (TeleCIMT) may enable more stroke survivors to participate in CIMT but may also introduce new barriers to delivery. Aim: to explore therapists perceived barriers to TeleCIMT delivery and describe the development and outcomes of a behaviour change intervention (BCI) to support TeleCIMT implementation.

Methods

Clinicians who deliver outpatient neurological upper-limb rehabilitation were recruited from three health services. Proposed behaviour change interventions including online training and resources (www.telecimt.com), virtual skills workshop, and online community of practice to support implementation, were presented to therapists during a focus group. Barriers were discussed and the behaviour change intervention refined. Therapists completed the Capability, Opportunity, Motivation, Behaviour questionnaire at baseline, after online training and post workshop to evaluate changes in therapists behaviour. Results were analysed using descriptive statistics.

Results

Identified barriers to TeleCIMT included access to technology and carer support, and lack of therapist knowledge, skills and resources. To date, eleven therapists have participated in the BCI and completed the questionnaire. Therapists reported improved confidence (baseline=36%, post=100%), knowledge (baseline=72%, post=91%) and skills (baseline=81%, post=100%) to deliver TeleCIMT following the BCI.

Conclusions

The BCI was feasible and addressed identified barriers for TeleCIMT implementation by improving therapist knowledge, confidence and skills.

P11

Of hearts and minds - an exploration of Australian cardiovascular disease policies to guide implementation of evidence-based secondary prevention programs for people with stroke

Seamus Barker¹, Seana Gall¹

¹Menzies Institute for Medical Research, University of Tasmania, TAS, Australia

Background

Secondary prevention programs for people with heart disease are imbedded into tertiary care. In contrast, there are no such programs for people that experience stroke, another form of cardiovascular disease with similar risk factors.

Methods

In the exploration phase of a project focused on implementing evidence-based secondary prevention strategies after stroke, we undertook a analysis of national and state-based cardiovascular disease policies. We used Bacchi's methodology for policy analysis to focus on how these documents framed the "problematization" of cardiovascular disease prevention for stroke and heart disease.

Results

We identified 16 national and 5 state-based policies. National policies tended to emphasise the similarities between heart disease and stroke in defining the initial problem of cardiovascular diseases including the potential of shared approaches to prevention, management and treatment. However, in specific actions of national policies and most state-based policies there was a compartmentalising of stroke from heart disease. A cross-cutting theme across documents was the emphasis on the role of primary care sector in the secondary prevention of stroke, which somewhat contrasts to heart disease where both tertiary and primary care were seen to play a role.

Discussion

The compartmentalising of stroke from heart disease in national and state-based policies may be reducing wider implementation, adaptation and scale up of existing evidence-based secondary prevention programs, including cardiac rehabilitation, for people with stroke. Further exploration of why secondary prevention of heart disease, but not stroke, is embedded in the tertiary care sector is needed to address sector-wide implementation of evidence-based programs.

P12

Assessing the scalability of healthy eating interventions within the early childhood education and care setting: Secondary analysis of a Cochrane systematic review.

Alice Grady^{1,2}, Jacklyn Jackson^{1,2}, Melanie Lum^{1,2}, Luke Wolfenden^{1,2}, Sze Lin Yoong^{1,3}

¹Hunter New England Population Health, Hunter New England Local Health District, NSW, Australia

²University of Newcastle, NSW, Australia

³Deakin University, VIC, Australia

Background

Early childhood education and care (ECEC) is a recommended setting for the delivery of health eating interventions at scale to improve child public health nutrition. Appraisal of the scalability of an intervention is recommended to guide public health decision-making. This study aimed to describe the extent to which the factors required to assess scalability are reported among ECEC-based healthy eating interventions.

Methods

Studies included in a recent Cochrane Systematic Review assessing the effectiveness of healthy eating interventions delivered in ECEC settings for improving child dietary intake in children aged six months to six years were included. The reporting of factors of scalability was assessed against domains outlined within the Intervention Scalability Assessment Tool (ISAT). The tool recommends that decision makers consider the problem, the intervention, strategic and political context, effectiveness, costs, fidelity and adaptation, reach and acceptability, delivery setting and workforce, implementation infrastructure, and sustainability. Data was extracted by one reviewer and checked by a second reviewer.

Results

Of the 38 included studies, none reported all factors within the ISAT. All studies reported the problem, the intervention, effectiveness, and the delivery workforce and setting. The lowest reported domains were intervention cost/cost effectiveness (n=5 studies) and intervention sustainability (n=6 studies).

Conclusions

Review findings indicate there is a lack of reporting on all key factors of scalability for healthy eating interventions in the ECEC setting. Such factors should be measured and reported within future studies as these are considered important to support policy and practice decision makers when selecting interventions to be scaled up.

P13

Exploring paediatric cancer genetics clinics at the intersection of mind and process maps

Sharon de Graves¹, Natalie Taylor², Andrew Grant^{3,4}, Marilyn Cruickshank^{3,5}, Kathy Tucker^{2,4}

¹VCCC alliance, University of Melbourne, VIC, Australia

²The University of New South Wales, NSW, Australia

³University of Technology Sydney, NSW, Australia

⁴Sydney Children's Hospital Randwick, NSW, Australia

⁵Sydney Children's Hospital Network, NSW, Australia

Background

Mind mapping is a powerful tool for investigating and visually representing complex structures. Similarly, process mapping visually describes steps involved in detailed processes. The intersection of these tools can facilitate a novel approach to investigating complex healthcare systems. Cancer predisposition syndromes are genetic conditions that increase an individual's risk of cancer. The field of cancer genetics is rapidly evolving, requiring new approaches to these clinics. We aim to detail the gaps, barriers and facilitators to care in paediatric cancer genetics clinics using a combination of mind and process maps.

Methods

Draft mind maps and process maps have been developed using interim findings from a scoping review and consultation with a team of experts in paediatric cancer genetics. The mapping will further develop in consultation with a small panel of consumers and clinicians. These will facilitate interview discussions with consumers and clinicians, guided by the Consolidated Framework for Implementation Research (CFIR).

Results

Draft mind maps show the clinics' complexity with varying consistency on role assignment. Draft process maps delineate adhoc referral pathways resulting in either; no follow-up, follow-up by GP, paediatrician or sub-specialty, or follow-up within cancer genetics. Gaps and barriers to optimal care exist, such as transition to adult services.

Conclusions

The interplay of mind and process maps can provide unique insights when exploring complex systems. Initial findings demonstrate care coordination for children/adolescents with a CPS is disjointed, lacking a systematic approach to their healthcare. Data will be used to guide implementation of a new paediatric cancer genetics clinic.

P14

Minimising preoperative fasting and preventing postoperative nausea and vomiting: A qualitative evaluation of barriers to implementing evidence-based guidelines

Oya Gumuskaya¹, Rosemary Carroll², David Rowe³, Jed Duff⁴

¹The University of Newcastle, NSW, Australia

²John Hunter Hospital, NSW, Australia

³Armidale Hospital, NSW, Australia

⁴Queensland University of Technology, QLD, Australia

Background

Preoperative overnight fasting of patients (no oral intake from midnight until the time of surgery) is an outdated and harmful practice; however, it remains common in Australia. The fasting period is frequently prolonged for up to 24 hours. International guidelines recommend reduced fasting time to improve patient outcomes; however, evidence is poorly implemented. This project investigates the barriers and enablers to implementing evidence for preoperative fasting and develops actionable recommendations that will inform a more extensive research programme. This research addresses an important clinical problem relevant to industry partners and health districts across Australia.

