

## Growth Assessment and Dietary Advice in Public Oral Health Services

**Summary** This Guideline provides direction on the implementation of routine height and weight measurements for children, and associated dietary advice in public oral health services. It complements the NSW Health Guideline Growth Assessment in Children and Weight Status Assessment in Adults (GL2017\_021), but provides additional information specific to public oral health services.

**Document type** Guideline

**Document number** GL2019\_001

**Publication date** 28 February 2019

**Author branch** Centre for Oral Health Strategy

**Branch contact** (02) 8890 4300

**Review date** 28 February 2024

**Policy manual** Not applicable

**File number** H17/52697

**Status** Active

**Functional group** Clinical/Patient Services - Dental/Oral, Information and Data  
Population Health - Health Promotion

**Applies to** Ministry of Health, Local Health Districts, Board Governed Statutory Health Corporations, Specialty Network Governed Statutory Health Corporations, Community Health Centres, Dental Schools and Clinics, Public Hospitals

**Distributed to** Ministry of Health, Public Health System

**Audience** All Public Oral Health Service Staff, Health Promotion Units, LHD Staff

## GROWTH ASSESSMENT AND DIETARY ADVICE IN PUBLIC ORAL HEALTH SERVICES

### PURPOSE

This document introduces routine measurement of height and weight of patients in public oral health services, as part of addressing the NSW Premier's priority on Tackling Childhood Obesity to reduce childhood overweight and obesity by 5% by 2025.

This document complements the NSW Health Guideline *Growth Assessment in Children and Weight Status Assessment in Adults* (GL2017\_021). It provides specific directions on the implementation of growth assessment and dietary advice for children in public oral health services.

### KEY PRINCIPLES

A strategic direction under the NSW Premier's priority on Tackling Childhood Obesity is the routine collection of height and weight across NSW Health Services. Routine weight status assessment and management by public oral health services, including the provision of brief advice and referral pathways to healthy lifestyle programs, is important for inter-professional collaboration to address the issue of childhood obesity.

This Guideline provides the recommended approach for public oral health services to implement routine growth assessment and advice into clinical care. This includes:

- Professional development for staff (Section 2);
- Processes for growth and dietary assessments (Section 3);
- Provision of brief intervention for children above a healthy weight (Section 4.1);
- Provision of dietary and physical activity advice to address both oral health and obesity risk (Section 4.2), and;
- Referral pathways and processes for children identified as being outside of a healthy weight status (Section 5).

Successful implementation of this Guideline will require oral health service to establish partnerships with other key health services in their Local Health District, such as Health Promotion, to obtain additional support for staff and patients.

### USE OF THE GUIDELINE

**Public oral health staff** should be aware of the recommended professional development (Section 2), and the processes for:

- Measuring and recording height and weight of patients (Section 3);
- Providing an appropriate brief intervention (Section 4); and
- Providing referrals to other health services (Section 5).

**Public oral health service managers and clinical directors** should support staff in completing recommended professional development, and in the implementation of the measurement of height and weight, brief interventions, and referrals as part of standard clinical practice.

## REVISION HISTORY

Version	Approved by	Amendment notes
February 2019 (GL2019_001)	Chief Health Officer and Deputy Secretary, Population and Public Health	Initial document.

## ATTACHMENTS

1. Growth Assessment and Dietary Advice in Public Oral Health Services: Guideline

**Growth Assessment and Dietary Advice in Public Oral  
Health Services**



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**Issue date:**

GL2019\_001

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## **1 BACKGROUND**

### **1.1 Routine measurement of height and weight**

This document introduces the routine measurement of height and weight of patients in public oral health services. This intervention addresses the New South Wales (NSW) Premier's priority on Tackling Childhood Obesity to reduce childhood overweight and obesity by 5% by 2025.<sup>1</sup>

Childhood obesity is a primary public health issue across Australia. Overweight and obese children are more likely to remain so into adulthood, more likely to develop non-communicable diseases at a younger age as well as die prematurely<sup>2</sup>. In NSW, 21% of school-aged children are overweight or obese<sup>3</sup>.

A strategic direction under the NSW Premier's priority is the routine collection of height and weight measurements across NSW Health Services. Routine weight status assessment and management by public oral health services, including the provision of brief advice and referral pathways to healthy lifestyle programs, is important for inter-professional collaboration to address the issue of childhood obesity.<sup>4</sup>

This document complements the NSW Health Guideline *Growth Assessment in Children and Weight Status Assessment in Adults* (GL2017\_021). It provides additional direction on the specific implementation of routine height and weight measurements for children in public oral health services.

