**Survey questionnaire**

**Participant characteristics**

1. **What specialty do you belong to?**
   1. Endocrinology
   2. Rheumatology
   3. Metabolic medicine
   4. Clinical chemistry
   5. Geriatric medicine
   6. General practice
   7. Others: \_\_\_\_\_\_\_\_\_\_\_
2. **What grade are you?**
   1. Consultant
   2. GP
   3. Trainee
   4. Other: \_\_\_\_\_\_\_\_\_\_\_\_
3. **Which type of hospital do you work at? (tick all)**
   1. Specialist hospital/Tertiary referral centre
   2. General hospital
   3. Community based
   4. Primary care
   5. Other: \_\_\_\_\_\_\_\_\_\_\_\_\_
4. **Do you run a specialist metabolic bone clinic?**
   1. Yes
   2. No
5. **Do you have access to regional specialist adult bone MDTs?**
   1. Yes
   2. No
6. **Which part of the UK best describes where you work?**
   1. Scotland
   2. Wales
   3. Northern Ireland
   4. North East and Yorkshire
   5. North West
   6. Midlands
   7. South Central
   8. London
   9. South East
   10. South West
   11. Other: \_\_\_\_\_\_\_\_\_\_\_

**Section 1- Assessment of PHPT**

Case details:

80 year old woman with a recent hip fracture.

**Biochemistry:**

Calcium 2.85mmol/l

PTH 25pmol/L (<7.2 pmol/L)

25OH vitamin D 15nmol/L (>50nmol/L)

CrCl 45 ml/min/1.73m²

Mild cognitive impairment living at home.

Patient has been referred for consideration of parathyroid surgery (4 month wait).

1. **To make the diagnosis, would you request 24 hour urinary calcium: creatinine clearance ratio?**
   1. Yes (**if yes, go to step 2**)
   2. No (**if no, skip to question 6**)
2. **Given that you would request a 24-hour urinary calcium: creatinine clearance ratio, do you wait until after correcting Vitamin D?**
   * 1. Yes **(if yes, go to Step 3)**
     2. No **(if no, ignore 3 and go to 4)**
     3. N/A as I would not request a 24-hour calcium: creatinine ratio (**if N/A,** **ignore question 3**)
3. **Given you would wait under after correcting Vitamin D, to what level and how long do you wait?**
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. **Do you advise on a range of calcium intake during that day?**
   1. Yes (**if yes, go to step 5**)
   2. No (**if no, ignore step 5 and go to step 6**)
   3. N/A as I would not request a 24-hour calcium: creatinine ratio (**if N/A, ignore Step 5**)
5. **Given you would advise on a range of calcium intake during that day, what do you advice (mg/day)?**
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. **To make the diagnosis, would you request a spot urine for calcium: creatinine clearance ratio?**
   1. Yes (**if yes, go to Step 7**)
   2. No (**if no, ignore Step 7 and go to Step 8**)
7. **If yes, would this be random, morning or fasting?**
   1. Random
   2. Morning
   3. Fasting
   4. Other: \_\_\_\_\_\_\_\_\_\_\_
8. **How would you correct a low 25OH Vitamin D?**
   1. Single bolus of X
   2. Daily dose of X over X days
   3. Weekly dose of X over X weeks
   4. Other: \_\_\_\_\_\_\_\_\_\_\_
9. **Please describe the dose and duration to correct low 25OH Vitamin D:**
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. **What level of 25OH Vitamin D do you aim for (nmol/L)?**
    1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section 2- Assessment of fracture risk**

Case details:

80 year old woman with a recent hip fracture.

Calcium 2.85mmol/l

PTH 25pmol/L (<7.2 pmol/L)

25OH vitamin D 15nmol/L (>50nmol/L)

CrCl 45 ml/min/1.73m²

Mild cognitive impairment living at home.

Patient has been referred for consideration of parathyroid surgery (4 month wait).

**Assume that biochemical PHPT is now confirmed.**

1. **How do you assess fracture risk (select all that apply)?**
   1. DXA – Lumbar Spine, Total hip, Femoral neck
   2. DXA – distal radial
   3. DXA – VFA
   4. FRAX
   5. QFracture
   6. Other: \_\_\_\_\_\_\_\_\_\_\_\_
2. **If you use DXA, when do you request it?**
   1. At presentation
   2. Immediately after parathyroid surgery
   3. X months after parathyroid surgery **(if this option, answer step 3 else ignore)**
   4. Other: \_\_\_\_\_\_\_\_\_\_\_\_\_
3. **How many months after parathyroid surgery would you wait to do a DXA?**
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Section 3- Anti-osteoporotic medication in this case**

1. **What type of agents would you recommend regarding approach to anti-osteoporosis medication (AOM)?**
   1. No different to other patients with osteoporosis
   2. Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. **In general when do you start AOM?**
   1. Pre parathyroid surgery ( if this option, answer Step 3 else ignore)
   2. Within 3 months after parathyroid surgery
   3. 1 year after parathyroid surgery
   4. Post parathyroid surgery without a DXA
   5. Post parathyroid surgery with a DXA
   6. No general approach, varies widely depending on patient risk factors
   7. Other: \_\_\_\_\_\_\_\_\_\_\_
3. **If you would treat with anti-osteoporosis drugs before parathyroid surgery, do you favour any particular agent in this case?**
   1. Oral bisphosphonates
   2. IV Zolendronic acid
   3. SC Denosumab
   4. Other: \_\_\_\_\_\_\_\_\_\_\_\_
4. **If PHPT is confirmed, what is the role of cinacalcet in this case?**
   1. As a treatment for reducing fracture risk
   2. Pre-operatively as stand alone
   3. Pre-operatively as combination with anti-osteoporosis medication
   4. If not a candidate for parathyroid surgery
   5. No general role for cinacalcet
   6. Other: