# The Research Connection

#### Preterm Insights Sprint: 7 minutes to clarity

#### **PROGRAM**



## Guideline for growth, health and developmental follow-up of children born very preterm

Dr Alice Burnett

A study of ~300 parents highlighted a lack of information about what to expect in the preschool years after a preterm birth, with more focus on leaving NICU. There was a need for coordination and sharing of expertise between hospital and community services and a need for respectful and empowering relationships between health professionals and families.

A clinical practice guideline was developed using a rigorous GRADE approach (GRADE is a method of assessing the certainty in evidence and the strength of recommendations in health care).

A multidisciplinary team developed key recommendations including a minimum set of contacts and priorities, multidisciplinary involvement, different settings (hospital, community, universal services) and flexibility including different modalities. Structured, preterm-specific post discharge follow-up care should be offered to children born very preterm and their caregivers regardless of presence of risk and/or resilience factors.

### PLATIPUS: A new approach to improve health outcomes for babies born preterm

Dr Kelly Fredell

Preterm birth is a global issue. Pregnant women at risk of preterm birth and babies born very preterm have been traditionally excluded from research, limiting what we know about how medicines and therapies given in pregnancy and after birth work in these populations. PLATIPUS is part of a movement away from 'protecting complex populations from research' towards 'protecting them through research', believing that it is fairer to include pregnant women and tiny babies in the research of medicines and therapies they may be prescribed.

PLATIPUS is in development. It is an 'adaptive platform trial' that aims to improve outcomes for babies born preterm. Trials will gather evidence for (or against) the use of medicines and therapies already used in the care of pregnant women and preterm babies, simultaneously. The results of all trials will be assessed on a baby health scale. PLATIPUS will begin its roll-out into hospitals across Australia and in Aotearoa, New Zealand, in 2025.

PLATIPUS aims to grow evidence for effective treatments that are safe and acceptable to the populations who receive them. The results of each trial will be shared widely to help improve the health and well-being of pregnant women and babies born preterm.

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#### **The Most Premature Babies Priority Setting Partnership**

**Dr Stacey Peart** 

While much research has focussed on improving outcomes for extremely preterm (EP) infants born <28 weeks' gestation, the most immature and highest risk subset of infants born <25 weeks' gestation has not been well studied. To improve outcomes for these infants and their families in a meaningful way, it is critical to first establish the research priorities.

In association with the James Lind Alliance (UK), a survey was disseminated to people with lived experience and healthcare professionals across Australia, New Zealand and the UK. The final outcome produced the Top 10 research priorities.

Through dissemination and engagement with researchers and PLE, these findings will help guide future research aimed at improving meaningful outcomes for these infants <25 weeks and their families.

#### Engaging families with lived/living experience in the Bundle for Kids Study

Dr Kate Cameron

Children born high-risk have a higher rate of short- and long-term health and developmental challenges. Bundle for Kids is a co-designed research study that seeks to build a targeted and individualised intervention bundle for children aged 2-5 years who were born high-risk. Interventions in this critical developmental period are essential to help children thrive and potentially improve their developmental trajectory for life.

Bundle for Kids is seeking to design a bundle that is accessible, feasible and adaptable to the needs of individual families. In this presentation we will share preliminary findings, as well as, sharing our experiences of working together as researchers and families with lived/living experience in The Bundle for Kids Study.

#### AIROPLANE: Air or Oxygen for Preterm Infants; An Embedded Trial

**Dr Stacey Peart** 

There remains no clear recommendation regarding the amount of oxygen to use for moderate-late preterm infants, resulting in wide clinical practice variation. The aim of this study is to access the effect of different oxygen concentrations at birth on the need for ongoing respiratory support in this cohort.

The AIROPLANE Trial will be the first study to focus exclusively on moderate-late preterm infants with respect to oxygen use at delivery. With a plan to recruit 1200 infants across 20 sites, it will be powered to detect a difference in the primary outcome and address the evidence gap for these infants, which could translate to a change in clinical practice guidelines.

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# Co-design of a follow-up model of care for children born very preterm at 2-4 years of age

Dr Adrienne Harvey

This project used participatory co-design principles to develop a family-centred and sustainable follow-up model of care for children born VPT at 2-4 years of age.

The final co-designed model of care involves 3 levels of risk (lower, moderate, and higher) of motor skills, language, cognition and behaviour. Children are either screened or assessed every 6 months for skills in each domain, dependent on their level of risk and individual family circumstances. This co-design process with parents and health professionals has produced a family-centred and feasible model of follow-up care for children born very preterm at 2-4 years of age.

# Parent Perspectives of the Effect of Extremely Preterm Birth for Their Child's Learning and Development

Ms Kaitlyn Corso

This study aims to explore parents' perceptions of the effect of EP birth for children's development and their perceived academic competence compared with parents of children born at term.

Capturing parental perceptions of the learning and development of children born EP is essential to appropriately understand how best to provide longer-term support for these children and their families. While some parents have specific developmental concerns related to their child's birth history (particularly academically), the majority do not feel that EP birth has had an unfavourable effect.