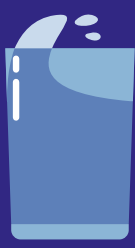
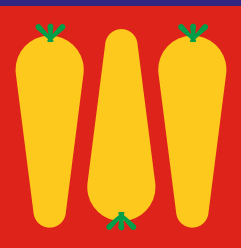


NSW childhood obesity prevention in clinical settings

Program Snapshot
2016-2020



Background

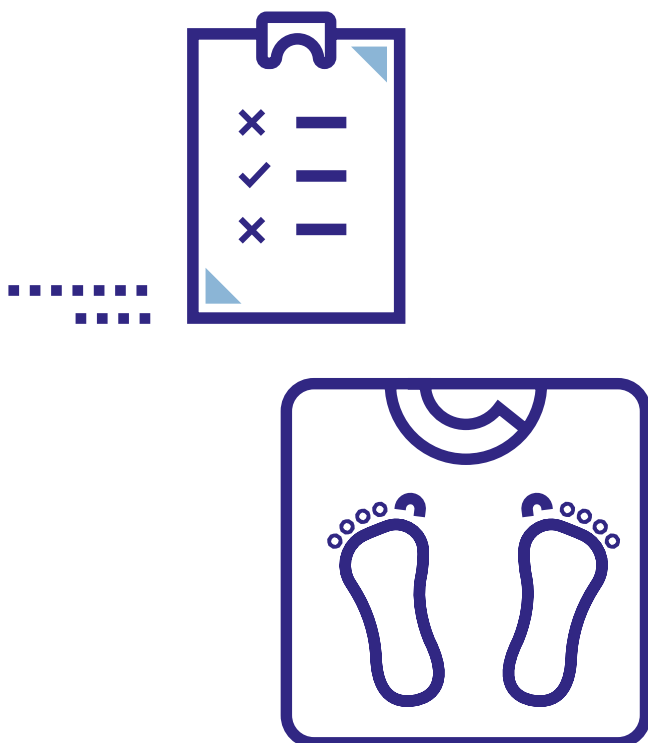
Healthy Kids for Professionals is a NSW Health program supporting NSW Health and primary care services to routinely assess children's growth and provide healthy lifestyle support for families.

In 2019, more than 1 in 5 children (23%) aged 5-16 years were above a healthy weight in NSW, this equates to about 270,000 children.^{1, 2}

Increasing parental awareness of children's weight status is an important first step in providing healthy lifestyle support for families.

A survey of NSW school children in 2015 showed that around 3 in 4 (73%) parents of children (Kindergarten to Year 4) above a healthy weight and around 1 in 3 (30%) parents of children well above a healthy weight perceived their child to be 'about the right weight'.³

Routine growth assessments in health services offer opportunities for health professionals to monitor children's growth over time. Routine growth assessments also present an opportunity for health professionals to provide family focused healthy lifestyle advice and referral to treatment services.



From 1 July 2019 to
30 June 2020 over

500,000

children encountered
a NSW Health service.
This presents a significant
opportunity to support
children and families
in NSW.

About the program

The Healthy Kids for Professionals program was launched in 2016. It combines health professional education and resources with organisational change strategies to support NSW Health services to embed children's growth assessment, advice and referral into routine clinical practice.

Healthy Kids for Professionals aims to:

- Increase the number of children in NSW who have a routine growth assessment
- Support health professionals to provide children and families with appropriate healthy lifestyle advice and referral

Healthy Kids for Professionals recommends health professionals use the **4 A's** approach to deliver brief interventions for children and their families. This approach was adapted from the well known 5 A's brief intervention tool for tobacco use.⁴



healthykids
for professionals

The 4 A's

ASSESS

Assess the child's height, weight and weight status using the body mass index (BMI)-for-age percentile chart for boys and girls.

ADVISE

Use positive, non-judgemental language to advise the parent and child where they are on the BMI-for-age chart. Provide family-focused and practical healthy lifestyle key messages.

ASSIST

Assist the family to consider healthy behaviours and set achievable lifestyle goals.

ARRANGE

Provide ongoing support or arrange for a referral to another program or service.

