

## Paediatric Endocrinology Specialist Clinics at Western Health:

Western Health provides the following Specialist Clinics for patients up to the age of 17 who require assessment and management of Paediatric Endocrinology conditions. Patients will be triaged by Consultant Endocrinologist into management pathways according to specific clinical requirements:

**These referral guidelines are for Paediatric Specialist Clinics provided at Joan Kirner Women's and Children's at Sunshine Hospital only.**

**Referrals may be triaged to alternative Paediatric Specialist Clinics at Western Health.**

## Paediatric Endocrinology Alarm Symptoms:

**Acute conditions listed below require immediate assessment – please refer the patient to the Sunshine Hospital Emergency Department.**

- Hypoglycaemia
- Newly diagnosed hyperthyroidism
- Polyuria
- Polydipsia
- Hypocalcaemia

## Access & Referral Priority Paediatric Endocrinology:

The clinical information provided in your referral will determine the triage category. The triage category will affect the timeframe in which the patient is offered an appointment.

<p style="text-align: center;"><b>URGENT</b></p> <p style="text-align: center;">Appointment timeframe 30 days</p>	<p style="text-align: center;"><b>ROUTINE</b></p> <p style="text-align: center;">Appointment timeframe greater than 30 days, depending on clinical need.</p>
<p><b>Thyroid Disorders</b></p> <p><b>Hypothyroidism</b></p> <ul style="list-style-type: none"> <li>Newly diagnosed TSH &gt;20 and low Free T4— suggest contact paediatric endocrinologist on-call for advice via switch 8345 6666.</li> </ul> <p><b>Hyperthyroidism</b></p> <ul style="list-style-type: none"> <li>Newly diagnosed with low TSH and elevated free T4/free T3 and symptomatic (palpitations, weight loss), send to the Sunshine Hospital Emergency Department.</li> <li>Newly diagnosed with tests mildly abnormal TSH low but &gt;0.2U/l or free T4 mildly elevated but &lt;30pmol/l.</li> </ul>	<p><b>Thyroid Disorders</b></p> <p><b>Hypothyroidism</b></p> <ul style="list-style-type: none"> <li>Newly diagnosed TSH &gt;10 on 2 occasions</li> <li>Mild elevation in TSH (&lt;10) is seen commonly and will often improve without treatment. Mild elevation in TSH can be associated with obesity. Suggest repeat TFTs in 3 months with anti-thyroid peroxidase (TPO) and anti-thyroglobulin antibodies.</li> </ul>
<p><b>Primary Adrenal Insufficiency</b></p>	<p><b>Short Stature</b></p> <ul style="list-style-type: none"> <li>Height &lt; 1<sup>st</sup> centile or &lt;3<sup>rd</sup> centile with other medical concerns or height out of keeping of family height potential.</li> </ul> <p><b>Tall Stature</b></p>
<p><b>Polyuria and/or Polydipsia</b></p>	<p><b>Turner Syndrome</b></p>
<p><b>Precocious Puberty</b></p> <ul style="list-style-type: none"> <li>In children &lt; 6 years of age.</li> <li>Referral accepted for all females with breast development starting &lt;8 years of age and males with testicular enlargement &gt;4mls at &lt;9 years of age*</li> </ul> <p>*Referrals will be triaged to either urgent or routine pending initial work up and results/investigation provided.</p>	<p><b>Pubertal Delay</b></p> <ul style="list-style-type: none"> <li>No secondary sexual characteristics developed in boys or girls by the age of 14 years.</li> </ul>
<p><b>Hypoglycaemia</b></p> <ul style="list-style-type: none"> <li>Refer to the Sunshine Hospital Emergency Department</li> </ul>	<p><b>Fractures</b></p> <ul style="list-style-type: none"> <li>Femoral shaft fracture</li> <li>Two or more other long bone fractures</li> </ul>

# Western Health Specialist Clinics Access & Referral Guidelines

## Hypercalcaemia

## Bone Fragility Syndromes

- Osteogenesis imperfecta
- Hypophosphatasia

## Rickets Vitamin D Deficiency

- Patients with a 25(OH) D level < 12 nmol/L

**Note:** If also hypocalcaemic refer patient to the Sunshine Hospital Emergency Department.

## Bone Health Assessment

- Bone health assessment for non-ambulatory children less than 17 years of age.

## Obesity

- Children > 10 years with obesity for assessment and monitoring if associated with:
  - Acanthosis nigricans
  - Family history of type 2 diabetes mellitus
  - Maternal gestational diabetes
  - Polycystic ovarian syndrome in older teenager girls; indicative of increased risk for type 2 diabetes mellitus.

## Condition Specific Referral Guidelines:

Key information enables Western Health to triage patients to the correct category and provide treatment with fewer visits to specialist clinics, creating more capacity for care. If key information is missing, you may be asked to return the referral with the required information.

