ON TRACK News

ON TRACK NETWORK
BETTER HEALTH FOR MOTHERS AND BABIES
Te Awhi Rito

TOGETHER WE CAN ACHIEVE BETTER HEALTH FOR MOTHERS AND BABIES

July 2022

Welcome

Welcome to the July edition of ON TRACK News for 2022

Kia ora, welcome to ON TRACK News. We are back after a short break and delighted to welcome our new ON TRACK Network Co-ordinator. This month we feature the recent publication of the Network's Research Prioritisation Project which has been a huge piece of work for us over the last few years, so it's awesome to finally be able to share the results with you.

LATEST NEWS

We offer huge congratulations to the Neonatal Glucose Studies Team for achieving the PREMIER AWARD for the Prime Ministers Science prize 2021!!

This multidisciplinary research team has been led by Distinguished Professor Dame Jane Harding FRSNZ from the Liggins Institute. The team have spent more than 20 years researching the effects of high and low blood sugar on babies' brain development, including through several clinical trials, most recently the hPOD trial which ran across the ON TRACK Network.

Their work has changed practice globally and led to a reduction in brain injuries for babies and admissions to intensive care, with improved breastfeeding and millions of healthcare dollars saved.

The team: Distinguished Professor Dame Jane Harding, Associate Professor Jane Alsweiler, Distinguished Professor Geoff Chase, Dr Richard Edlin, Greg Gamble, Dr Deborah Harris, Associate Professor Chris McKinlay, Jenny Rogers (Ngāi Tahu), Dr Phil Weston, Professor Trecia Wouldes and Dr Ben Thompson.

IN THIS EDITION

Special Feature Spread

We look at **our latest publication in NZMJ—Research Prioritisation Framework. Read more on page 2.**

DIAMOND **Celebrations for the DIAMOND and PLUSS Trials read more on page 4**

ON TRACK NETWORK **Meet the new OTN Coordinator! Read more on page 4**

Congratulations to Associate Professor Jane Alsweiler from the University of Auckland and her team on their success with **Health Research Council Project funding for the LATTE Trial**.
The LATTE Dosage Trial (considered at the OTN Trial Development Workshop in 2017) was completed last year and this main trial was considered at our 2022 workshop in May.

We look forward to seeing the trial roll out across the Network over the next year!

SAVE THE DATE

Perinatal Society New Zealand - Abstract Submissions 21st August www.perinatalsociety.org.nz—Abstract submissions Pg 4
RANZCOG Aotearoa New Zealand 2022 ASM Christchurch 22-23 Aug 2022 www.nzasm.org.nz
Home Birth Aotearoa Hui and Conference 2022 Waikato October 29th 30th www.whba.org.nz
Paediatric Society NZ 73rd Annual Scientific Meeting 2022 New Plymouth 1-3 Nov 2022 www.psnzconference.org.nz
10th Biennial Joan Donley Midwifery Research Forum Tauranga 18 Nov 2022 www.midwife.org.nz

The Priorities for Future Clinical Trials and Large Cohort Studies Addressing Health and Healthcare for Mothers and Babies in Aotearoa New Zealand.

2022 NZMJ Apr 14; 135(1553). ISSN1175-8716

We are excited to let you know that the **ON TRACK Network Research Prioritisation Project** has recently been published in the New Zealand Medical Journal. Many of you will have contributed to this work (thank you) and we thought you may be interested to know the results. This Research Prioritisation Project makes an important contribution to the Network's vision and strongly supports the first of our three strategic pillars https://ontrack.perinatalsociety.org.nz/about-the-on-track-network/

The ON TRACK Network Vision: to see an **effective self-improving** maternal and perinatal healthcare system in New Zealand, where disciplines perceive clinical trials research as a **core component** of service **engage** in high clinical trials research accordingly, to achieve **greater equity**, **health outcomes**, **and quality of life for women and babies nationwide.**

What is research prioritisation? Research prioritisation in health is designed to ensure that the research we undertake and support allows the most effective use of resources (both in funds and capacity) to achieve optimal health impact. Research prioritisation has always existed in informal ways (e.g. selected by funders, greatest interest of the researcher) but in recent decades more systematic approaches have been developed. However, no single gold standard research prioritisation method exists, with each method having advantages and disadvantages, often dependent on the goals of the prioritisation and the setting in which it takes place.

Why did we do this project? Multicentre clinical trials and large cohort studies provide the most efficient platform to answer clinically important research questions that lead to improved health outcomes. Well organised and coordinated clinical trial networks, like the ON TRACK Network, provide support for clinical trials and large cohort studies to be more efficient and effective over time, and so collectively benefiting our patients and healthcare services. To have maximum benefit we need to ensure the research questions we aim to answer are those of most importance to Aotearoa. To date, no national research prioritisation in Aotearoa has been undertaken in maternal and perinatal health (or any other health discipline) and so this is what we set to achieve.