### **1.2 Dietary analysis and advice in the clinical setting**

Behavioural risk factors that impact on oral health share common risk factors with a number of other chronic diseases such as diabetes, cancer and cardiovascular disease.<sup>5</sup> The consumption of sugars has a strong link with the growing obesity problem in Australia, and is a significant behavioural risk factor for developing dental caries.<sup>6,7</sup> Because of these common risk factors, this Guideline links the preventive approaches for oral health and obesity in the public oral health setting. The Guideline recognises that addressing these risks requires use of expertise from outside the public oral health service. It promotes consistency and improved integration with NSW health promotion messages and programs.

A key dietary message for the prevention of dental caries and obesity is the promotion of drinking tap water. In Australia, community water fluoridation programs are considered a safe and effective way of reducing tooth decay across the population.<sup>8</sup> NSW Health supports water fluoridation as the primary method of delivering the benefits of fluoride to the community.

### 1.3 Roles and Responsibilities

**Public oral health staff** should be aware of the recommended professional development (Section 2), and the processes for:

- Measuring and recording height and weight of patients (Section 3);
- Providing an appropriate brief intervention (Section 4); and
- Providing referrals to other health services (Section 5).

**Public oral health service managers and clinical directors** should support staff in completing recommended professional development, and in the implementation of the measurement of height and weight, brief interventions, and referrals as part of standard clinical practice.

### 1.4 Key definitions

Weight status: Based on BMI measurements in adults, and on sex-specific BMI-for-age centiles in children. The weight status provides a clinical description of whether a patient is below a healthy weight (underweight), at a healthy weight, above a healthy weight (overweight), or well above a healthy weight (obese).

Body mass index (BMI): An indicator of weight status, calculated by dividing weight by height squared ( $\text{kg}/\text{m}^2$ ).

Above a healthy weight: Patient's BMI-for-age is in the 85<sup>th</sup> to <95<sup>th</sup> percentile according to Centres for Disease Control (CDC) BMI-for-age percentile chart.

Well above a healthy weight: Patient's BMI-for-age is in the 95<sup>th</sup> percentile or above according to CDC BMI-for-age percentile chart.

### 1.5 Strategic framework

#### *NSW Premier's Priority on Tackling Childhood Obesity*

The routine collection of height and weight in NSW Health Services is a key strategic direction under the NSW Premier's priority for tackling childhood obesity.

#### *Oral Health 2020: Strategic Directions for Dental Health in NSW*

This Guideline supports the actions of Oral Health 2020 A Strategic Framework for Dental Health in NSW<sup>2</sup> by addressing the following action areas:

- Implementing an integrated risk factor approach to oral health promotion that capitalises on key initiatives such as the Healthy Children Initiative, and
- Provide support to other health promotion campaigns that include common messages around water consumption and reduction of intake of sugary drinks and food.

This Guideline should be read in conjunction with the following NSW Health Policies and Guidelines:

- Nutrition Care Policy (PD2017\_041)
- Growth Assessment in Children and Weight Status Assessment in Adults Guideline (GL2017\_021)

## **2 PROFESSIONAL DEVELOPMENT**

All public oral health professionals working with children and young people are required to complete the *Weight4KIDS - Core Module* (My Health Learning course code: 179056869). This module provides the framework for measuring height and weight, calculation of body mass index, determination of weight status, and strategies to engage appropriately with patients, parents and carers regarding the management of a child's weight status.

LHD oral health services should consider additional professional development required to support staff to implement the elements of this Guideline. This may include patient coaching courses to support their patients towards health self-care<sup>a</sup>.

## **3 ASK & ASSESS**

To assist dental practitioners perform height and weight measurements and associated activities for all children aged 2 – 17 years of age, a patient flow chart (Attachment 1) is provided for guidance. These oral health procedures are aligned with the Weight4KIDS training module.

### **3.1 Assess: Height and Weight**

#### *Ask*

All children aged 2-17 presenting at NSW public oral health clinics must be approached to have their height and weight measured at the commencement of a comprehensive course of care, or as soon as appropriate. Where verbal consent is not given, this must be documented in the patient's oral health record.

### **3.2 Assess: Measure and record patient height and weight**

Where verbal consent has been provided, height and weight measurements should be undertaken in accordance with the *Weight4KIDS* training and also Section 2 and 3 of the NSW Health Guideline *Growth Assessment in Children and Weight Status Assessment in Adults*.

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<sup>a</sup> My Health Learning: Learning Path - Motivational Interviewing. Includes courses *Introduction to Motivational Interviewing* (Course code: 42190007) and *Motivational Interviewing: Building Skills* (Course Code: 99447022).



