**Two Steps Forward:**

Building healthy habits for long-term health outcomes in children and adolescents with severe obesity

Jenny Martin  
Director Allied Health  
CYPFS  
Jenny.Martin@hnehealth.nsw.gov.au  
(02) 4923 6255  
ECLP Cohort 20

## Background

1 in 4 children (aged 2 – 17yrs) in NSW are affected by overweight and obesity which is known to have significant impacts on physical health including hyperlipidaemia, hypertension, insulin resistance, decreased pulmonary function, sleep apnoea, hepatic steatosis, polycystic ovary disease and orthopaedic complications. Children who are overweight and obese are also at risk of developing psychosocial complications such as poor self-esteem, depression and eating disorders. Rates of overweight and obesity in children have been increasing.

Tackling Childhood Overweight and Obesity was identified as a NSW Premier’s Priority in 2015, aiming to reduce rates in children by 5% by 2025.

In 2014 a Coroner’s Report following the death of a 10-year-old boy resulting from complications associated with his obesity recommended the establishment of a local weight management service at John Hunter Children’s Hospital.

---

### Aim Statement

By January 2019, 100% children and adolescents with severe obesity when seen by the Paediatric Weight Management Service at John Hunter Children’s Hospital will adopt two or more healthy lifestyle behaviours.

### Team members

**Sponsor (Guidance team) members:**
- Prof. Trish Davidson – Executive Director  
  Children, Young People & Families, HNELHD

**Project team members:**
- Cathy Grahame, Dr Liz Percival, Dr Krista Monkhouse, Dr Kate Bryan, Jared Allen, Kate A’Beckett, Denise Wong See, Meredith Jordan, Carolyn Matthews, Loukas Nadiotis, Anne McRea

### Quality Advisor:

- Mathew Frith – Network Manager, CYPFS

**Patient / consumer involvement:**

- Jenny Richards (parent)

---

### Alignment with National Standards

- Standard 1.1 – Governance for Safety & Quality in Health Service Organisations
- Standard 2.2 – Partnering with Consumers
- Standard 6 – Clinical Framework

### Literature Review


---

### PDSA Cycles

<table>
<thead>
<tr>
<th>Change Idea</th>
<th>Name of Change Idea to look at a PDSA Cycle</th>
<th>Staff to coordinate PDSA</th>
<th>Measures: How will you know that a change is an improvement?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1</td>
<td>Calculate BMI for age &amp; obesity, evidence for all new referrals to Paediatric Weight Management Service (PWMS)</td>
<td>Kate Grahame, Liz Percival, Jared Allen</td>
<td>% Patients in PWMS with documented BMI for age and obesity as cut off 50% improvement</td>
</tr>
<tr>
<td>Priority 2</td>
<td>Update information about healthy eating &amp; weight loss behaviours on PHN sites. Health education including nutrition, exercise and weight management</td>
<td>Kate Grahame, Jared Allen, Ian Varley</td>
<td>% Patients in PWMS with weight management behaviours of 50% improvement</td>
</tr>
<tr>
<td>Priority 3</td>
<td>Link children’s healthy eating, exercise and weight management to Children’s Health Services</td>
<td>Jared Allen</td>
<td>% Patients in PWMS with weight management behaviours of 50% improvement</td>
</tr>
<tr>
<td>Priority 4</td>
<td>Introduce physical activity &amp; exercise for patients/ families unable to attend face-to-face sessions</td>
<td>Li Liu, Meredith Jordan</td>
<td>% Patients in PWMS with weight management behaviours of 50% improvement</td>
</tr>
<tr>
<td>Priority 5</td>
<td>Introduce Physical activity &amp; exercise for patients/ families unable to attend face-to-face sessions</td>
<td>Meredith Jordan &amp; Kate A’Beckett</td>
<td>% Patients in PWMS with weight management behaviours of 50% improvement</td>
</tr>
<tr>
<td>Priority 6</td>
<td>Introduce ‘My Healthy Kids’ Passport</td>
<td>Meredith Jordan</td>
<td>% Patients in PWMS with weight management behaviours of 50% improvement</td>
</tr>
</tbody>
</table>

---

### Results

**Overall Outcome of Project**

100% children and adolescents with severe obesity seen by the Paediatric Weight Management Service have adopted 2 or more healthy lifestyle behaviours.

**Sustainability**

Initiatives have been standardised and embedded within service systems.

Potential sustainability risks identified and action plans developed in relation to infrastructure and monitoring.

**Strategies for Spreading / Sharing**

The next step is to investigate how to adapt the service to better support rural families and sustain long-term follow-up.