To embed routine growth assessments in NSW Health services, the program delivered the following key elements:

- **Central implementation support** – the NSW Ministry of Health provided support to Local Health Districts (LHDs) including a state-wide network of practice, targeted implementation support, regular site visits and meetings with senior leaders. An implementation toolkit, state-wide *Nutrition Care Policy (2017)*, and *Growth Assessment in Children and Weight Assessment in Adults Guideline (2017)* were developed to guide local implementation.
- **Local implementation** – clinical and health promotion representatives in LHDs were responsible for leading clinical practice change and actioning steps of the *implementation toolkit*.
- **Suite of resources and training** – patient resources, referral pathways, online and face-to-face training were developed by the NSW Ministry of Health to support health professionals.
- **Performance monitoring** – a key performance indicator for the proportion of children with their growth measured was implemented in LHD Service Level Agreements. Performance was monitored quarterly and used to identify services who required additional support.



What have we learnt about implementing programs in clinical settings?

Implementation of the program in LHDs has been evaluated at various time points using interviews with health professionals responsible for implementing the program.

We have identified four key themes for successful implementation:

- ☐ **Leadership and management support**
A management culture that supports preventive health and encourages implementation of the program.
- ☐ **Nominated champions or implementation leads**
Champions to drive implementation and maintenance of change in practice at the frontline.
- ☐ **Readily available equipment**
Physical location of equipment integrated into clinical workflow, combined stadiometer and scales, and access to appropriate equipment for immobile patients.
- ☐ **Regular monitoring and accountability**
Clear accountability for performance and regular monitoring to keep implementation on track.

Implementation in priority settings

Inpatient paediatric wards were identified as a priority setting for the program. Children are usually present for at least 24 hours providing opportunity to conduct a growth assessment and growth can be discussed with families as part of discharge care planning. After analysing how five paediatric wards implemented the program, we found the following strategies supported improvements in the proportion of children with growth assessed:

- ✓ Support and endorsement from management
- ✓ Nominated champions
- ✓ Staff education and training
- ✓ Equipment available and located in line with the ward's workflow
- ✓ Use of daily reports, monitoring and feedback
- ✓ Reminders in ward processes including handover and team meetings



LHDs highlighted the value of having **performance data** available to keep senior leaders engaged with the program, track implementation progress and identify where to target their efforts.

Key program achievements from program launch to June 2020

Health professional resources and training

- **59%** of children had their growth assessed in 2019-20 compared to 53% in 2018-19
- **708,535** visitors to the *Healthy Kids for Professionals* webpage
- **1,400** tear off pads of BMI-for-age percentile charts distributed to NSW Health facilities
- **7,709** NSW Health staff completed online Weight4KIDS training about the basics of assessing children's growth and delivering brief interventions
- **2,996** NSW Health staff completed additional online training about measuring children's growth
- **919** NSW Health staff completed face-to-face training about how to raise the issue of childhood obesity with families
- **9** webinars were delivered for General Practitioners (GPs) reaching a total of **1,595** clinicians (attendance average was **177** GPs per webinar).



Healthy habits and a healthy weight: Tips for your child and family

More children than ever are above a healthy weight, but there's plenty you can do to help your child and family eat well, be more active and stay healthy.

What is a healthy weight?
Children need to grow, but they are happiest if they stay within a healthy weight range for their age. A healthy weight range is based on your child's height and age.

Why is a healthy weight important?
Children who grow to a healthy weight tend to be more confident and active. They are also less likely to have problems in school.

How can I tell if my child is a healthy weight?
Around age 5, your child's weight and height are measured to see if your child is a healthy weight for their age. Ask your doctor or nurse to measure your child's weight and height, and tell you if your child is healthy. Measuring your child's healthy weight for their height and age.

Is it likely my child will just grow out of their extra weight?
No. Most children do not grow out of their extra weight. If your child is overweight or obese, their eating and activity habits need to change. The health care professional can help you understand what your child's weight means, and if your child is overweight, you may need to make changes to your child's diet and activity habits.

Let there's good news. You can do it! To help your child stay healthy, healthy eating habits, and more active habits.

BE A GOOD ROLE MODEL
Children learn by example. One of the best ways to help your child learn healthy eating habits is to eat healthy food with them. Healthy eating habits are to eat a variety of different types of vegetables and fruits, and to eat a variety of different types of grains, proteins, and fats. Children who are above a healthy weight are also more likely to have problems in school, and to have problems with their confidence and self-esteem.

What does it mean for my child if they are above a healthy weight?
Children who are above a healthy weight may develop health problems, such as high blood pressure, high cholesterol, and type 2 diabetes. Children who are above a healthy weight are also more likely to have problems in school, and to have problems with their confidence and self-esteem.