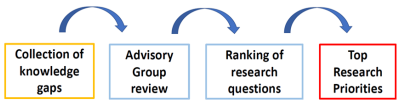
Study Design

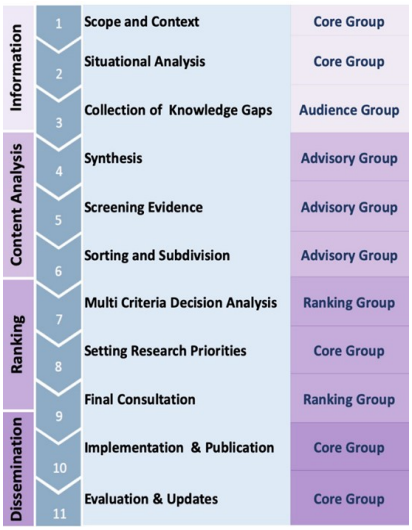
The Research Prioritisation Framework. Established health research priority-setting methods such as; Council of Health Research for Development, James Lind Alliance and the Health Research Council New Zealand Health Research Prioritisation Framework were identified and reviewed. The quality of each method was assessed using a recognised good practice tool and with consideration of context within Aotearoa and how each framework may address the needs of indigenous peoples, consider equity, allow consumer participation and suitability for our unique maternity care system.

None of the established frameworks were 'fit for purpose' and so the research team developed their own framework adapting and utilising different aspects from each. Key features were transparent process, use of an equity lens, working with Māori and the voices of women and whānau (our consumers).

The development of the framework was led by Clara Mossinger and presented at the Australian Clinical Trials Alliance International Clinical Trials Conference in Sydney, 2019 (figure).

The resulting Aotearoa specific framework (figures on page 3) includes four phases and 11 steps, involving four groups of participants: the Core Group, Audience Group, Advisory Group and Ranking Group.





In the **first phase** we aimed to identify as many knowledge gaps as possible, from as wide and diverse a group as possible. This was done in three ways; a systematic review of all existing research prioritisation projects in mothers and babies health published since 2009; a semi-structured online questionnaire and; by kanohi ki te kanohi (face-to-face) hui and focus groups. These second two methods allowed us to reach out across all disciplines of maternal and perinatal health, as well as consumers, scientists, clinical researchers and policy-makers. Unfortunately, the first COVID-19 lockdown hit just as hui and focus groups were set to get underway but Zoom calling still permitted interviews and personal interaction and discussion.

In phase 2 knowledge gaps were turned into research questions if a genuine gap existed. Those that could be answered in a clinical trial or large cohort study were then further analysed and sub-divided by timing and type of intervention with consideration where questions may be of specific importance for Māori and Pacific peoples. Once all research questions had been reviewed by members of the Advisory Group, **phase 3** began. In this ranking phase, the 52 members of the Ranking Group (including representatives of all relevant disciplines and stakeholder groups) met to commence work. Decision-making was done using Multi-Criteria Decision Analysis (MCDA) via an on-line tool developed by 1000minds Ltd. Initially the Ranking Group considered the five rating criteria (see figure) and collectively set the weightings for each criteria. The group then spent several weeks and much of their spare time working through all the research questions and rating each question against these five criteria.

1000minds®
when good decisions matter

Rating Criteria Weightings

Effective on Equity 26.1%
Potential to reduce disease burden 20.5%
Effectiveness 20.0%
Deliverability 17.9%
Answerability 16.0%

Results

A total of **305 online questionnaires** were submitted. Of the responders there were 29 Māori (9.5%), 235 NZ European/ European (77%) and four Pacific peoples (1.3%); and 21 consumers (33.9%) and 34 healthcare professionals (54.8%). Responses were received from the majority of regions of Aotearoa.

62 Interviews were completed. Notably a higher proportion of Māori and Pacific peoples responded via in-person interview than via online questionnaire; 12 Māori (19.4%), 39 NZ European/European (62.9%) and 8 Pacific peoples (12.9%). **62 systematic reviews** also contributed knowledge gaps to the study.

Across these three collection methods, **a total of 3347 knowledge gaps** were identified and after analysis **358 unanswered questions** were considered suitable for clinical trial or large cohort study research. The assigned weightings of the rating criteria (see figure) identified **'effect on equity' to be the most important**. Once rating was completed all questions were ranked 1 to 358 and have been reported in full in the study appendix.