Condition:	Key Information Points:	Clinical Investigations
<b>Short Stature / Tall Stature</b>	<p><b>Essential</b></p> <ul style="list-style-type: none"> <li>• Past medical history</li> <li>• Clinical examination                             <ul style="list-style-type: none"> <li>➢ Height and weight measurements</li> <li>➢ Growth chart assessments</li> <li>➢ All past height and weight measurements</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Please forward any copies of previous assessments and reports.</li> <li>• Bloods Tests                             <ul style="list-style-type: none"> <li>➢ Full blood count</li> <li>➢ Electrolytes</li> <li>➢ bone chemistry (Ca/Phosphate)</li> <li>➢ IGF1</li> <li>➢ TSH/freeT4;</li> <li>➢ coeliac serology,</li> <li>➢ liver function tests,</li> <li>➢ ESR</li> </ul> </li> <li>• Chromosomal karyotype in females to exclude Turner syndrome.</li> <li>• Bone age X-ray</li> </ul>
<b>Thyroid Disorders</b>	<p><b>Essential</b></p> <ul style="list-style-type: none"> <li>• Past medical history</li> <li>• Clinical examination                             <ul style="list-style-type: none"> <li>➢ Height and weight measurements</li> <li>➢ Growth chart assessments</li> </ul> </li> <li>• Age at diagnosis</li> </ul> <p><b>Hypothyroidism</b></p> <ul style="list-style-type: none"> <li>• Current thyroxine dose</li> </ul>	<ul style="list-style-type: none"> <li>• Thyroid stimulating Hormone (TSH)</li> <li>• Free Thyroxine (fT4)</li> <li>• Thyroid antibodies</li> <li>• Anti thyroglobulin antibodies and anti-thyroid peroxidase antibodies</li> </ul>
<b>Pubertal Delay</b>	<p><b>Essential</b></p> <ul style="list-style-type: none"> <li>• Past medical history</li> <li>• Clinical examination</li> <li>• Family history – pubertal timing of parents, maternal age of menarche</li> </ul>	<ul style="list-style-type: none"> <li>• Please forward any copies of previous assessments and reports.</li> <li>• Bone age Xray</li> <li>• Blood Tests:                             <ul style="list-style-type: none"> <li>➢ Full Blood Count</li> <li>➢ Electrolytes</li> <li>➢ TSH</li> <li>➢ LH</li> <li>➢ FSH</li> <li>➢ Oestradiol/ testosterone</li> </ul> </li> </ul>

# Western Health Specialist Clinics Access & Referral Guidelines

<b>Early Puberty</b>	<b>Essential</b> <ul style="list-style-type: none"> <li>• Past medical history</li> <li>• Clinical examination</li> <li>• Noting Tanner stage <a href="#">RACGP - Growth disorders in adolescents</a> <ul style="list-style-type: none"> <li>➢ blood pressure</li> </ul> </li> <li>• Growth measurements</li> <li>• Evidence of true puberty <ul style="list-style-type: none"> <li>➢ Females – evidence of breast development at &lt;8years.</li> <li>➢ Males - evidence of testicular enlargement ≥4ml, or virilization /development of phallus at &lt;9yrs.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Please forward any copies of previous assessments and reports.</li> <li>• Bone age X-ray</li> <li>• Blood Tests <ul style="list-style-type: none"> <li>➢ TSH</li> <li>➢ FSH</li> <li>➢ LH</li> <li>➢ testosterone/oestradiol</li> </ul> </li> <li><b>If pubic hair present:</b></li> <li>• Blood Tests <ul style="list-style-type: none"> <li>➢ DHEAS</li> <li>➢ Testosterone</li> <li>➢ Androstenedione</li> <li>➢ 17 – OH Progesterone</li> <li>➢ FSH</li> <li>➢ LH</li> <li>➢ (+ Oestradiol if female)</li> </ul> </li> <li>• Bone age X-ray</li> </ul>
<b>Turner Syndrome</b>	<b>Essential</b> <ul style="list-style-type: none"> <li>• Past medical history</li> <li>• Age at diagnosis</li> <li>• Current hormone treatment</li> </ul>	<ul style="list-style-type: none"> <li>• Results of chromosomal analysis.</li> <li>• Please forward copies of previous assessments and reports.</li> <li>• TSH</li> </ul>
<b>Fractures</b>	<b>Essential</b> <ul style="list-style-type: none"> <li>• Past medical history</li> <li>• Details of Paediatric Orthopaedic involvement.</li> </ul>	<ul style="list-style-type: none"> <li>• Xray reports</li> </ul>
<b>Bone Fragility Syndrome</b>	<b>Essential</b> <ul style="list-style-type: none"> <li>• Details of initial diagnosis</li> <li>• Past medical history</li> <li>• Past fracture history</li> </ul>	<ul style="list-style-type: none"> <li>• Please forward copies of previous assessments and reports.</li> <li>• Xray reports</li> </ul>
<b>Bone Health Assessments</b>	<b>Essential</b> <ul style="list-style-type: none"> <li>• Past medical history</li> </ul>	<ul style="list-style-type: none"> <li>• Please forward copies of previous assessments and reports.</li> <li>• Xray reports</li> </ul>
<b>Hypophosphatemia Rickets</b>	<b>Essential</b> <ul style="list-style-type: none"> <li>• Past medical history</li> <li>• Details of initial diagnosis</li> </ul>	<ul style="list-style-type: none"> <li>• Please forward any copies of previous assessments and reports.</li> <li>• Xray reports</li> </ul>