A *Guide to accurately measure the height of a child* resource is available through the Healthy Kids for Professionals website: <https://pro.healthykids.nsw.gov.au/resources/>

The patient's height and weight measurements must be recorded in their oral health record. A 143 item number must be recorded in the patient's oral health record to account for this activity. If consent for height and weight measure is not obtained from the patient's parent or carer, an item number must not be claimed.

### **3.3 Assess: Determine patient weight status**

#### **Calculate Body Mass Index**

In children 2 years and older, the weight status is informed by the BMI. BMI is defined as the weight in kilograms divided by the square of the height in metres (kg/m<sup>2</sup>). For example, a child who weighs 43.6 kg and whose height is 1.42 m will have a BMI of 21.6kg/m<sup>2</sup> when rounded to 1 decimal place.

$$\text{BMI} = 43.6 \text{ kg} / (1.42 \text{ m}^2) = 43.6 / 2.0164 = 21.6 \text{ kg/m}^2$$

BMI calculators are available online. An online weight status calculator for children is also available: <https://pro.healthykids.nsw.gov.au/calculator/>

#### **Determine weight status**

A child's BMI should be plotted against their respective age on the appropriate BMI-for-age chart. An online description of how to plot a child's BMI-for-age is available: <https://pro.healthykids.nsw.gov.au/assess/>

Plotting BMI-for-age will reveal a percentile, which should be interpreted as follows:

- Below the 5<sup>th</sup> percentile: below a healthy weight
- 5<sup>th</sup> to below the 85<sup>th</sup> percentile: healthy weight
- 85<sup>th</sup> to below 95<sup>th</sup> percentiles: above a healthy weight
- 95<sup>th</sup> percentile and above: well above a healthy weight

A child's weight status should be considered in the context of a patient's medical history and family circumstances.

#### **Maintenance of equipment**

Storage, use and maintenance of equipment should be in accordance with Section 2.1 of the NSW Health Guideline *Growth Assessment in Children and Weight Status Assessment in Adults*. Equipment for the measurement of height and weight should be calibrated annually. Consideration must be given to infection control and risk management in compliance with NSW Health and LHD policies, procedures and guidelines.

### 3.4 Assess: Diet analysis

A diet analysis is essential to help individuals reduce the frequency of eating refined carbohydrates such as sugars, which contribute to the development of dental caries and obesity.<sup>9</sup> The diet analysis should at least cover the risk of high frequency intake of sugar sweetened beverages or fermentable carbohydrates.

Dental practitioners should conduct a dietary analysis to inform the preventive health care and advice for all children and adolescents under 18 years of age. Questions for assessing dietary risks for dental caries and weight status are included in the growth assessment and diet analysis form in some electronic oral health record systems<sup>10</sup>.

## 4 ADVISE

### 4.1 Brief intervention for children above a healthy weight

If a child is above a healthy weight a brief intervention must be performed. The intervention must be consistent with the *Weight4KIDS* training and Section 2.2.4 of the NSW Health Guideline *Growth Assessment in Children and Weight Status Assessment in Adults*.

Patients and/or their families should be advised of the patient's weight status in a positive, sensitive and non-judgemental manner. Avoid any suggestion of blame or disapproval, and focus on delivering the advice using clear language appropriate to the patient.

Understanding the family or social circumstances may also help to deliver the information in an appropriate approach. This could include engagement of Aboriginal Liaison Officers, and effective use of health care interpreters in compliance with *Standard Procedures for Working with Health Care Interpreters* (PD2017\_044).

Suggested conversation starters can be found on the [Healthy Kids for Professionals](#) website.

Avoid language that can be potentially offensive or stigmatising, such as "malnourished", "skinny", "obese", "morbidly obese" and "obesity".

Describe weight status using the following recommended terms, which have been shown to be acceptable to patients and carers:

- Below a healthy weight (instead of underweight)
- At a healthy weight
- Above a healthy weight (instead of overweight)
- Well above a healthy weight (instead of obese)

Advice about weight status should ideally be accompanied with written and visual information, such as a completed BMI-for-age chart for children.

Parents/carers should be advised of the healthy lifestyle programs available, and a referral to these services arranged where indicated and with parent/carer agreement.

## **4.2 Dietary advice**

Dental practitioners should provide dietary advice as part of a patient's treatment plan.<sup>9,11</sup> The coaching principles to encourage patients towards health self-care should guide communication with parent/carer.<sup>12</sup> The dental practitioner should assess the patient's readiness and determine the most appropriate time to offer preventive advice during a course of care.