All of the top 20 prioritised research questions directly related to Māori and/or Pacific health and predominantly involved research into healthcare systems and workforce rather than disease conditions

Within the top 49 prioritised research questions a further 12 were specific to Māori and Pacific with the remaining questions focusing on specific health conditions that are more prevalent in these two ethnic groups; mental health, obesity and diabetes in pregnancy or inequities existing due to social disadvantage, poverty, access to care, rural location or high needs communities.

Conclusion

This Research Prioritisation Project has identified the most important questions for future clinical trials and large cohort studies addressing maternal and perinatal health and healthcare in Aotearoa New Zealand. Addressing equity is a key feature.

Next steps

Phase 4 of the project is still to be undertaken and this includes dissemination, implementation and evaluation of the project. The OTN needs to ensure the results of this study are widely understood and to facilitate and support the development of top prioritised research questions. This can be done in part through our Trial Development Workshops but wider collaboration and team building is required. First steps to support this include support for the newly established Te Aukume o Hine te Iwaiwa, a national mama and pepi Māori health research group and the Network's successful application to for a 2022 HRC Activation grant Whakapiri: nationally prioritised Māori māmā and pēpi health clinical trials. Watch this space for more details. The Framework and methodology can be adapted for use across all areas of health and the Network is already sharing it's learnings with other clinical trials networks in Aotearoa.

The **DIAMOND Trial** has had **2 celebrations** since our last newsletter.

The team celebrated the end of the recruitment phase in May with a final recruitment number of 532, a fantastic achievement! The second celebration goes to Tanith Alexander, who has been a part of the team from the beginning and recently successfully defended her PhD. Congratulations Dr Alexander! Tanith is now a Research Fellow at the Liggins Institute and continues her work as a neonatal dietitian at Middlemore Hospital.

DIAMOND

Congratulations to the PLUSS Trial on reaching 850 recruits! The PLUSS Trial is well on it's way to reaching their recruitment goal 1060.

The Perinatal Society of New Zealand would like to invite abstract submissions for oral or poster presentation at the PSNZ Annual Scientific Meeting in Tāmaki Makaurau on the 10th –11 th November 2022. The are welcoming submissions on clinical and preclinical studies from all health professionals involved in perinatal care at every level of training. PSNZ welcome a 'work in progress' and final study outcomes.

The eligibility criteria for the New Investigator Award as well as travel Scholarships can be found on the PSNZ website **https://perinatalsociety.org.nz/awards-grants/**

PSNZ PERINATAL SOCIETY NEW ZEALAND.

A warm congratulations to you all from OTN for these fabulous achievements.

Welcome Emma!

We are very happy and excited to welcome our **new Coordinator for the Network, Emma Ryburn-Phengsavath.** Emma has a strong background in consumer representation for the maternity sector. She has been a steering group member of Maternity Services Consumer Council for the past 11 years, consumer representative for Auckland NZCOM Committee for 4 years and a member of the Birthcare Clinical Advisory Committee for 2 years. She is also the co-founder for Mothers Milk NZ, a charitable organisation assisting whānau who are seeking donor milk. Emma was introduced to OTN last year when she joined the Trial Development Workshop. Emma also brings skills in writing, art and social media. We would like to give Emma a very warm welcome and look forward to introducing you to her personally in the future.

New Zealand Trials		New Zealand recruits
PROTECT Me	Antenatal melatonin supplementation in fetal growth restriction for fetal neuroprotection	12
C*STEROID	Corticosteroids before planned caesarean section from 35^{+0} to 39^{+6} weeks of pregnancy	351
FIIX Trial	The Fertility, IVF and Intrauterine Insemination trial in couples with uneXplained infertility	450
NeoGluco	Neonatal Glucose Care Optimisation Study (I)	61
PIPPA TAMARIKI	Paracetamol and Ibuprofen in Primary Prevention of Asthma	3129
PLUSS	Preventing Chronic Lung Disease in Extremely Preterm Infants Using Surfactant + Steroid	169
PROTECT	IV pentoxifylline as adjunct therapy to improve long-term disability in preterm infants	74

Recruitment completed - follow up to primary outcome and/or data analysis ongoing	
LATTE Dosage	The most effective and best tolerated dose of caffeine to reduce intermittent hypoxaemia
GEMS	Gestational Diabetes Mellitus Trial of Diagnostic Detection Threshold
MAGENTA	Magnesium Sulphate at 30 to 34 weeks' gestational age: Neuroprotection Trial
PROVIDE	Higher IV protein intake for extremely low birthweight babies in the first week after birth on survival free from neurodevelopmental disability at 2 years' corrected age
DIAMOND	DIfferent Approaches to Moderate & later preterm Nutrition

Childhood outcome studies	
hPOD@2YR Follow-up Study	Hypoglycaemia Prevention in newborns with Oral Dextrose
TARGET Follow up Study	Optimal glycaemic targets for women with gestational diabetes: the randomised trial