TRANSLATIONAL RESEARCH GRANTS SCHEME 2020
Deb Matha, Director Maternity, Child and Family
A/Prof Elisabeth Murphy, Sr Clinical Adviser
27 February 2020
What we will cover

► What is happening across NSW
► First 2000 Days and research
► Priorities
► When and how to consult with the Ministry team
Actions to date across NSW

- **2018**
  - Evidence and consultation on draft Framework

- **2019**
  - Cross Government Support confirmed
  - First 2000 Days Framework released as Policy Directive for NSW Health system

- **1 July 2019**
  - LHDs and Specialty Health Networks to include First 2000 Days strategies in local plans

- **Nov/Dec 2019**
  - Draft Implementation Strategy distributed for consultation

- **2020**
  - Dates TBC: Implementation Strategy release
  - Cross government workplan developed and commenced

---

Initial consultation and engagement within NSW Health and with stakeholder partners:
- Workshops and Forum
- Roadshow presentations
- Interviews
Presentation on First 2000 Days (to December 2019)

► 55 events, and
► 4577 people by end 2019
► A number of events booked for 2020

Health

► Districts (NSLHD, WSLHD, HNELHD, MNCLHD, SNSWLHD, MLHD, SESLHD, SWSLHD, SLHD, ILHD)
► Pillars and Speciality Networks
► Ministry of Health (Senior Executives)
► NSW Health Statewide Implementation Consultation
► Child and Youth Mental Health Advisory Group
► Faculty of Child and Adolescent Psychiatry

Partners

- Department of Premier and Cabinet
- Treasury
- Department of Communities and Justice
- Government Architects
- National Child Health Digital Strategy
- General Public- Royal North Shore Hospital
- Karitane
FIRST 2000 DAYS- Emerging Evidence

A - Antenatal
B – Brain
C – Childhood experience
A – Antenatal

► Physical health – first trimester
► Psychosocial health
► Future Health

Relevant studies include:

► The Raine Study (formerly known as the Western Australian Pregnancy Cohort Study), established in 1989, is one of the largest prospective cohort studies of pregnancy, childhood, adolescence and adulthood to be carried out anywhere in the world. For more information see https://rainestudy.org.au/

► Variety of studies on psychosocial health in pregnancy and impacts on child and parent in later life

► Fetal Origins of Disease (David Barker)
“how little is known about life before birth and how that may impact on our health and our disease throughout the rest of our lives”

Professor John Newnham AM
2020 Senior Australian of the Year

Obstetrics specialist Professor Newnham was Founding Investigator of the Raine Study (see https://rainestudy.org.au/). In July 2018 he led the development of the Australian Preterm Birth Prevention Alliance, supported by NHMRC in Canberra. This alliance is the world’s first national program aiming to safely reduce the rate of harmful early birth across its population. The Australian Preterm Birth Prevention Alliance are partners in the NSW based Every Week Counts Study (University of Sydney and Royal North Shore Hospital see https://www.everyweekcounts.com.au/)
B - Brain
Brain Structure - Head Circumference

Source: My Personal Health Record
NSW Health
Adversity impacts on brain development

Source: The Founders' Network www.founders.net
Sensitive Periods for Early Development

- Binocular vision
- Central Auditory System
- Emotional control
- Habitual ways of responding
- Peer social skills
- Language

Cognitive skills: relative quantity

Critical period
Critical period wanes

Source: The Founders’ Network www.founders.net
C – Childhood experience
Adverse Childhood Experiences

Traumatic events that can have negative, lasting effects on health and wellbeing

- Abuse
  - Emotional abuse
  - Physical abuse
  - Sexual abuse

- Household Challenges
  - Domestic violence
  - Subsistence abuse
  - Mental illness
  - Parental separation/divorce
  - Incarcerated parent

- Neglect
  - Emotional neglect
  - Physical neglect

People with 6+ ACEs can die 20 yrs earlier than those who have none

1/8 of the population have more than 4 ACEs
Objective 1
Understanding the importance of the first 2000 days

Objective 2
Care and support for all

Objective 3
Specialised services for those who need it

Australian research tells us what shapes thinking

FrameWorks Institute collaborated with The Centre for Community Child Health at the Royal Children’s Hospital Melbourne to uncover the widely shared patterns of thinking that shape how Australians reason about early childhood development – and to identify effective ways of translating the science in order to inform thinking about policy and practice.

Map the Gaps - Core story findings

**Dominant patterns of thinking** in the Australian public:

- Children’s worlds are **idealised and distinct** from the world of adults
- People assume that spoken **words are necessary** for cognitive and emotional development
- **Brain development** remains a challenge for the public to understand
- People have **conflicted understanding** of how development works
- People do not think about **child mental health** in deep or productive ways
- **Play** is assumed to be **children’s natural state**, and to be child-led


http://frameworksinstitute.org/assets/files/Australia/au_mtg.pdf

Slides used with permission from Professor Donna Cross, Head, Health Promotion and Education, Telethon Kids Institute Director, CoLab – Early Childhood Development and Learning with support from the Minderoo Foundation.
Reframing Parenting Research

Parenting framework reduced support for positive policies and behavioural outcomes.

