

Metabolic Bone Clinic Referral Guidelines

Austin Health holds a weekly Metabolic Bone Clinic for people with severe or complex osteoporosis needing **specialist osteoporosis management**. Due to an overwhelming demand for this service, we are currently **only accepting referrals for patients meeting the criteria below**.

Department of Health clinical urgency categories for specialist clinics

For all emergency cases that require immediate review, or pose an immediate risk to life or limb, please dial 000 or send the patient to the Emergency Department.

Urgent: Referrals should be categorised as urgent if the patient has a condition that has the potential to deteriorate quickly, with significant consequences for health and quality of life, if not managed promptly. These patients should be seen **within 30 days** of referral receipt.

Routine: Referrals should be categorised as routine if the patient's condition is unlikely to deteriorate quickly or have significant consequences for the person's health and quality of life if specialist assessment is delayed beyond one month.

Referral Process

GP Referral Guide: Please see below conditions accepted into this clinic and provide the relevant investigations required below to aid in the appropriate triaging of your patient.

Patient instructions: Please instruct your patient to bring **ALL** their diagnostic results to their Specialist Clinic appointment.

Exclusion criteria: Referrals will be declined if they meet any of the below exclusion criteria:

- Osteoporosis not commenced antiresorptive therapy
- No previous DEXA scan or minimal trauma fracture
- Age-appropriate osteopenia without fracture
- Patients with a life expectancy < 6 months
- Age < 18 years old
- Men without renal transplant or on dialysis requiring osteoporosis assessment – please refer to the Men's Health Clinic (<https://www.austin.org.au/Assets/Files/Referral%20guideline%20for%20Men's%20Health%20Clinic.pdf>)
- Amenorrhoea in women < 40 years old requiring osteoporosis assessment – please refer to the Women's Health Clinic

Clinic Discharge Exit Criteria: Your patient will be discharged from our metabolic bone clinic either at the completion of the two visits or sooner if any of the following criteria are met:

- **Initiation of appropriate therapy:** The patient has successfully been initiated on appropriate osteoporosis therapy and no longer requires ongoing specialist Endocrinologist input.
- **Transition to Maintenance Phase:** The patient is deemed to be ready to transition to a maintenance program under the supervision of their GP.
- **Patient Decision to Cease Attendance:** The patient chooses to discontinue, either due to satisfaction with progress, preference for another treatment approach, or other personal reasons.
- **Failure of patient to attend scheduled appointments on two occasions.**
- **Development of Exclusion Criteria:** The patient develops a condition or meets any of the exclusion criteria above

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- **Stabilization of Comorbid Conditions:** Associated comorbid conditions, such as hyperthyroidism or hyperparathyroidism, are adequately controlled and ongoing management can be transitioned to the patient's GP.
- **Non-adherence with Treatment Plan:** The patient consistently fails to adhere to the recommended treatment plan despite repeated counselling and support.
- **Unwillingness to Participate Due to Cost:** Patients who are unwilling or unable to participate in pharmacotherapy due to the associated costs.
- **Lack of Progress Despite Maximum Intervention:** After maximum medical intervention, the patient shows minimal or no improvement, and further treatment within the clinic is deemed unlikely to be beneficial.

We accept patients with complicated and difficult to treat osteoporosis, chronic kidney disease related metabolic bone disease, Paget's disease, parathyroid and calcium disorders, and other rare metabolic bone disease including but not limited to hypophosphatasia, Osteogenesis Imperfecta, osteomalacia.

See below for further details.

Condition / Symptom	GP Management	Investigations Required Prior to Referral	Expected Triage Outcome	Expected Specialist Intervention Outcome	Expected number of Specialist Appointments
Persistent osteoporosis despite 3 years of maximum antiresorptive treatment <ul style="list-style-type: none"> • Request for consideration of anabolic agents • Transitioning between antiresorptive therapies 	When to Refer: <ul style="list-style-type: none"> • Age \geq 18 years • No improvement in bone density on serial bone densitometry measurements despite adherence to antiresorptive therapy • Fragility fracture despite 12 months of continuous antiresorptive therapy 	To be included in referral <ul style="list-style-type: none"> • Age • Medical comorbidities • Current Medications • Details of any previous fractures, including location and mechanism • Details of previous medical management including course of treatment and outcome of treatment Diagnostics <u>Pathology</u> <ul style="list-style-type: none"> • Full blood examination • Electrolytes/renal function • Liver function tests • Thyroid function tests • Parathyroid hormone level 	All urgent patients will be seen in Rapid Access Bone clinic within 4 weeks. Any non-urgent patients will be seen in Metabolic Bone Clinic as per the wait list.	We will review results of recent pathology and imaging and prescribe non-pharmacological and pharmacological osteoporosis therapy.	Typically, 4 appointments over a period of 12-24 months. Patients will then be discharged back to their general practitioner's care with a plan for longer-term management.

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	<ul style="list-style-type: none"> Vitamin D level optimized > 50 	<ul style="list-style-type: none"> Vitamin D level Calcium, magnesium, phosphate Serum free light chains, serum protein electrophoresis, urine protein electrophoresis Fasting bone turnover markers: C-terminal telopeptide of type 1 collagen (CTX) and Procollagen type 1 N-propeptide (P1NP) Coeliac disease screening with tissue transglutaminase Ab <p><u>Imaging</u></p> <ul style="list-style-type: none"> Bone densitometry results Lateral spine X-ray 			
Condition / Symptom	GP Management	Investigations Required Prior to Referral	Expected Triage Outcome	Expected Specialist Intervention Outcome	Expected number of Specialist Appointments
Suspected metabolic bone disease that is not osteoporosis	<ul style="list-style-type: none"> Age ≥ 18 years old Vitamin D level optimized > 50 	<p>As above</p> <p>Additionally, consider nuclear medicine bone scan.</p>	As above	As above	As above
Condition / Symptom	GP Management	Investigations Required Prior to Referral	Expected Triage Outcome	Expected Specialist Intervention Outcome	Expected number of Specialist Appointments
Metabolic bone disease associated with:	<ul style="list-style-type: none"> Age ≥ 18 years old 	As above	As above	As above	As above

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<ul style="list-style-type: none"> • Glucocorticoid use • Chronic kidney disease • Post-transplant 	<ul style="list-style-type: none"> • Vitamin D level optimized > 50 				
Condition / Symptom	GP Management	Investigations Required Prior to Referral	Expected Triage Outcome	Expected Specialist Intervention Outcome	Expected number of Specialist Appointments
Osteoporosis in women age < 50 of men age < 60 years	<ul style="list-style-type: none"> • Age \geq 18 years old • Vitamin D level optimized > 50 	As above	As above	As above	As above
Condition / Symptom	GP Management	Investigations Required Prior to Referral	Expected Triage Outcome	Expected Specialist Intervention Outcome	Expected number of Specialist Appointments
Review of management plan in patients with stable metabolic bone disease after 5 years of treatment	<ul style="list-style-type: none"> • Age \geq 18 years old • Vitamin D level optimized > 50 	As above	As above	As above	As above