The dental practitioner should ensure the patient and their parent/carer are actively engaged to establish achievable and meaningful goals for reducing behavioural risks. Advice should be provided in a way that makes sense in the patient's family and social context. As with weight status advice, this could include engagement of Aboriginal Liaison Officers, and effective use of health care interpreters.

Advice should encourage eating behaviours that prevent dental caries, and also reduce the risk of the patient being above a healthy weight:

- Drink tap water;
- Limit frequency of sugar intake, e.g. Have less than four sugary foods per day;
- Choose healthier snacks.

The specific dietary advice offered is recorded in the patient's oral health record, and a 131 item should also be claimed for this activity.

## **5 ARRANGE: REFERRAL PATHWAYS**

### **5.1 Healthy lifestyle programs**

#### *Above or well above a healthy weight*

To support the brief intervention on healthy weight, LHDs must establish referral pathways to healthy lifestyle programs. A range of services available, and how to refer to them, can be found at: <https://pro.healthykids.nsw.gov.au/arrange/>

These services include:

- Go4Fun® (including Go4Fun Online <https://go4funonline.com.au>  
For children aged 7-13 years who are above a healthy weight
- Get Healthy Information and Coaching Service  
For children above 16, or for family based advice

- Local multidisciplinary weight management services such as Hornsby Healthy Kids, Weight Management and Nutrition and Dietetics at The Children's Hospital at Westmead, Nepean Kids Fit 4 Future Clinic, and John Hunter Children's Hospital Weight Management Service.

Referrals to Go4Fun and the Get Healthy Service may be supported by electronic referral forms in some LHDS. Parent and/or carer contact details should be entered into the electronic referral forms for all patients who are to be referred to these services.

In some LHDS a report is available to automatically extract these referral details from the electronic patient referral activity to provide referrals to Go4Fun and the Get Healthy Service. This process simplifies the referral process for dental practitioners. In LHDS where this automated process is not available, appropriate Go4Fun and Get Healthy Service paper referral forms should be used. These referrals must be documented in the patient oral health record.

Where healthy lifestyle programs are not locally available, dental practitioners may develop local referral pathways to paediatric, nutrition and dietetic services, or refer the patient to their GP.

Referrals can also be made to dietitians employed within the LHDS for advice relating to either healthy weight or oral health. The Get Healthy Information and Coaching Service may also be used to support a brief dietary intervention (Item 131).

#### *Below a healthy weight*

Children and adolescents who are below a healthy weight can be referred to their family GP or to a local paediatric or nutrition and dietetic service if available.

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## **6 COMMUNICATION STRATEGY**

It is important to identify LHD sponsors and key stakeholders to support the implementation and compliance to this state health initiative. The following key stakeholders are examples of those that could assist oral health staff to ensure they achieve the project goals.

- LHD Integrated Care
- LHD Population Health – Health Promotion Officers
- Allied Health and Community Health services
- Clinical Governance Structures

## **7 PROGRAM EVALUATION & MONITORING**

LHDs will be able to monitor and evaluate the Growth Assessment and Dietary Advice activities using a program logic framework (Attachment 2). The framework provides transparency to track and evaluate activities at multiple levels for quality improvement purposes.

Additionally, the program logic provides a governance framework for stakeholders to clearly communicate with health professionals regarding the strategy to reduce childhood obesity and enhance good oral health for children 2–17 years of age.

## **8 LIST OF ATTACHMENTS**

1. Patient Flow: Growth Assessment and Dietary Advice in Oral Health Services
2. Program Logic - Growth Assessment and Dietary Advice in Oral Health Services

## Patient Flow Growth Assessment and Diet Advice in Oral Health Services

### 1. Ask & Assess

Ask for consent.

Measure patient height and weight as soon as practical in course of care.



- ⇒ Record item 143
- ⇒ Record patient height and weight in patient oral health record,
- ⇒ Calculate BMI using scales or online calculator.
- ⇒ Determine weight

Assess diet and record in patient oral health record.

### 2. Advise

Discuss patient weight status. Provide brief advice on a healthy lifestyle.

For patients above a healthy weight, inform them about free healthy lifestyle programs available.

- ⇒ Use BMI-for-age chart as a visual aid.
- ⇒ Discuss common risks for oral health and weight (e.g. sugar, low water consumption).

Provide dietary advice and record in patient oral health record.

### 3. Arrange

(if consent given)

**For child below or above healthy weight, record action to be taken on patient oral health record.**

Refer to Go4Fun or Go4Fun Online (6.5-13 Years & Above healthy weight).