Slides used with permission from Professor Donna Cross, Head, Health Promotion and Education, Telethon Kids Institute Director, CoLab – Early Childhood Development and Learning with support from the Minderoo Foundation.
In the last trimester the brain is developing fast

<table>
<thead>
<tr>
<th>WEEKS’ GESTATION</th>
<th>35 weeks</th>
<th>36 weeks</th>
<th>37 weeks</th>
<th>38 weeks</th>
<th>39 weeks</th>
<th>40 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>BABY’S BRAIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A baby’s brain at 35 weeks weighs only two-thirds of what it will weigh at 38–40 weeks.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BABY’S RISK AT BIRTH</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of babies spending time in a special care baby unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LEARNING DIFFICULTIES AT SCHOOL ENTRY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RISK</td>
<td>RISK</td>
<td>RISK</td>
<td>RISK</td>
<td>RISK</td>
<td>RISK</td>
<td>RISK</td>
</tr>
</tbody>
</table>

Brain development is responsible for learning, movement, and coordination.

Babies are less likely to need specialised care for breathing and feeding difficulties when born closer to their due date.

There is less risk of learning difficulties at school entry when born closer to their due date.

Image used with permission from Professor Jonathan Morris and Every Week Counts. The project is a partnership between the University of Sydney and the Northern Sydney Local Health District, and acknowledges funding from Sydney Health Partners and the NSW Health Translational Research Grant Scheme.
FASD is recognized as one of the leading known causes of developmental disability in the western world. Compared with other common disabilities, FASD is at least 2.5x more common than Autism Spectrum Disorder, 19x more common than Cerebral Palsy, 28x more common than Down Syndrome and 40x more common than Tourette’s Syndrome.
RESEARCH PRIORITIES

First 2000 Days of life
Effective communication of knowledge to inform decisions

► Build on the Frameworks and Colabs/Telethon Institute work
► Find effective ways of communicating key First 2000 Days messages to:
  ► parents,
  ► carers
  ► Communities
  ► service providers
  ► decision makers
Better universal service delivery

► Effective delivery of continuity models of care (and continuity of carer models) for families in maternity, and early childhood.

► Effective transition of care from maternity care to child and family health care

► Integrated models of Maternity, Child and Family Health Care (including better collaboration with general practice)

► Best strategies to engage families in preventive health care and the schedule of child development checks

► Father and co-parent inclusive practice

► Delivery of care that improves breastfeeding initiation and duration
Better delivery of care to target issues and communities

► FASD Prevention
► Smoking cessation/reduction in pregnancy and parenthood
► Effective models of care that meet the needs of populations vulnerable to poorer outcomes for their children and families, eg:
  ► Aboriginal families
  ► Culturally and linguistically diverse communities
  ► Parents living with mental health, alcohol and drug issues
  ► Refugee families
  ► Young parents with low support
When and how to involve our team:

Stage 1 EOI:
- Send your First 2000 Days related EOI with your support request clearly articulated to MOH-HSPB@health.nsw.gov.au as early as you can, and no later than 27 March 2020.
- We will provide you with a response before your proposals are due to the TRGS coordinator in your LHD on 9 April 2020.

Stage 2 Full applications
- Provide us with a draft of your application by 31 August if you will be seeking partner sign off. Send it to MOH-HSPB@health.nsw.gov.au.
- We will provide feedback and an indication of whether we are happy to sign off in early September, so you can meet the local submission date for host organisation sign off on 21 September.
Stage 1 EOI:
- Send your First 2000 Days related EOI with your support request clearly articulated to MOH-HSPB@health.nsw.gov.au as early as you can, and no later than 27 March 2020.
- We will provide you with a response before your proposals are due to the TRGS coordinator in your LHD on 9 April 2020.

Stage 2 Full applications
- Provide us with a draft of your application by 31 August if you will be seeking partner sign off. Send it to MOH-HSPB@health.nsw.gov.au.
- We will provide feedback and an indication of whether we are happy to sign off in early September, so you can meet the local submission date for host organisation sign off on 21 September.
Questions?

First 2000 Days resources, research and further information:

- **NSW Health First 2000 Days Framework** (NSW Health Policy Directive) which is the guide for our health system for this work
- Nadine Burke Harris **TED Talk**: 15 minute summary of the ACE research

- The research and other work on communications done by Frameworks Institute in partnership with the Centre for Community Child Health, Royal Children’s Hospital Melbourne is here: [https://www.frameworksinstitute.org/australia-reframing-early-development.html](https://www.frameworksinstitute.org/australia-reframing-early-development.html)
- The Harvard Center on the Developing Child, which has some fantastic research communicated through short videos, animations, and infographics: [https://developingchild.harvard.edu/science/](https://developingchild.harvard.edu/science/)