For more healthy habits tips visit makehealthychoices.nsw.gov.au
For health professional resources visit pro.healthykids.nsw.gov.au

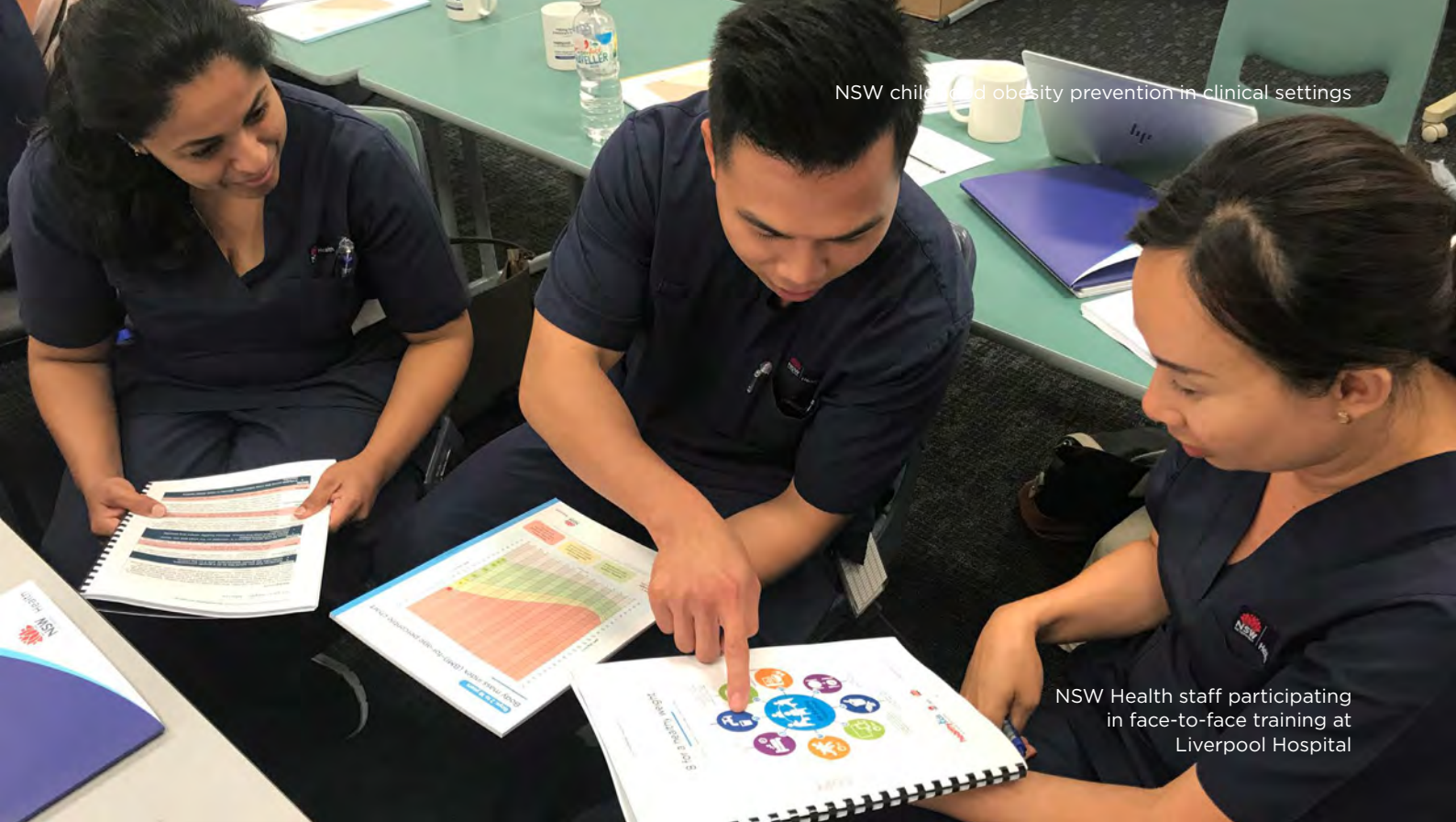
We measure height and weight in all children as part of a child's health assessment

Your health care professional will help measure your child's height and weight.

For healthy habits tips visit makehealthychoices.nsw.gov.au
For health professional resources visit pro.healthykids.nsw.gov.au

We asked GPs what they liked most about our webinars:

- *"The suggested ways to bring up the subject, including what to say to parents using sensitive language."*
- *"Bringing up healthy conversations using tools such as 8 Healthy Habits."*
- *"Simplicity of approach to raising the issue of above or well above a healthy weight range with families and excellent non-stigmatising, non-confrontational language to do that with."*



NSW Health staff participating in face-to-face training at Liverpool Hospital

“Can you raise the issue?” training

Talking to families about weight is challenging and many health professionals identified this as a key barrier to implementing the program. Face-to-face training was developed with a focus on skills for effective communication, use of sensitive and non-stigmatising language, and motivational interviewing.