Methods

The study was informed by the Consolidated Framework for Implementation Research (CFIR), which describes the factors necessary to uptake innovations, supporting the Determinants Theory of implementation. Qualitative interviews were conducted via Zoom™ with a purposive sample of perioperative team members. Thematic analysis will be conducted using NVivo™ software with audio recordings of transcriptions. Intervention-specific codes and CFIR constructs will be used to organise the data and analysis.

Results

Twelve perioperative nurses from across Australia were interviewed. The preliminary thematic analysis revealed that the significant barriers were the lack of knowledge, clear policies, and organisational culture. Enablers were the progressive anaesthesia team leaders, the organisational culture for improving patient safety and experience, and perioperative teamwork and collaboration.

Conclusions

The outcomes of this research programme will improve patient safety and the quality of perioperative care by reducing the fasting time and consequently reducing the length of hospital stay.

P15

Measures of sustainability and sustainability determinants: A systematic review and critical appraisal

Alix Hall¹, Adam Shoesmith¹, Emma Doherty², Brydie McEvoy¹, Kayne Mettert³, Luke Wolfenden², Serene Yoong⁴, Melanie Kingsland², Rachel Shelton⁵, Shannon Wiltsey⁶, Noor Imad⁷, Rachel Sutherland¹, Nicole Nathan¹

¹School of Medicine and Public Health, The University of Newcastle, Newcastle, NSW, Australia

²Hunter New England Population Health, Hunter New England Local Health District, Newcastle NSW, Australia

³Kaiser Permanente Washington Health Research Institute, Seattle, USA

⁴School of Health Sciences and Social Development, Deakin University, Melbourne VIC Australia

⁵Mailman School of Public Health, Department of Sociomedical Sciences, Columbia University, NY, USA

⁶National Center for PTSD and Department of Psychiatry and Behavioural Sciences, Stanford Medicine, Stanford University, Palo Alto, CA, USA

⁷School of Health Sciences, Department of Nursing and Allied Health, Swinburne University of Technology, VIC, Australia

Background

Sustainability is an important and emerging field, which relates to the continued delivery and thus benefit of evidence based interventions. To adequately investigate and address sustainability, we require measures that are reliable, valid and easy to use. As an emerging area of research, the number of measures is increasing, and measurement quality is variable. High quality systematic reviews on available measures of sustainability are essential for providing evidence-based recommendations on what measures to use, identifying gaps and highlighting areas for future research.

Methods

We conducted a systematic review of the published and grey literature. We included any publication that described the development, psychometric evaluation or empirical use of a standardised, quantitative measure of sustainability or sustainability determinants. Eligibility screening, data extraction, and critical appraisal were conducted independently by two authors. The Psychometric and Pragmatic Evidence Rating Scale was used to evaluate the quality of identified measures.

Results

223 articles, describing 28 individual measures were included. The psychometric and pragmatic quality was variable, with quality scores ranging from 14 to 35, out of a possible 56 points. The Provider Report of Sustainment Scale rated the highest in quality. Few studies have been developed and/or validated for use in languages other than English.

Conclusions

Practitioners and researchers should use the results of this review to select the most relevant and psychometrically robust measure to assess sustainability or its determinants. Future research should aim to improve the psychometric and pragmatic qualities of current measures.

P16

Get to know me - A Co-Designed Bedside Communication Board to Improve the Patient and Family Experience on a Paediatric Oncology Unit

Connor Hawken¹

¹Sydney Children's Hospital Network, NSW, Australia

Background

Improved communication between patients, family and clinicians improves patient and family experience. A lack of capacity to communicate with staff, lead to negative experiences for patients and families. This gap in care, served as the impetus for the "Get to Know Me" project. The project aimed to empowered children and provide families with a mechanism to advocate for their children. The objective was to co-design and implement a communication board at the bed space in a paediatric oncology unit to improve the patient and family experience.

Methods

Survey and audit data were collected using Quick Response (QR) codes; employing a Likert scale to measure the board's usefulness in communication, experience and engagement of patients, families and staff.

Results

Of the 6 patient, 13 family and 26 staff survey responses, reports indicated a favourable 8/10 rating in improving the patient and family experience and 8/10 rating in usefulness for staff. The 83 audits indicated engagement was high (80%). Identifying data such as Name (88%), Carer's Name (87%), pets or others important to me (84%) and How I Take Medication (82%) have the highest rate of engagement.

Conclusion

This project highlights the important role communication between patient, families and nurses plays in the experience of young people with cancer and their families. Findings support patients, families and staff all contribute towards communication. More research in needed to suggest using bedside communication boards.

P17

Enablers and barriers to delivering a motor neurone disease multidisciplinary clinic in regional New South Wales

Karen Hutchinson¹, Anna Schutz², Sally Carr², Molly Reynolds², Nicholas Goodwin³, Anne Hogden⁴

¹Macquarie University, Sydney, NSW, Australia

²Central Coast Local Health District, NSW, Australia

³Central Coast Research Institute, University of Newcastle, NSW, Australia

⁴The University of New South Wales, Sydney, NSW, Australia

Background

Access to specialised motor neurone disease (MND) multidisciplinary clinics (MDC) are optimal approaches to improve quality of life, health outcomes and care experiences living with MND (plwMND). This evaluation explores the barriers and enablers to implementing a regional-based MDC.

Methods

The implementation evaluation was informed by qualitative methods using semi-structured interviews with plwMND, family caregivers, health and social care providers attending the clinic. Underpinned by the Theoretical Domains Framework (TDF), we adopted an inductive analysis approach. Barriers and enablers influencing adoption, delivery, and sustainability of MND MDC, were systematically identified through the TDF.

Results

Preliminary results highlight key enablers influencing implementation are the multidisciplinary team (MDT) expertise in MND management (skills), strong clinical leadership, and understanding and cooperation within MDT (social/ professional role and identity) and the strong belief in providing a MND MDC to optimise care and treatment (belief about consequences). Barriers related to lack of funding to support MDT time, cross sector challenges and organisational boundaries (environmental context and resources), low representation of palliative and respiratory specialist teams and absence of gastroenterology team (skills) and limited understanding of optimal MND management (knowledge).

Conclusions

This evaluation demonstrates the commitment to implement a regional based MND MDC, to optimise health outcomes and care experiences for all plwMND and their family members. This research highlights the need to remove complex organisational boundaries to foster collaborative practices and partnerships, and the importance of obtaining financial support to ensure equity and sustainability of care delivery.

P18

In real-time - collecting the experiences of consumers accessing care virtually

Donna Parkes¹, Julia Chessman¹, Stacey Hutchinson¹

¹NSW Agency for Clinical Innovation, NSW, Australia

Introduction

myVirtualCare is a NSW Health custom-built clinical videoconferencing platform. It was first used clinically in November 2019. The platform incorporated the ability to collect patient-reported experience measures (PREM) for virtual care in real-time.

Methods

In November 2020, a literature review identified that no validated real-time question set existed to capture the patient experience following a virtual care appointment. The Agency for Clinical Innovation (ACI) collaborated with the Bureau of Health Information (BHI), eHealth NSW, consumers and carers developing a survey tool and embedded this into the platform for statewide use from 1 July 2021. The survey tool consisted of 10 questions, with a choice to include the final question highlighting the need to provide moderation of survey responses where included. In April 2022, responses collected by the survey tool between July 2021 and March 2022 were analysed. During that time, 25,759 surveys were completed across 15 local health districts (LHDs) and two specialty health networks (SHNs).

