The ON TRACK Network

July 2018 Edition 23




ON TRACK NETWORK
BETTER HEALTH FOR MOTHERS AND BABIES

Welcome to the July edition of the ON TRACK Network newsletter

ON TRACK News

- **Save these dates: 21/22 Feb 2019 - we are running the 3rd ON TRACK Concept Development Workshop.** Whether you would like to present a trial concept or join in with developing research ideas, we hope you will book this into your diary. We will give more details via this newsletter in the coming months.
- We are pleased to report a new trial underway in New Zealand - PIPPA Tamariki, the first ever randomised controlled trial of paracetamol and the risk of asthma and related allergic disorders at age six years. It's recruiting in Wellington, Auckland and Counties Manukau. We will profile it here soon! To find out more in the meantime go to www.pippatamariki.ac.nz.
- **We regularly update our website, so check it out at: http://ontrack.perinatal.org.nz/**

The ON TRACK Trial Development Workshop - Concept Summary

Our annual workshop aims to develop promising concepts for clinical trials into collaborative, multicentre proposals suitable for submission for competitive grant funding. This month we profile the fourth of four concepts presented at this year's workshop.

Dr Sara Filoche presented her proposal entitled **Can a pregnancy and family health history tool in primary care improve maternal-infant health trajectories? A randomised control trial.**

Family health history (FHH) is a risk factor for many diseases, including cancer, cardiovascular disease, and diabetes. Furthermore, FFH can be used to identify obstetric risk, inherited disease and couples who are carriers for conditions such as cystic fibrosis. FFH reflects shared genetic and environmental factors and as an accepted part of clinical history taking, is an effective and cost-efficient way to collect important health information. However, FFH is widely reported as being both poorly and infrequently collected.

Sara writes: We received some very helpful feedback - from Māori consultation for potential applications and clinical context which has further informed the development of our proposal. A key next step, that was identified from the workshop discussions, is to explore provider and stakeholder viewpoints in relation to utility and application of FHH and current use. We have recently applied for funding to carry out such a study - and through review and analysis of doctor-patient consultations, and face-to-face interviews with general practitioners and members of the public we will explore the use and application of FHH in healthcare. Our ultimate goal is to develop a tool for the systematic collection of FFH that has meaning and relevance to Aotearoa New Zealand.

If you would like more information or to be involved in this study please contact Sara on sara.filoche@otago.ac.nz.

ontracknetwork@auckland.ac.nz

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Multicentre Trials currently recruiting in NZ

DIAMOND | GEMS | HINT2 | hPOD | MBM | OBLIGE | PAEAN | PIPPA Tamariki | PLUSS | PROVIDE

DIAMOND

The DIAMOND Study (DIfferent Approaches to Moderate- & late-preterm Nutrition: Determinants of feed tolerance, body composition and development) is a randomised, factorial design clinical trial

The aim is to investigate the impact of different feeding strategies currently used in NZ on feed tolerance, body composition and gut microbial composition in moderate to late preterm infants.
There is currently no research available to inform us on how best to feed babies born moderate to late preterm. The DIAMOND Study will, therefore, provide high quality research to inform best practice guidelines in babies that, until now, have been relatively unstudied. The DIAMOND Study includes a number of secondary outcomes that will extend the knowledge base of the nutritional management of preterm babies including breastmilk composition and possible sex differences, stool samples for microbiome analysis, saliva samples for metabolic hormone analysis, breastfeeding rates and time to full suck feeds.

Current recruiting sites include: National Women's Hospital, Middlemore Hospital, North Shore Hospital, Waitakere Hospital.
Inclusion criteria: Babies 32^{+0} – 35^{+6} weeks gestation, whose mothers intend to breastfeed, admitted to NNU/SCBU, requiring IV insertion and domiciled in Auckland.
Recruitment to date: 122 of 528 babies
Lead Investigators: Professor Frank Bloomfield, Tanith Alexander.
For further information contact: diamond.trial@auckland.ac.nz.

Article of Interest

This month we are featuring an article of interest rather than an 'update your practice'.

Neonatology 2018;114:155-162.
https://doi.org/10.1159/000489080

Cost Analysis of Cot-Side Screening Methods for Neonatal Hypoglycaemia

The article is a cost analysis from the New Zealand Sugar Babies Study (J Pediatr 2012; 161: 787–791. doi.org/10.1016/S0140-6736(13)61645-1 is relevant to the hPOD Trial, which uses enzymatic glucometers (glucose oxidase) for testing blood sugar concentrations in neonates due to their greater accuracy.

This paper explores the costs associated with the use of non-enzymatic glucometers vs enzymatic glucometers for neonatal hypoglycaemia screening.

This cost analysis may provide useful evidence for hospitals looking to introduce enzymatic glucometers for testing blood sugar concentrations in neonates.

Many hospitals in New Zealand and Australia currently use non-enzymatic glucometers in their routine screening for neonatal hypoglycaemia.

Non-enzymatic glucometers (e.g. Accu Chek, HemoCue, Statstrip) are known to be less accurate as a single tool to detect hypoglycaemia in neonates. Enzymatic glucometers (e.g. iSTAT, blood gas analyser, epoc) have greater accuracy at lower glucose levels and can be relied upon as a single measurement tool for timely clinical decision making.

A key barrier to the introduction of enzymatic glucometers in neonatal care has been cost. The conclusion reached is that "even under conservative conditions, a screening approach using enzymatic glucometers is likely to have lower direct costs, and also avoids the longer-term risks and costs associated with false-positive and false-negative results. **In view of their lower cost under most circumstances and greater accuracy, enzymatic glucometers should be routinely utilised for point-of-care screening for neonatal hypoglycaemia**." (Glasgow, Harding & Edlin, 2018 p161).

If you would like more information about the hPOD Trial
Email hpod@auckland.ac.nz Call 0800 004763 or
Text 0221364933

hPOD hypoglycaemia Prevention with Oral Dextrose

ontracknetwork@auckland.ac.nz