- **919** NSW Health staff completed the training which was made available to all NSW Health clinical staff working with children.
- **47%** of participants were nurses, **27%** were allied health and **11%** were oral health clinicians



“I really enjoyed the session; it gave me confidence to raise the issue with a family.”

**Participant,
Sydney Local Health District**

Feedback from the training was very positive and at follow up, many participants reported changing their practice. Response rate for participants providing feedback was 54%.



Strongly agree or agree that the training helped to **understand how to assess a child's growth**



Strongly agree or agree that the training helped to **understand how to raise the issue in a non-judgemental and non-stigmatising way**



Strongly agree or agree that the training helped to **understand how to refer children and families to relevant services**



At follow up **81%** participants reported they were **more frequently using sensitive and non-stigmatising language**

Respondents were asked to describe the major barriers to implementing routine growth assessments. 4 in 5 reported experiencing barriers. The top four barriers were:

- Not enough time
- Not part of their role
- Not clinically appropriate
- No equipment available



1 in 5

participants reported
experiencing no barriers
to implementing routine
growth assessments

Growth assessments in NSW Health facilities

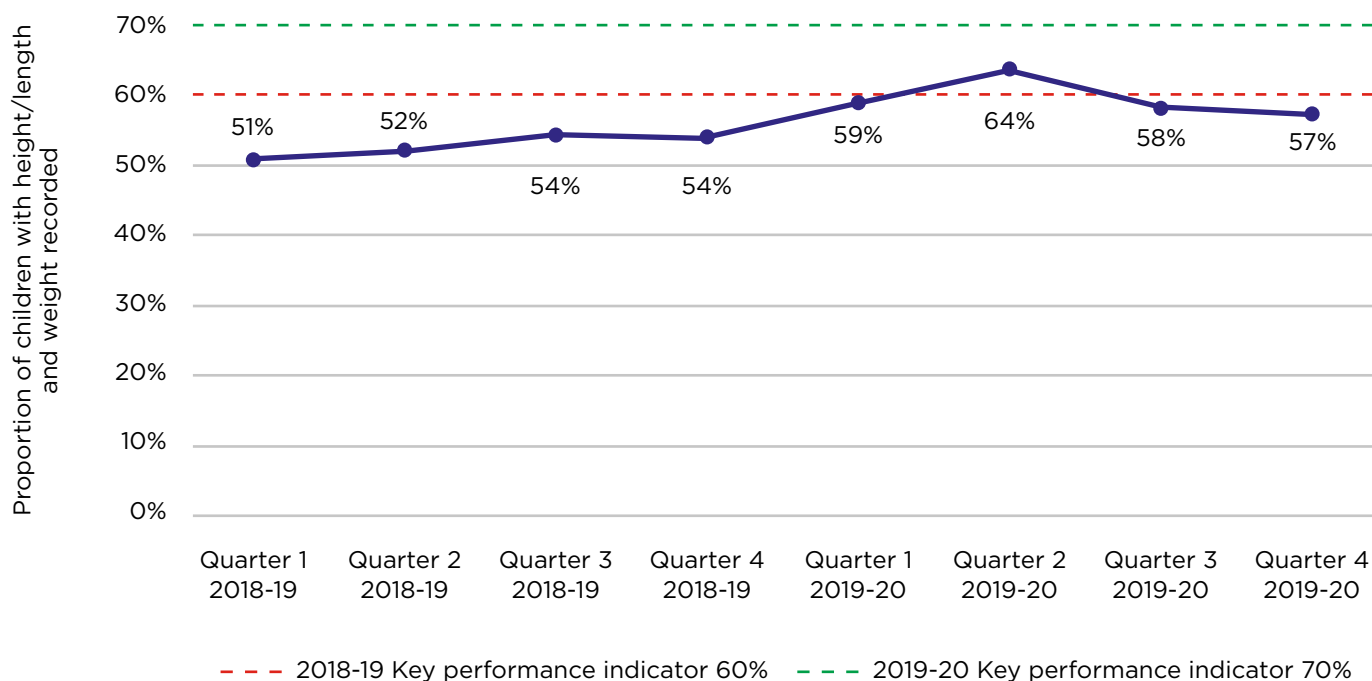
The Healthy Kids for Professionals program has supported improvement in the proportion of children who have their growth assessed in NSW Health facilities. Figure 1 shows the proportion of children who had their height/length and weight measured in a NSW Health facility in the 2018-19 and 2019-20 financial years.