Results

The result demonstrated an overwhelming acceptance and positivity towards patient's experience of virtual care and the myVirtualCare platform.

Conclusions

This data is extremely valuable in the broader context of the NSW Health Future Health strategy where technology use plays a significant role in achieving the vision of a sustainable health system that:

- delivers outcomes that matter most to patients and the community
- is personalised
- invests in wellness
- is digitally enabled.

P19

Care coordination for children in rural New South Wales: Barriers and enablers during early implementation

Karen Hutcinson¹, Raghu Lingam², Hayley Smithers-Sheedy², Kirsten Bula³, Diana Collings³, Yvonne Zurynski¹

¹Macquarie University, Sydney, NSW, Australia

²The University of New South Wales, Sydney, NSW, Australia

³Sydney Children's Hospital Network, NSW, Australia

Background

The Rural Kids Guided Personalised Service (RuralKidsGPS) is an innovative integrated model of care coordination for children and young people living with medical complexity, in four rural local health districts across New South Wales. This study explores early implementation barriers and enablers to inform contextual adaption and ensure scalability across diverse health settings.

Methods

A mixed methods implementation evaluation informed by qualitative methods using semi-structured interviews, and focus groups with healthcare professionals, managers, parents, and children.

Underpinned by the Consolidated Framework for Implementation Research (CFIR), analysis was conducted using a hybrid deductive/inductive approach to identify barriers and facilitators.

Results

The key themes highlight considerations of local context, processes, leadership, and resources as fundamental to implementation and sustainability. A strong commitment of care coordinators to implementing RuralKidsGPS whilst leveraging local knowledge and networks within health, social care and disability systems, enabled delivery of family-centred care across diverse socio-economic and cultural backgrounds. Inability to share healthcare information across jurisdictions, and staff changes have impacted the timely implementation of RuralKidsGPS and delivery of care coordination. Support from healthcare managers and professionals, and access to local resources and networks enabled nurse coordinators to adapt and implement RuralKidsGPS but streamlining workflows will be crucial for model adoption and sustainability.

Conclusions

Early findings highlight the importance of adaptation to local contexts, and the important role of care coordinators who help with navigation of complex health care systems. Ongoing implementation evaluation guided by the CFIR will further elucidate barriers and enablers of adoption and sustainability.

P20

Parents experience and satisfaction of care decades after implementation of fathers' attendance at birth

Mike Etemady¹, Marjan Khajehei²

¹University of Sydney, Sydney, NSW, Australia

²Westmead Hospital, Sydney, NSW, Australia

Background

In the last century, the role of fathers in the birth has changed exponentially. Before the 1970s, the principal view was that birth was a female business and not a man's place. Changing cultural and professional attitudes around the emotional bond between a man and a woman, family structure and the more proactive involved role of men in the family have encouraged fathers' attendance at birth.

Effects on fathers

Although birth will end with the miraculous moment of birth, it can be overshadowed by less attractive images. What happens in the birth room and the fathers' reaction to the graphic experience of birthing can be unpredictable. Despite the fact that most men are absolutely thrilled to be in the delivery room, for some men, a very intimate body part can become completely desexualised and they can experience psychological and sexual scarring. They may then associate their partners with a disturbing scene, and it can dramatically affect their relationships.

Effects on mothers

While most women want the expectant fathers by their side for this life-changing event, not all of them may be happy for their partners to watch the perineum to be cut or stitched or when large blades of forceps are inserted inside the vagina. Anecdotal reports have shown that consent is not sought from the labouring women as to whether they want their partners to watch these procedures.

Assessment of customers satisfaction after implementing changes

After wide-spread implementation of fathers' attendance at birth, the majority of research has focused on men's and women's retrospective attitudes towards their birth experience. However, no research has investigated whether women need to be asked for their consent before inviting their partners to closely watch the childbirth, nor men's consent for the birth room attendance has been investigated. Further research is needed to understand the parents' experience and expectations of childbirth.

P21

Is there a relationship between acceptability and sustainable adoption of a healthcare intervention? A mixed methods study on oral health care after stroke.

Marlena Klaic¹, Roisin McGrath¹

¹University of Melbourne, VIC, Australia

Background

There is a large evidence-base demonstrating the relationship between routine oral health care (OHC), such as brushing teeth, and overall health and wellbeing. For survivors of stroke, OHC reduces the incidence of aspiration pneumonia and cardiovascular disease. Yet, despite the evidence base, clinical recommendations and seeming simplicity of this intervention, hospitalised survivors of stroke continue to receive inconsistent support with OHC. To date, strategies aiming to address this evidence-practice gap have focused on education packages but these have failed to result in sustainable practice change. This study explores whether acceptability of OHC interventions is related to fidelity, feasibility and sustainable adoption.

Methods

Data were collected from two Victorian health services. Participants were all staff working on either the acute or rehabilitation stroke unit. A mixed methods approach was used including online questionnaires, focus group discussions and medical record audit. Data from the questionnaires and focus groups were analysed using the theoretical framework of acceptability and the theoretical domains framework. Medical record data were analysed descriptively.

Results

Two focus group discussions (N=16) were conducted, 39 questionnaires were completed and 60 medical records were audited. OHC interventions have low acceptability particularly for perception of burden, self-efficacy and opportunity costs. Participants had high knowledge and beliefs in consequences related to OHC but low belief in capabilities. The medical record audit revealed low fidelity and feasibility.

Conclusion

Interventions aiming to improve health professional delivery of OHC interventions with hospitalised survivors of stroke should focus on strategies to enhance acceptability, particularly self-efficacy and burden.

P22

Measuring success - implementation of the MOHMQuit trial to improve smoking cessation support in pregnancy

Jo Longman¹, Larisa Barnes¹, Megan Passey¹

¹University of Sydney, Sydney, NSW, Australia

Background

Smoking is the single most important preventable cause of adverse pregnancy outcomes. These outcomes can be avoided if pregnant women stop smoking. Although many pregnant women are motivated to stop, they face significant challenges including a lack of effective support from health professionals.

Methods

MOHMQuit (Midwives and Obstetricians Helping Mothers to Quit smoking) is a multi-component intervention developed using the Behaviour Change Wheel. MOHMQuit takes a whole-of-system approach and includes system-, clinical leader- and clinician-focused elements, and was designed to be replicable and scalable. The real-world effectiveness of the intervention is currently being assessed using a cluster-randomised stepped-wedge trial in nine maternity services providing antenatal care in NSW. The trial has multiple aims including: testing the effectiveness of MOHMQuit in increasing cessation among pregnant women; determining the effectiveness of MOHMQuit in changing clinician knowledge, confidence and attitudes and provision of cessation support; and exploring a range of implementation outcome measures to assess context, reach and fidelity and maintenance and sustainability of the intervention.

Results

The trial will run for three years, and final results will be available in 2025.