Refer to Get Healthy Service (Family advice or if over 16 Years).

Refer to GP or other local service (e.g. dietician) (Other age or below healthy weight).

**Check referral details on height and weight form.**

Refer to dietician for oral health advice only if required (Healthy weight).

**Complete referral letter.**

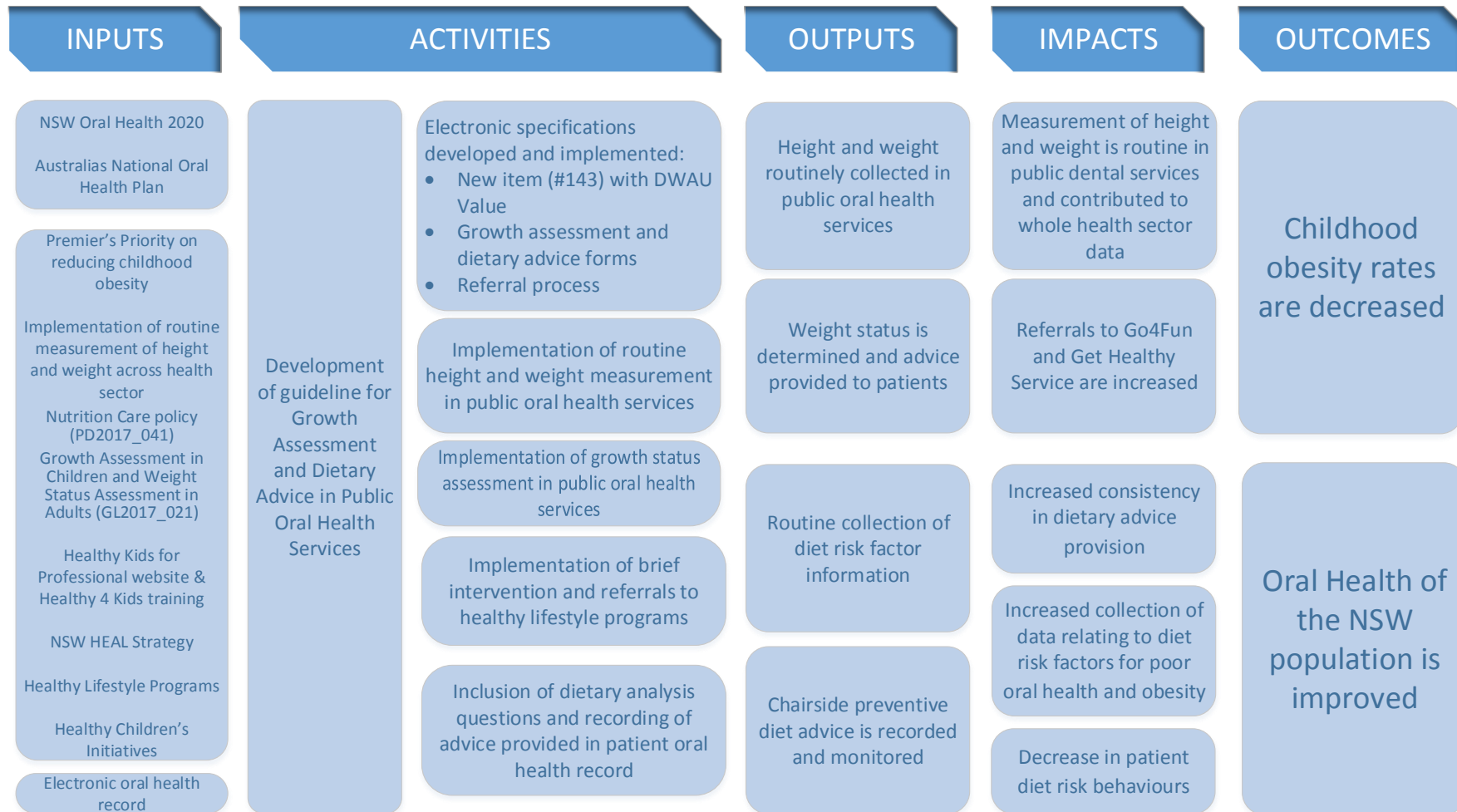


## Attachment 2: Program Logic – Growth Assessment and Diet Advice in Public Oral Health Services

### Oral Health 2020: Improve the oral health of the NSW Population through primary prevention

Implement an integrated risk factor approach to oral health promotion that capitalises on key initiatives such as the Healthy Children Initiative.

Provide support to other health promotion campaigns that include common messages around alcohol, smoking, water consumption and reduction of intake of sugary drinks and food.





## 9 REFERENCES

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