Notes:

Growth assessment at baseline is unknown as data reporting commenced after two years of program implementation.

Performance targets were set at 60% in 2018-19 and increased to 70% in 2019-20. These targets were not set at 100% to account for clinical encounters where a growth assessment does not enhance patient care. For example in cases of life-threatening illness and end-of-life care.

Figure 1: Proportion of children with height/length and weight measured in NSW Health facilities* from 2018-19 to 2019-20 financial years



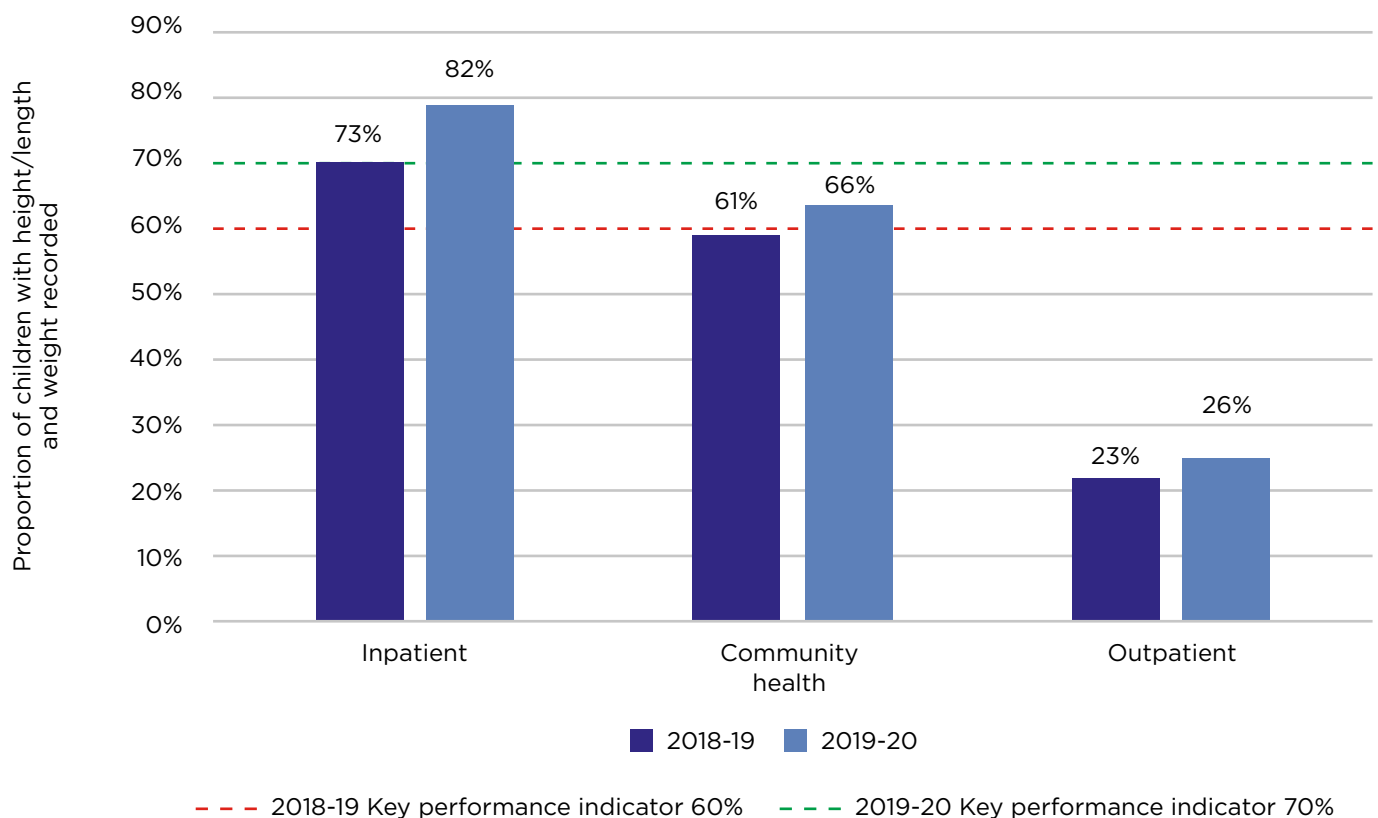
*Excludes sites where complete data set was not available

There are four main types of NSW Health services providing care to children: inpatient services, community health clinics, outpatient clinics and oral health services. The proportion of children growth assessed between 2018-19 and 2019-20 increased across all services (with the exception of oral health where complete data are not available), see Figure 2. Early analysis of oral health data indicates the proportion of children with growth assessed has increased from 26% in quarter 1 2019-20 to 46% in quarter 3 2019-20. State-wide implementation of routine growth assessments in oral health settings commenced in early 2019.