P24

Development of consumer information leaflets to support TAPERiNG of Opioids in older adults with low back pain and hip and knee osteoarthritis (TANGO)

Alessandra C Mareclo¹, Emma Ho¹, David Hunter^{1,2}, Sarah Hilmer^{1,2}, Natali Jokanovic^{3,4}, Joanna Prior¹, Ana P Carvalho-e-Silva⁵, Manuela Ferreira¹

¹Faculty of Medicine and Health, The Kolling Institute, School of Health Sciences, University of Sydney, NSW, Australia

²Royal North Shore Hospital, Sydney, NSW, Australia

³The Alfred Hospital

⁴Monash University, VIC, Australia

⁵John Walsh Centre for Rehabilitation Research, Sydney Medical School Northern, Faculty of Medicine and Health, University of Sydney, NSW, Australia

Background

Although most guidelines recommend against the use of opioids for chronic musculoskeletal conditions, the rate of opioid prescription has been increasing globally. However, deprescribing opioids is complex and can be hindered by prescriber and patient-related barriers. To address these barriers, co-production is crucial to ensure that resources have high readability, usability, and acceptability. The aim was to develop educational consumer leaflets to support opioid tapering in older people with low back pain (LBP) and hip or knee osteoarthritis (HoKOA), and evaluate the perceived usability, acceptability, and credibility of the consumer leaflets from the perspective of consumers and health care professionals (HCP).

Methods

Prototypes of educational consumer leaflets included a brochure and a personal plan developed by a team of LBP, OA and geriatric pharmacotherapy researchers and clinicians. The prototypes were evaluated by two review panels involving consumers and/or carers, and HCPs via an online survey. Outcomes were the perceived usability, acceptability, and credibility of the leaflets. Feedback from the consumer panel was used to refine the leaflets before review by the HCP panel. Additional feedback from the HCPs was then used to refine the final version of the leaflets.

Results

Both consumers and HCPs perceived the leaflets to be usable, acceptable and credible. Consumers and HCPs rated the brochure against several categories, which scored between 70% - 84% and 90% of positive responses respectively.

Conclusions

This study led to the development of educational consumer leaflets to support the reduction of opioid use in older people with LBP and HoKOA.

P25

Using process mapping to elicit recommendations to establish an informed financial consent process in cancer services

Carolyn Mazariego¹, Raylene Cox², Elizabeth Kennedy³, Kate Whittaker², Megan Varlow², Natalie Taylor¹

¹School of Population Health, The University of New South Wales, Sydney, NSW, Australia

²Cancer Council Australia, Sydney, NSW, Australia

³The Daffodil Centre, The University of Sydney, NSW, Australia

Background

Despite the known negative psychological and physical impacts financial toxicity has on people affected by cancer, a gap remains in the establishment of standard processes to ensure that informed financial consent (IFC) is obtained within cancer care settings. This study aimed to understand existing pathways of established IFC processes to develop general recommendations as to how IFC can be implemented in various cancer clinical care settings.

Methods

Oncological health providers were invited to participate in semi-structured interviews. The Consolidated Framework for Implementation Research (CFIR) informed the development of interview questions. An aggregated process map of recommendations as to instances where IFC discussion could take place during patient consultation and supporting strategies utilised were elicited through deductive thematic analysis.

Results

Ten oncological medical professionals participated in interviews. Individualised process maps were established, confirmed, and refined by the different participants. Key components of the individual IFC process maps were characterised and led to the development of an aggregated process map. Key components included; establishment of centralised points of contact, consolidated information delivery, reiteration and follow-up.

Conclusions

The themes and aggregated process map provide recommendations on essential practices to support oncological medical professionals to meet the standard for IFC. The study produced examples of practical actions and recommendations for healthcare professionals and services to consider when adopting IFC processes. Furthermore, the study stands as a methodology example of how process mapping can be used to develop recommendations for implementation of a standardised process.

P26

Applying the Theoretical Framework of Acceptability in a short-stay care pathway after arthroplasty: Learnings from a theory-informed qualitative study

Cassie McDonald¹, Camille Paynter¹, David Story¹, Jill Francis¹

¹University of Melbourne, VIC, Australia

Background

Acceptability of a healthcare intervention is proposed to be essential for implementability and scaling. The Theoretical Framework of Acceptability (TFA) has been rapidly adopted to assess acceptability, however, it has rarely been used in surgical contexts. The primary aim of this study was to assess acceptability of a complex surgical intervention: a short-stay care pathway after arthroplasty. Potential methodological and theoretical developments for the TFA were considered during study design and conduct.

Methods

A theory-informed qualitative study was conducted from July-October 2021 (ethics approval 2021-22186-20081-4). Consecutive patients (n=15) at least 3 months after arthroplasty were recruited from a single site that offered a short-stay care pathway. Individual semi-structured interviews were conducted with participants using an interview guide based on the TFA. Data were analysed with the Framework Method inductively, then deductively.

Results

Perceived effectiveness was a strong driver of acceptability. Aspects of the intervention which limited acceptability included: timeliness of clinical assessments (perceived safety), effort required to manage at home (burden) and feeling anxious prior to surgery (affective attitude). To address a gap in the sufficiency of the TFA, the construct 'perceived safety and risk' was added. An existing construct (opportunity costs) was redefined to reflect bi-directional acceptability issues.

Conclusions

Overall, a short-stay care pathway after arthroplasty was acceptable to patients. Proposed refinements to the TFA which can be applied in future implementation research include adding the construct of 'perceived safety and risk' and using the redefined construct of 'opportunity costs and gains'.

P27

EQUIPping tertiary care for the optimal diagnosis of Primary Aldosteronism

Angela Melder¹, Heather Morris¹

¹Health and Social Care Unit, Monash University, VIC, Australia

Background

Hypertension is a leading risk factor for death. Improved blood pressure (BP) control can save more lives on a population basis than any other clinical intervention. Primary Aldosteronism (PA) is the most common cause of potentially curable high BP. Early diagnosis and prompt treatment can improve high BP and minimise the sequelae. Currently there is unmet clinical need and inefficiencies in the health system leading to missed, delayed or even incorrect diagnoses in patients with PA. Our research explores scalable strategies to implement an efficient PA diagnostic pathway, particularly focussing on one aspect of the process, adrenal vein sampling (AVS), in the tertiary health care in Australia.

Methods

A systematic review has identified evidence about implementation processes. This has aided our understanding of how efficient PA-AVS diagnostic pathways can be implemented and scaled. Qualitative investigations including interviews with clinical leaders across Australia and surveys of clinician and patient perspectives have begun and will triangulate our interpretation of the evidence about implementation and scale-up.

Results

The Consolidated Framework for Implementation Research has guided the analysis of evidence, interview and survey data. This body of information enabled the development of an implementation plan and logic model for scale-up.

Conclusions

Our research will address inconsistent diagnostic methods, inefficient implementation and use of AVS, and pilot processes to improve the quality and consistency of patient care.

P28

Should I Take Aspirin (SITA): trialling a decision aid for cancer chemoprevention

Shakira Milton¹, Jennifer McIntosh¹, Finlay Macrae², Patty Chondros³, Lucy Boyd³, Rushani Wijesuriya⁴, Sibel Saya³, Napin Karnchanachari³, Kitty Novy³, Natalie Taylor⁵, Mark Jenkins¹, Fiona Walter⁶, Lyndel Trevena⁷, Javiera Martinez Gutierrez³, Kate Broun⁸, Sarah McGill⁹, Sara Whitburn¹⁰, George Fishman, Julie Marker, Max Shub, Jon Emery³

¹Melbourne School of Population and Global Health, University of Melbourne, VIC, Australia

²Colorectal Medicine and Genetics, The Royal Melbourne Hospital, Melbourne, VIC, Australia

³Department of General Practice, University of Melbourne, Melbourne, VIC, Australia

⁴Murdoch Children's Research Institute, Melbourne, VIC, Australia

⁵School of Population Health, University of New South Wales, Sydney, NSW, Australia

⁶Wolfson Institute of Population Health, Queen Mary London University, London, UK

⁷School of Public Health, University of Sydney, Sydney, NSW, Australia

⁸Prevention Department, Cancer Council Victoria, Melbourne, VIC, Australia

⁹Cancer Institute of New South Wales, Sydney, NSW, Australia

¹⁰Belmore Road Medical Centre

Background

Australian guidelines recommend that all people aged 50-70 consider taking aspirin for 2.5 to 5 years to reduce their risk of colorectal cancer (CRC).

