Figure 1: The Lancet’s conceptual framework for interventions during the ‘First 1,000 Days’

Preconception care: family planning, delayed age at first pregnancy, prolonging of inter-pregnancy interval, abortion care, psychosocial care

- Folic acid supplementation
- Multiple micronutrient supplementation
- Calcium supplementation
- Balanced energy protein supplementation
- Iron or iron plus folate
- Iodine supplementation
- Tobacco cessation

- Delayed cord clamping
- Early initiation of breast feeding
- Vitamin K administration
- Neonatal vitamin A supplementation
- Kangaroo mother care

- Exclusive breast feeding
- Complementary feeding
- Vitamin A supplementation (6–59 months)
- Preventive zinc supplementation
- Multiple micronutrient supplementation
- Iron supplementation

Decreased maternal and childhood morbidity and mortality

Improved cognition, growth, and neurodevelopmental outcomes

Increased work capacity and productivity

Economic development

Delivery platforms: Community delivery platforms, integrated management of childhood illness, child health days, school-based delivery platforms, financial platforms, fortification strategies, nutrition in emergencies

**Bold**=interventions modelled; **Italics**=Other interventions reviewed; WRA=women of reproductive age; WASH=water, sanitation, and hygiene; SAM=severe acute malnutrition; MAM=moderate AM
Figure 2: Rates of return to human capital investment at different ages: Return to an extra dollar at various ages
Figure 3: Sensitive periods for synapse formation development

Sensory Pathways (Vision, Hearing)

Language

Higher cognitive function

First Year

Birth (Months) (Years)

Source: Silburn et al. 2011:6
Figure 4: Summary of possible actions under a ‘First 1,000 Days’ approach for Aboriginal infants and those caring for them

<table>
<thead>
<tr>
<th>Issues to be addressed</th>
<th>Adolescent</th>
<th>WRA and pregnancy</th>
<th>Neonates</th>
<th>Infants and children</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>drug and alcohol</em></td>
<td>• smoking*</td>
<td>• breastfeeding and good nutrition</td>
<td>• family support and preservation</td>
<td>Reduced maternal and childhood morbidity and improved cognition, neurodevelopmental outcomes</td>
</tr>
<tr>
<td><em>impact of incarceration</em></td>
<td>• maternal nutrition</td>
<td>• family support and preservation</td>
<td>• good nutrition</td>
<td>Improved economic and education participation, social wellbeing and family resilience</td>
</tr>
<tr>
<td></td>
<td>• antenatal care</td>
<td>• appropriate learning and stimulation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• focus on gestational diabetes</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Goals</td>
<td>• maximise health, awareness and resilience for potential parenthood</td>
<td>• reduce incidence of low birth weight babies</td>
<td>• reduce growth faltering</td>
<td>• avoid early obesity</td>
</tr>
<tr>
<td></td>
<td>• focus on fatherhood</td>
<td>• reduce incidence of conditions such as FAS-D</td>
<td>• comprehensive immunisation</td>
<td>• improved dental health (too early?)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• delay pregnancy</td>
<td>• improved brain development</td>
<td>• understand and mitigate impact of placement into care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• better fathering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relevant services</td>
<td>• drug and alcohol services</td>
<td>• child and maternal nursing</td>
<td>• home visiting</td>
<td>• early learning and development</td>
</tr>
<tr>
<td></td>
<td>• youth corrections</td>
<td>• antenatal care</td>
<td>• family support</td>
<td>• home visiting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• home visiting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possible priorities or interventions</td>
<td>• cultural strengthening*</td>
<td>• target the 150 Aboriginal women under 19 giving birth each year?</td>
<td>• greater risk assessment for neglect?</td>
<td>• teach self-regulation and emotional intelligence concepts to parents</td>
</tr>
<tr>
<td></td>
<td>• family outreach/ support for those in gaol/care (eg playgroups/ playgrounds in gaols)</td>
<td>• Year 12 catch-up</td>
<td>• links to family and cultural support</td>
<td>• intensive pre-school and baby learning and communication programs, eg Abecedarian</td>
</tr>
<tr>
<td></td>
<td>• Year 12 catch-up</td>
<td>• relationship support</td>
<td>• analyse linked data to understand mortality and morbidity</td>
<td>• community charters for child rights</td>
</tr>
<tr>
<td></td>
<td>• relationship education</td>
<td>• review location and focus on antenatal and postnatal services</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note: a number of issues will need to be addressed across all phases*

Governance and Leadership – establish a Task Force to lead
Monitoring and Evaluation – define the key expected changes and how to measure them
Workforce Planning and Development – identify the various workforces involved with the ‘First 1,000 Days’ and look for any shared challenges
Research and Communication – address under-ascertainment/misclassification of births and improve data access and linkage
The 1,000 days between a woman’s pregnancy and her child’s 2nd birthday offer a unique window of opportunity to shape healthier and more prosperous futures. (1,000 Days 2014)

We know that a healthy start to life sets up good health throughout life. (DoH Victoria 2012:16)

Our challenge is to join up the efforts of the many delivery and intervention agencies to ensure services move outside of the traditional silos to an earlier and more proactive engagement of vulnerable children. (DHS Victoria 2014:2)

Indigenous children are the most vulnerable group of children in Australia and disparities with non-Indigenous children in some outcomes have widened in recent years. (COAG 2009)