Children's growth is monitored regularly in the early years of life however the proportion of children with growth assessed after two years is significantly less. The Healthy Kids for Professionals program has supported improvement in the proportion of children 2 years and over who have their growth assessed in the 2-5 years and 6-13 years age groups. More work is needed to support the 14-17 years age group.






Figure 2: Proportion of children with height/length and weight measured in NSW Health inpatient, outpatient and community health services



From 2018-19 to 2019-20 there was an increase in the proportion of children aged 2 years and over who had their growth assessed.

The proportion of children with growth assessed by age-group:

Age-group	2018-19	2019-20
 2 years to < 6 years	40%	46%
 6 years to < 14 years	35%	40%
 14 years to < 17 years	38%	39%

Paediatric inpatient wards

The increase in routine growth assessments in NSW Health facilities has been most apparent in paediatric inpatient wards. This is likely a result of targeted training, implementation support and investment in new equipment. Figure 3 summarises performance in these wards across a two-year period.

The overall proportion of children with growth assessed in paediatric wards has increased from 47% in 2018-19 to 65% in 2019-20.

Equivalent to
9,000
more children having
their growth assessed.

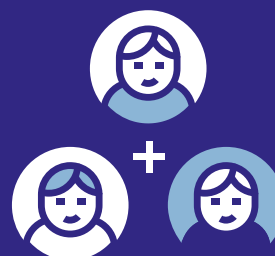
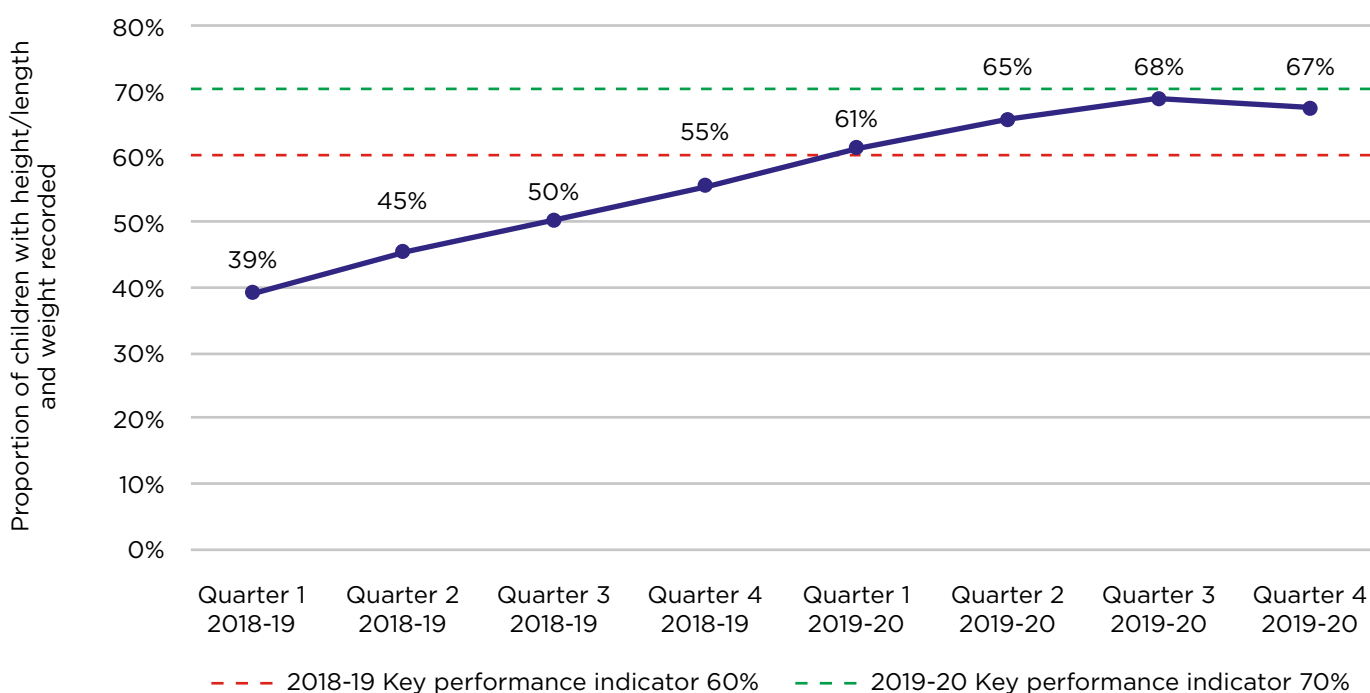