Methods

Randomised controlled trial with patients from six general practices in Melbourne, Australia, which aimed to test the efficacy of a health consultation and use of a decision aid, to present the benefits and harms of taking low-dose aspirin, on two co-primary outcomes including informed decision-making at one-month and uptake of aspirin at six-months. Consultation presenting the aspirin decision aid. Control: talk presenting a brochure on ways to reduce CRC risk. A sample of 50-70-year-olds was consecutively recruited when attending their general practitioner. Co-primary outcomes were informed choice at one month and self-reported aspirin uptake at six months.

Results

261 participants (87% of eligible patients) were randomised (129 intervention, 132 control). There was an 8.8% increase in informed choice at 1 month (97.5% CI for difference, odds ratio (OR) 2.42 (97.5% CI: 0.92 to 6.36) $p=0.040$). There was no difference in aspirin use at six months between arms (-3.3% difference between the study arms, 97.5% CI for difference OR:0.72 (97.5% CI: 0.29 to 1.77; $p=0.408$). For the complete case analysis ($n=113$ intervention, 118 control), there was a 10.9% (97.5% CI: 2.3 to 19.5%) absolute increase in informed choice at one month in the intervention arm [OR:2.76 (97.5% CI: 1.03 to 7.42 $p=0.021$).

Conclusions

A decision aid about aspirin for cancer and cardiovascular disease prevention increased short-term informed decision-making but had no effect on aspirin use in the medium term.

P29

Building Implementation Capability within Rehabilitation in Lower Middle-Income Countries

Lucio Naccarella¹, Wesley Prior²

¹Melbourne School of Population and Global Health, University of Melbourne, VIC, Australia

²Nossal Institute for Global Health, University of Melbourne, VIC, Australia

Background

Evidence about what works in rehabilitation is improving every day. In low and middle-income countries (LMICs), rehabilitation is under-resourced, and the evidence-base is dominated by research in higher-income settings, resulting in poor access, inequities, and poor health outcomes. Implementation science enables exploration of how evidence can be adapted and implemented in diverse contexts, but is under-utilised in rehabilitation. Aiming to: explore implementation barriers, build implementation capability, develop practical implementation training, an Online implementation science training was piloted as part of USAID funded ReLAB-HS initiative to strengthen integration of rehabilitation within and across health system levels.

Methods

An introductory 1.5 hour Short Course and a 16 hour Foundational training was piloted for rehabilitation leaders in Pakistan and Uganda. Training included: asynchronous (videos, readings, brainstorming, quizzes, key learning activities) and synchronous (webinars) activities.

Results

Sixty-two rehabilitation leaders expressed an interest, 28 started, and 9 completed the training. Trainee feedback was positive, with content reported as informative and leading to renewed commitment to the implementation of evidence-based rehabilitation practice. Overall, the lessons included: online learning is misaligned with trainee motivations, readiness, capacity and ways of learning; linking implementation science should align directly with individual learner context including learning transfer authorising environment.

Conclusions

Building implementation capability that aligns with rehabilitation in LMICs has implementation research and practice implications: Engaging with rehabilitation sector key stakeholders to shift from an implementation science training “push” to a “pull” approach, with rehabilitation-led implementation science training, increasing training alignment and learning transfer into rehabilitation work practices.

P30

Implementing Arts programs for community-dwelling people living with dementia: implementation and program outcomes

Claire O'Connor¹, Roslyn Poulos¹, Michelle Heldon², Costanza Preti², Elizabeth Beattie³, Christoph Poulos²

¹University of New South Wales, Sydney, NSW, Australia

²HammondCare, Australia

³Queensland University of Technology QLD, Australia

Background

The majority of Australians with dementia live in the community with support from family carers. Arts on Prescription at Home (AoP@Home) Arts and Dementia was recently rolled out as a new service by a large community aged care provider in Sydney, Australia. Over 8-10 weekly sessions in the home of the person with dementia and their family supporter(s), AoP@Home involves a professional artist using the client's preferred art form (e.g. music, visual arts, singing, drama) to actively engage them in art-making.

Methods

Throughout program roll out, we evaluated the implementation process such as feasibility, uptake, and costs, and experiences from artists, managers and clients about the program and implementation process. Additionally, we evaluated program outcomes via personal goal attainment, wellbeing, and Patient Reported Experience Measures for clients with dementia and their family supporters who engaged in an AoP@Home program. This hybrid process of evaluation was used to maximise the likelihood of sustainable practice change and to inform broader service development.

Results

Following COVID-19 related delays, n=6 participant dyads were recruited. Programs were delivered flexibly to align with funding availability; challenges were identified around a largely casual artist workforce. All people with dementia and carers rated their health and wellbeing greater post-program, compared to baseline. The majority of goals were achieved greater than expected, and the majority of participants were extremely likely to recommend AoP@Home for others living with dementia.

Conclusions

AoP@Home is feasible to implement using available Government funding programs. Providers should consider establishing a permanent Arts Engagement Team.

P31

Remember to change the batteries: Learnings from the Victorian Healthy Homes Program

Katie Page¹, Lutfun Hossain¹, Dan Lui¹, Rosalie Viney¹

¹University of Technology Sydney, NSW, Australia

Background

Implementing any government program has its challenges but combine that with a randomized control trial (RCT) and economic evaluation embedded into the program design and the challenges are both more numerous and complex. The Victorian Healthy Homes Program (VHHP) was a RCT of a residential thermal comfort and energy efficiency upgrade program targeted at 1000 vulnerable Victorian residents. The program was implemented over three years with the aim to improve the health outcomes of elderly residents as well as to demonstrate economic viability. We discuss the lessons learned from implementing the VHHP, a real-world trial with significant policy implications.

Methods

We performed a retrospective qualitative analysis of interview data with key stakeholders. Fourteen in-depth semi-structured interviews were conducted via Zoom in April and May 2021, in the final stages of the rollout of the program. All organisations involved in the program were represented, including researchers, delivery partner, and the implementation partner/funder. Data were analysed using thematic analysis in both Leximancer and Word and were guided by the CFIR implementation science framework.

Results

Key themes include communication, nature of the intervention, research impacts, and unforeseen external impacts. We discuss these themes, their applicability to other government programs and the impacts on the outcomes of the program. We provide a range of recommendations for the implementation of large-scale complex research trials in government funded programs.

Conclusions

Large scale, real-world trials have significant implementation challenges. We hope to use these insights to inform design and implementation of a similar trial in NSW.

P32

Diabetes Alliance Program: A Story of Increasing Scale and Success

Alexis Hure¹, Martha Parsons², Morag Joseph², Michelle Kriss^{3,2}, Shamasunder Acharya²

¹School of Medicine and Public Health, University of Newcastle, NSW, Australia

²Hunter New England Local Health District, NSW, Australia

³Community and Aged Care Services, Greater Newcastle Sector, NSW, Australia

Background

The Diabetes Alliance Program support the health and wellbeing of regional, rural and remote communities by improving access to specialist services, resources, and training that empowers people to better manage diabetes. The program was piloted in 2015-2016 as a partnership between Hunter New England Local Health District and the Hunter New England Central Coast Primary Health Network. After demonstrating efficacy, it was funded as business-as-usual by the partnering organisations from 2017.

Methods

This diabetes integrated care program involves:

- (i) specialist-led case conferencing between tertiary and primary care clinicians in the General Practice setting (N=4650 delivered),
- (ii) data driven quality improvement activities at the whole of practice level (138 practices), and
- (iii) masterclass education events for clinicians and health professionals (delivered to approximately 2000 health professionals).

The program (ACTRN12622001438741) has undergone continuous quality improvement, including studies on clinical efficacy, qualitative studies of patient and clinician experience, micro-costing compared to tertiary outpatient services, and quantification of spillover benefits to >22,000 patients with type 2 diabetes.

Results

Successful implementation and evaluation of this program has recently attracted significant external funding and increased stakeholder engagement. Launching in 2023, Diabetes Alliance Program Plus (DAP+) will expand the current offerings to include a First Nations adapted model of care (Yarn Ups), and access to a Medibus, urgent care, telehealth, and self-help digital supports.

Conclusions

DAP+ has vision to scale to other regional areas, beyond the Hunter New England Local Health District, to improve population health and make access to healthcare more equitable.

P33

Co-design in health research: A systematic overview of reviews and development of an evaluation framework.

Sanne Peters¹, Lisa Guccione², Jill Francis¹, Stephanie Best², Emma Tavender³, Janet Curran⁴, Stephanie Rowe, Katie Davies⁵, Marlena Klaić¹

¹University of Melbourne, VIC, Australia

²Department of Health Services Research and Implementation Science, Peter MacCallum Cancer Centre, VIC, Australia

³Murdoch Children's Research Institute, Melbourne, VIC, Australia

⁴School of Nursing, Dalhousie University, NS, Canada

⁵Neurological Rehabilitation Group, Australia

Background

Co-design with patients and staff has been widely used in applied health research. While it appears to be ethically the right thing to do, a rigorous evaluation of its impact is frequently missing. Such an evaluation is important to determine whether research co-design helps to make healthcare interventions more effective, sustainable and scalable. We aimed to build on current literature to develop a framework to assist researchers with the evaluation of their co-design processes.

Methods

We searched OVID (Medline, Embase, PsycINFO), EBSCOhost (Cinahl) and the Cochrane Database of Systematic reviews. Abstracts and full text screening were performed by two independent reviewers and disagreements were resolved through discussion or with a third reviewer. Data extraction was facilitated by a data extraction table. A preliminary framework was developed based on the review findings and discussions within the review team. Two consensus meetings, involving patients, healthcare professionals and researchers, were held to interpret and critique review findings and refine the preliminary Co-design Evaluation Framework.

Results

Our preliminary Co-design Evaluation Framework included five components: 1) participants involved in the evaluation; 2) timing and frequency of assessments; 3) how evaluation data were collected and by whom; 4) whether a framework was applied and 5) outcomes reported. Outcomes were categorised at the following three levels: Context, process and impact.

Conclusions

This Co-design Evaluation Framework provides a structure for evaluating co-design processes of different intensities. Evaluating co-design will give insight into potential areas of improvement to maximise the benefits of co-design.

P34

The CPA Staff Research Participation Model: a health research capacity development program as a research translation strategy in allied health

Sarah Reedman^{1,2}, Kelly Wier^{3,4}, Cathy Morgan^{1,2}, Petra Karlsson^{1,2}, Maria McNamara^{1,2}, Anna te Velde^{1,2}, Ashleigh Hines^{1,2}, Emma Stanton^{1,2}, Jane Berry², Jo Ford², Iona Novak^{1,2}

¹University of Sydney, Sydney, NSW, Australia

²Cerebral Palsy Alliance, Australia

³Gold Coast Health, QLD, Australia

⁴Griffith University, QLD, Australia

Background

Health research capacity development (HRCd) programs aim to improve clinician research capability with resulting impacts on research activity and research translation within a health service. Most HRCd programs have been developed and evaluated in public tertiary health services, however most allied health providers work outside this setting. Cerebral Palsy Alliance (CPA) is a not-for-profit community provider with over 200 allied health staff and a world-leading research team. We aimed to design, implement and evaluate a HRCd program at CPA.

Methods

The CPA Staff Research Participation Model features 3 elements: (1) n=6 clinicians matched with identified research projects and provided protected time (0.2FTE) to engage in research, mentoring, and learning aligned to a new research competency framework; (2) team and organisation level changes to systems, standard operating procedures and available resources to support clinician-researcher activity, and (3) appointment of a staff member to manage the project, act as a liaison between research and clinical services, and support all interested clinicians to access literature, develop project proposals and submit funding applications.

Results

Evaluation will be supported by: (1) a pre-post clinician survey (including demographic questionnaire, Research Culture and Capacity tool, Individual Research Engagement Continuum, and customized, Theoretical Domains Framework-based survey on barriers and facilitators to research participation), and (2) implementation outcomes specific to the research projects included in the program, particularly of reach and adoption.

Conclusions

This evaluation will provide insight into success of a HRCd program by a private provider to improve health research capacity, culture and translation.

P35

Implementing Patient-Reported Measures in NSW Health - Measuring What Matters

Carolyn Ripper¹, Nerida Walker¹

¹Agency for Clinical Innovation, Australia

Background

NSW Health is accelerating towards a value-based healthcare (VBHC) system. As such, statewide enablers, such as the collection and use of patient-reported measures (PRM), are being prioritised and implemented. NSW Health has invested in an integrated IT platform to collect/use PRM, the Health Outcomes and Patient Experience (HOPE) platform. The platform is jointly developed by the Agency for Clinical Innovation (ACI) and eHealth NSW, in partnership with other stakeholder groups. The PRM program was developed with significant stakeholder engagement, and utilises a staged implementation approach, starting on a small scale, and increasing scope gradually based on “failing safe”, proactive feedback loops and transitioning lessons learnt into program improvements. Sites have executive leadership engaged, sponsorship identified and well-established governance. Local PRM leads have been permanently recruited and positioned within an appropriate local directorate to ensure effective enablement of district-wide support for the implementation into business as usual. The program has also been implemented into select primary care locations, with plans to integrate into GP software.

Methods

A “train the trainer” just-in-time approach has been utilised, along with Accelerated Implementation Methodology (AIM) principles to support local leads in their confidence with implementation and change management. Change and adoption principles such as a 90/60/30 to go live readiness assessment ensure all parties are aware of and accountable to their required readiness activities.

Results

Implementation achieved across every LHD/SHN in NSW.

- Implemented in >450 clinical locations statewide
- 46,000 surveys completed
20,000 patients registered and consented
- 930 clinicians
- >20 patient cohorts

Conclusions

The successful implementation approach of the PRM program supports the incremental adoption and use of PRMs and is ensuring change management statewide.

P36

Implementation of professional services in Australian community pharmacies: a cross-sectional survey

Veronika Seda¹, Carl Schneider¹, Rebekah Moles¹, Stephen Carter¹

¹School of Pharmacy, Faculty of Medicine and Health, University of Sydney, NSW, Australia

Background

The practice scope of community pharmacies has evolved from dispensaries to healthcare hubs, offering a wide range of professional services in Australia. However, professional services are implemented variably across the pharmacy sector. A cross-sectional survey of Australian community pharmacists was used to ascertain the importance of implementation elements for the implementation of professional services.