Figure 3: Proportion of children with height/length and weight measured in NSW Health paediatric wards from 1 July 2018 to 30 June 2020



Providing families with brief advice and referral

Data was not available to evaluate how often children and families are provided with brief advice following a routine growth assessment. However, the evaluation of the face-to-face training found that most participants had started using sensitive language and were using the 8 Healthy Habits resource which is a key resource for providing healthy lifestyle advice.

Arranging referral to appropriate services is the final component of the 4As approach. The primary referral pathways promoted by Healthy Kids for Professionals were *Go4Fun* (7-13 year olds), local weight management services, general practitioners and the *Get Healthy Information and Coaching Service* (16 years and older). Data was not available to evaluate how often families were referred to these programs and services, however, the number of referrals by health professionals to Go4Fun is positively correlated with the number of LHD health professionals who have been trained as part of the Healthy Kids for Professionals program, see Figure 4. Referral pathways to community-based programs are not available for all age-groups. Programs are needed to better support children aged 14-17 years.

Future directions

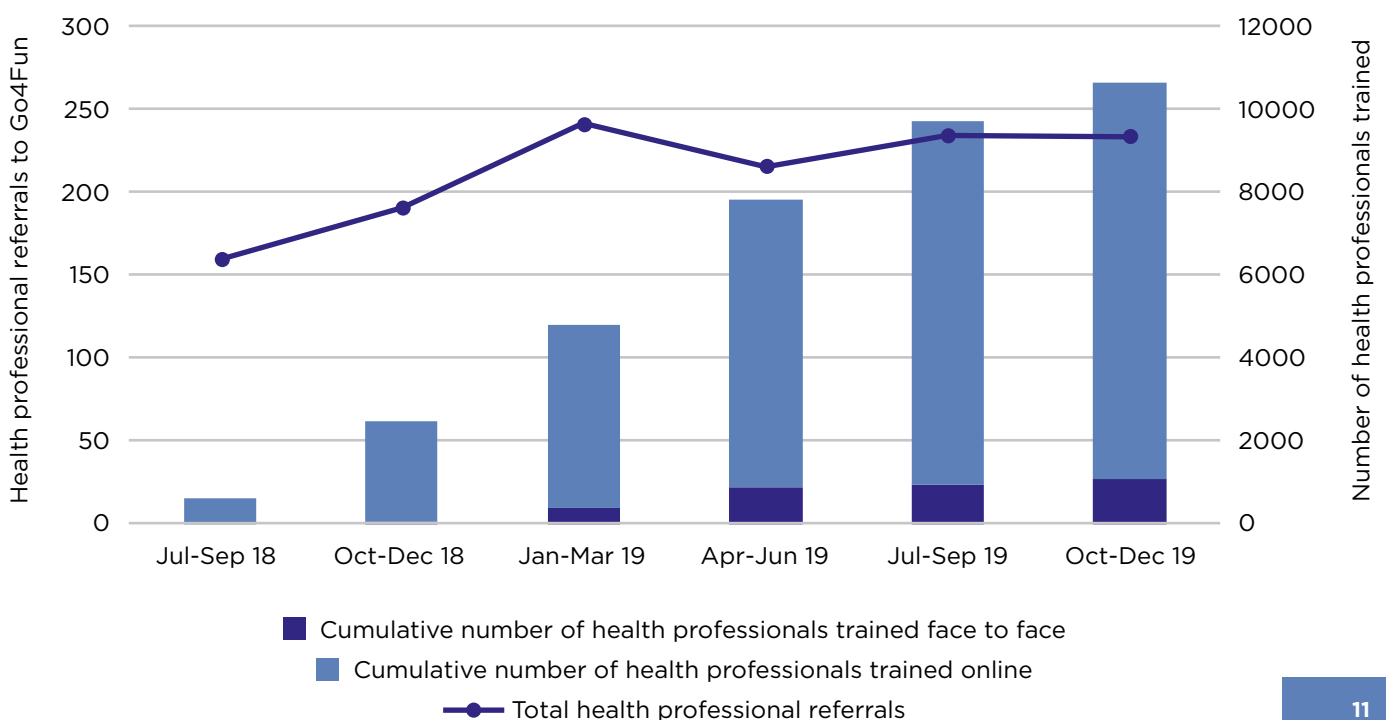
The Healthy Kids for Professionals website and resources provide ongoing support for health professionals to address childhood obesity with their patients. The resources and online training are freely available for all health professionals.

The program continues to be implemented to embed growth assessments into routine care in all NSW Health facilities. To continue improvements to date, brief interventions and referrals following the assessment of children's growth are an important childhood obesity prevention strategy.

For more information and resources visit pro.healthykids.nsw.gov.au



Figure 4: Health professional referrals to Go4Fun and NSW Health staff participation in Weight4KIDS online & 'Can you raise the issue' face-to-face training



Case study: Healthy Kids for Professionals – South Eastern Sydney Local Health District

South Eastern Sydney Local Health District (SESLHD) achieved the 2018-19 service improvement target of 60% of children's height/length and weight measurements recorded.

SESLHD implemented the program with a focus on integrated effort across the district to build organisational capacity to increase height and weight measurement in children, offer brief advice and refer to appropriate weight management services.

Implementation across SESLHD involved targeting many different clinical areas of the district with a focus on areas seeing high volumes of children. Oral Health Services and St George Paediatric inpatient ward were early adopters of the initiative.

What they did



Senior leaders engaged to support the practice change and ensure accountability in each clinical area



Measurement stations established to enable staff to conduct measurements



Clinical champions engaged to lead implementation activities across the district



243 staff trained to confidently perform growth assessments and sensitively talk to families



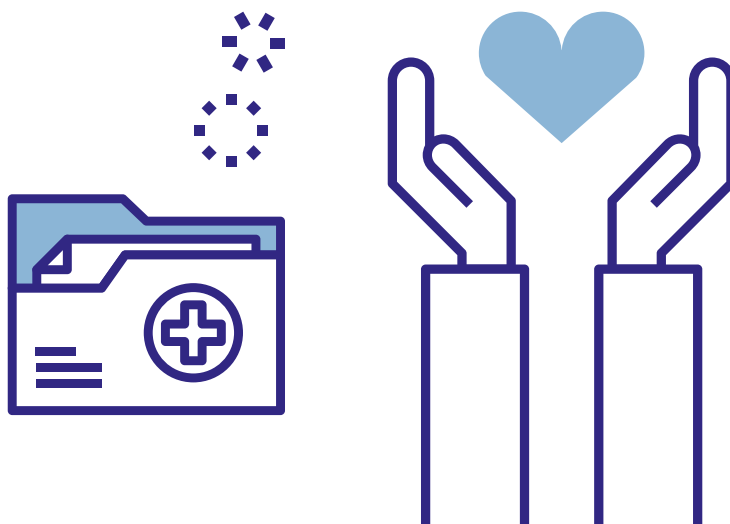
Dedicated project lead for the district to monitor performance and continually engage and support clinical champions



Local referral pathways for children were identified and promoted to clinical staff



Equipment reviewed and procured where required





St George Paediatric Inpatient Ward

Following the delivery of **staff training** in January 2019 and set up of additional **measurement stations**, the proportion of children with height and weight recorded increased from 14% in quarter 1 2018-19 to 44% in quarter 1 2019-20. Sustaining this increase was difficult due to staff changes and recruitment of new clinical champions. In order to maintain improvements to performance, focus groups were conducted with nursing staff to identify barriers. As a result a number of new strategies were implemented to improve performance and increase referrals. Strategies included reminders in **nursing handover** and in **the daily planner**. To increase staff confidence, additional **staff education** focused on having a sensitive conversation with families and improving awareness of **referral pathways**. Displaying engaging **visual reminders** and **support resources** on the ward improved staff engagement with routine growth assessments.

Oral Health Services

Oral Health Services provided staff with **training, equipment** and a new **electronic system** which included functions to record children's growth, key dietary behaviours and make referrals to weight management services, where appropriate. Oral Health Services found it was important to **display growth assessment information for families** and keep equipment in a **space that fits the usual workflow**. From July 2018 – June 2019 oral health staff performed 1,223 growth assessments. These assessments enabled early intervention for children above a healthy weight and led to:

- **91** Go4Fun referrals
- **32** General Practitioner referrals
- **2** Get Healthy Information and Coaching Service referrals

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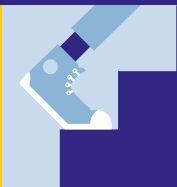
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