Methods

The Cochrane Qualitative & Implementation Methods Group's (CQIMG) twelve key dimensions of implementation were adapted for the cross-sectional survey. Content and expert validity assessments were undertaken. On ethics approval, the web-based survey was distributed among practising community pharmacists in Australia in 2022. Descriptive statistics and exploratory factor analysis using MPlus with Full information Maximum Likelihood using a robust estimator (FIML-R) were conducted.

Results

Eligible responses (n=108) from all Australian jurisdictions were obtained. Pharmacists reported delivery of professional services to 9,128 people over the past 14 days, with 40% (n=43) of pharmacists working for 10 or more hours on professional services. The most delivered services were Immunisation (4,147 events) and Dose administration aids (3,116 events). There is preliminary evidence for the existence of two factors for implementation elements, Internal and External. The high error in model fit (RMSEA = 0.100) is likely related to data size, low communalities and multivariate kurtosis arising from the five-point Likert-scale.

Conclusions

The preliminary data highlighted that professional services play a significant part of Australian community pharmacists' workloads. Pharmacists may dichotomise the importance of implementation features into internal and external factors.

P37

Evaluation of SA Health Implementation Science Community of Practice using RE-AIM implementation framework

Veronika Seda¹, Rachel Newrick¹, Simon Evans¹

¹Department for Health and Wellbeing South Australia, Implementation Science Unit, SA, Australia

Background

The Implementation Science Community of Practice (ISCOP) is a unique South Australian (SA) network of SA Government employees (n=249), formed in November 2021 from like-minded SA Health staff. New members have been added to the group on request and membership has grown through word of mouth. The aim of the evaluation was to explore the implementation of key ISCOP deliverables and evaluate the services delivery through the application of an evidence-based implementation framework. The results will be applied to effectively benchmark and improve quality.

Methods

The retrospective evaluation applied the RE-AIM implementation framework to evaluate operations and service delivery and was performed during December 2022. The evaluation included data analysis and thematic analysis from anonymous semi-structured interviews conducted with random sample of ISCOP members.

Results

The evaluation is currently in progress with results in January 2023.

Conclusions

Application of RE-AIM implementation framework is, to our knowledge, the first application of implementation science methodology in the context of Government evaluation in South Australia. The evaluation is currently in progress and will be completed in January 2023.

P38

Identifying key determinants influencing sustainment of public health interventions in schools and early childcare settings

Adam Shoesmith¹, Alix Hall¹, Luke Wolfenden², Rachel C Shelton³, Byron J Powell⁴, Serene Yoong⁵, Cassandra Lane¹, Nicole Nathan²

¹University of Newcastle, NSW, Australia

²Hunter New England Population Health, Hunter New England Local Health District, Wallsend, NSW Australia

³Department of Sociomedical Sciences, Mailman School of Public Health, Columbia University, NY, USA

⁴Brown School and School of Medicine, Washington University, St. Louis, MO, USA

⁵School of Health & Social Development, Faculty of Health, Deakin University, VIC, Australia

Background

This review aimed to identify factors that influence sustainment of interventions in schools and childcare services that address the leading risk factors of chronic disease.

Methods

Seven electronic databases were searched from inception to March 2020, as well as relevant reference lists. Articles were included if they were published in English, and reported on school or childcare stakeholders' perceived barriers or facilitators to sustainment of interventions addressing poor diet/nutrition, physical inactivity, obesity, tobacco smoking, or harmful alcohol use. Any research design (qualitative or quantitative) were eligible. Article screening, data extraction and synthesis were conducted independently in duplicate. Identified factors were coded against the Integrated Sustainability Framework.

Results

Of the 13,158 articles identified, 31 were eligible. Overall, 29 articles were undertaken in schools and two in childcare settings. The main health behaviours targeted were physical activity (n=9), diet (n=3), both diet and physical activity (n=15), and smoking (n=4). There were 59 barriers and 74 facilitators identified. There were little differences in the factors identified for schools and childcare settings. The majority of factors were mapped to the 'inner contextual factors' domain of the Integrated Sustainability Framework, and included: availability of facilities or equipment, continued executive or leadership support present, and team cohesion, support, or teamwork.

Conclusions

Identifying strategies to improve intervention sustainment requires a comprehensive understanding of factors that may influence their ongoing delivery. The findings from this review can help to guide development of strategies to improve intervention sustainment in the school and early education settings.

P39

Barriers and facilitators to implementing blended models of care into psychology services in Australia

Samantha Spanos¹, Belinda Parker², Kathleen O'Moore³, Jill Newby³, Alexis Whitton³

¹Australian Institute of Health Innovation, Macquarie University, Sydney, NSW, Australia

²Larkley PTY LTD, NSW, Australia

³Black Dog Institute, Sydney, NSW, Australia

Background

Blended models of care that integrate digital interventions into psychological therapy can improve the quality and standardisation of treatment for individuals with depression and anxiety. However, integrating digital programs into psychological therapy can be challenging, and research is needed to inform the development of an implementation model for blended care in Australian mental health settings.

Methods

The Consolidated Framework for Implementation Research (CFIR) guided the design of an online survey administered to psychologists (n = 33) to assess implementation needs for a new blended care program for adults with depression and anxiety. Psychologists rated agreement with 41 statements that referenced constructs within CFIR domains.

Results

Three quarters of psychologists reported feeling confident in using online programs in the context of psychological therapy. Factors perceived to be important to implementation were related to client needs (e.g., being able to tailor the intervention to client's goals and capabilities, ensuring the program was a good fit with the client's cultural and linguistic background), communication (e.g., opportunities for peer consultation for psychologists to support implementation), workplace culture (e.g., open discussion at all levels of a practice about implementation barriers), and readiness for implementation (e.g., access to the necessary training required to implement the program).

Conclusions

Using the CFIR, we identified that client, practitioner, and contextual factors are perceived as important for implementing blended care into routine therapy. Together with an ongoing qualitative component, this research contributes to the development of effective implementation strategies for integrating blended care into psychological therapy settings.

P40

Acceptability of an intravenous iron intervention amongst pregnant women with moderate and severe anaemia in Malawi: a qualitative study using the conceptual framework of access to health care.

Hana Sabanovic¹, Elizabeth Mamani-Mategula², Ebony Verbunt¹, Effie Chipeta², Khic-Houy Prang¹, Lucinda Manda-Taylor²

¹University of Melbourne, VIC, Australia

²Kamuzu College of Health Sciences

Background

Antenatal anaemia is a significant global health problem. The standard of care in Malawi is oral iron tablets. However, access and adherence are subpar. IV iron is routinely used in high-income countries to deliver a high dose of iron in a single infusion. A RCT is underway to assess the effectiveness of IV iron vs standard of care on maternal and child health outcomes. The objective of was to explore the acceptability of IV iron amongst pregnant women.

Methods

Semi-structured interviews (n=16) and focus groups (n=3) with pregnant women enrolled in the RCT were conducted in Chichewa and audio-recorded. Transcripts were transcribed to English and thematically analysed. Themes were mapped to the conceptual framework of access to health care.

Results

IV iron was found to be an acceptable and superior alternative to oral iron tablets. Participants were aware of IV iron, knew where to seek care and expressed desire to engage. However, several barriers to acceptability were identified. Some only pertained to the RCT, such as fear of blood collection and an extended study period with many scheduled visits. Others, such as cultural beliefs and misconceptions about IV iron were identified as real-world barriers to acceptability.

Conclusions

Should IV iron prove to be effective in Malawi, understanding concerns and challenges to acceptability will be necessary for scale-up. Our study provides important insight to guide implementation strategies for IV iron intervention. It also highlights the need to differentiate between barriers true of real-life settings vs. those found only in the context of a RCT.

P41

Integrating a general practice-led intervention into a National Bowel Cancer Screening Program (NBCSP) Interventions Scale-Up Plan

Eleonora Feletto¹, Stephanie Walker¹, Georgia Carney¹, Karen Canfell¹, Jie Bin Lew¹, Lyndal Trevena², Sarah Durkin³, Emily He¹, Belinda Goodwin⁴, Mark Jenkins⁵, Jane Young¹, Kate Broun³, Katina D'Onise⁶, Christopher Horn⁷, Melissa Treby⁸, Tanya Buchanan⁹, Anita Dessaix⁹, Jeff Cuff, Claire Nightingale⁵, Glenn Austin¹⁰, Paul Grogan¹, Natalie Taylor¹¹

¹The Daffodil Centre, The University of Sydney, Sydney, NSW, Australia

²The University of Sydney, Sydney, NSW, Australia

³Cancer Council Victoria, VIC, Australia

⁴Cancer Council Queensland, QLD, Australia

⁵School of Population & Global Health, University of Melbourne, VIC, Australia

⁶Wellbeing South Australia, SA, Australia

⁷Cancer Institute NSW, Sydney, NSW, Australia

⁸Cancer Council WA, WA, Australia

⁹Cancer Council NSW, NSW, Australia

¹⁰Queensland Health, QLD, Australia

¹¹School of Medicine and Health, University of New South Wales, NSW, Australia

Background

Australia's National Bowel Cancer Screening Program (NBCSP) (the clinical intervention) can save more Australian lives by increasing participation from 43.8% (current rate) (1,2). General practitioner (GP) endorsement is one effective way to encourage screening (3,4). Our aim is to pilot a co-designed general practice-led intervention (the service intervention) and use the findings along with published evidence to develop a NBCSP Interventions Scale-Up Plan.

Methods

Guided by the Theoretical Domains Framework (5) and Consolidated Framework for Implementation Research (6), a hybrid type 2 effectiveness-implementation cluster randomised controlled trial will be conducted in 80 general practices to pilot the service intervention and a suite of implementation strategies. The trial will evaluate the service intervention effectiveness, factors affecting implementation and the impact of implementation strategies, and service level and implementation outcomes. These results will be assessed alongside findings from an evidence review of the effectiveness of existing interventions to improve bowel screening participation, using predictive modelling (2).

Results

Service intervention effectiveness findings from the pilot and evidence review will be modelled to determine their potential additive or multiplicative effects. Principles from the Implementation Scalability Assessment Tool (7) and the Dynamic Sustainability Framework (8) will then be used to inform the NBCSP Interventions Scale-Up Plan to highlight the optimal suite of interventions and implementation strategies.

Conclusion

Investment in discrete service interventions has been shown to be cost-effective in increasing NBCSP participation but combining optimal approaches these with a plan for their scalable implementation will guide efforts and resources to improve bowel cancer outcomes.

P42

Evaluations of the adaptation and impact of Safewards in acute care wards

Marie Gerdtz¹, Celene Yap¹, Cathy Daniel¹

¹University of Melbourne, VIC, Australia

Background

Safewards has previously been trialled to minimise conflict events in mental health in-patient wards and emergency departments. We have piloted the Safewards interventions in four acute care wards in Victoria.

Methods

A mixed-method evaluation was conducted to examine the relevance, acceptability, feasibility, impact, and sustainability.

Results

Safewards interventions were clearly relevant for patients and staff, targeting identified gaps in managing conflicts in the acute care wards. Despite challenges within the context of COVID-19, the project achieved all key indicators of implementation in majority of the wards. The project's success was driven by the team's flexibility in allowing the ward staff to adapt the interventions to meet the needs of the ward, and strong collaboration and communication within the leadership team at the ward. Key challenges during the implementation included the impacts of COVID-19 on staff attitudes on making changes and time pressure in meeting the needs of increased bed demands, the reduced opportunity to have sufficient trainings for the Safewards model, and the increased complexity in meeting infection control. Staff reported a range of improvements in their ward culture and atmosphere, as well as their own wellbeing and relationships with their colleagues. Patients reported increased interaction with staff and other patients in the ward, which had positive impacts on their experience of care. There is clear evidence of increased buy-in, commitment, and ownership at each participating ward.

Conclusions

The Safewards interventions were considered beneficial to improve patient quality of care and staff wellbeing, specifically the "Calming Methods" intervention.

P43

AH-TRIP: developing knowledge translation capacity for Queensland health practitioners at scale

Adrienne Young¹, Ashley Cameron², Nina Meloncelli³, Sally Barrimore³, Katrina Campbell⁴, Shelley Wilkinson⁵, Liza-Jane McBride⁶, Rachelle Pitt⁶, Rhiannon Barnes⁶, Sally Bennett⁷, Gill Harvey⁸, Ingrid Hickman⁹

¹Royal Brisbane and Women's Hospital, Brisbane, QLD, Australia

²Queensland Health, QLD, Australia

³Allied Health Professions, Metro North Health, QLD, Australia

⁴Healthcare Excellence and Innovation, Metro North Health, QLD, Australia

⁵School of Human Movement and Nutrition Sciences, University of Queensland, QLD, Australia

⁶Office of the Chief Allied Health Officer, Queensland Health, QLD, Australia

⁷School of Health and Rehabilitation Sciences, University of Queensland, QLD, Australia

⁸College of Nursing and Health Sciences, Flinders University, Adelaide, SA, Australia

⁹Nutrition and Dietetics, Princess Alexandra Hospital, QLD, Australia

Background

Front-line health practitioners are required to undertake projects to bridge the knowledge-practice gap, but often lack skills and confidence in knowledge translation. This paper reports the development and evaluation of a knowledge translation capacity building program for allied health practitioners located over geographically dispersed locations in Queensland, Australia.

Methods

Allied Health Translating Research into Practice (AH-TRIP) was developed and scaled over five years with consideration of theory, research evidence and local needs assessment. AH-TRIP includes five components: training and education; support and networks (including champions and mentoring); showcase and recognition; TRIP projects and implementation; evaluation. Guided by RE-AIM, evaluation measures included reach (number, discipline, geographical location), adoption by health services and participant satisfaction, with these data collected from participants between 2019-2021.

Results

A total of 986 allied health practitioners participated in at least one component of AH-TRIP, with a quarter located in regional areas of Queensland. Online training materials received an average of 944 unique page views each month. A total of 148 allied health practitioners across disciplines and clinical areas have received project mentoring. Very high satisfaction was reported by those receiving mentoring and attending the annual showcase. Nine of sixteen public hospital and health service districts have adopted AH-TRIP.

Conclusions

AH-TRIP is a low-cost knowledge translation capacity building initiative that has been delivered at scale to support allied health practitioners across geographically dispersed locations. Higher adoption in metropolitan areas suggests that further investment and targeted strategies are needed to reach health practitioners working in regional areas.