Specification for a Local Enhanced Service for the Administration of Denosumab (Prolia®▼) for the Prevention of Osteoporotic Fractures

1. Introduction

All practices are expected to provide the essential and additional services they are contracted to provide to all their patients. This specification outlines a more specialised service to be provided. The specification of this service is designed to cover enhanced aspects of clinical care of the patient, that go beyond the scope of essential services. No part of this specification by commission, omission or implication defines or redefines essential or additional services.

2. Background

This enhanced service is for the treatment of patients at risk of osteoporotic fracture with denosumab. Osteoporosis is a condition characterised by reduced bone mass density and deterioration of bone tissue which results in increased bone fragility and susceptibility to fracture in simple falls.

Denosumab should be prescribed in accordance with:

1.Guidelines (National Institute for Health and Clinical Excellence (NICE) technology appraisal 204) outlined below:

Secondary prevention: denosumab is recommended as a treatment option for the secondary prevention of osteoporotic fragility fractures in postmenopausal women at increased risk of fractures who are unable to comply with the specific instructions for administering oral bisphosphonates, or have an intolerance of, or a contraindication to, those treatments.

Primary prevention: denosumab is recommended as a treatment option for the primary prevention of osteoporotic fragility fractures in postmenopausal women at increased risk of fractures: who are unable to comply with the specific instructions for administering oral bisphosphonates, or have an intolerance of, or a contraindication to, those treatments **and** who have a combination of T-score, age and a number of independent clinical risk factors for fracture (parental history of hip fracture, alcohol intake of 4 or more units per day and rheumatoid arthritis) as indicated in Table 1.

Table 1. T-scores (SD) at (or below) which denosumab is recommended when alendronate and either risedronate or etidronate are unsuitable

Age (years)	Number of independent clinical risk factors for fracture		
	0	1	2
65–69	Denosumab not recommended	-4.5	-4.0
70–74	-4.5	-4.0	-3.5
75 or older	-4.0	-4.0	-3.0

T-scores measure BMD using central (hip and/or spine) dual-energy X-ray scanning, and is expressed as the number of standard deviations (SD) below peak BMD. A T-score of -1 or higher is considered normal, whereas a T-score ≤ -2.5 is associated with osteoporosis.

2. Treatment of bone loss associated with hormone abalation in men with prostate cancer at increased risk of fractures where oral therapies are contraindicated or not tolerated. **(N.B. This enhanced service does not include denosumab (Xgeva®▼) 120mg prescribed for the prevention of skeletal related events) in adults with bone metastases from solid tumours).**

Denosumab injection comes as a solution (liquid) to be injected subcutaneously (under the skin) in the upper arm, upper thigh, or stomach area. When denosumab injection is used to treat osteoporosis, it is usually given as a 60mg dose once every 6 months.

3. Service Aim

This Local Enhanced Service (LES) seeks to ensure a consistent approach in the administration of denosumab in the primary care sector.

In October 2013 the All Wales Medicines Strategy Group (AWMSG) reviewed the guidance issued April 2011. The review recommended that denosumab should be initiated by a specialist within secondary care for the first dose (six months) and thereafter prescribing and administration responsibility may be transferred to primary care.

AWMSG recommended the inclusion of the use of denosumab (Prolia®) for the treatment of bone loss associated with hormone ablation in men with prostate cancer at increased risk of fractures where oral therapies are contraindicated or not tolerated.

AWMSG recommended that the enhanced service should be based on a shared care agreement. The AWMSG denosumab shared care protocol has been used as a basis for the Hywel Dda University Health Board Shared Care Protocol (SCP) which underpins this LES. The SCP must be read in conjunction with this LES service specification.

There is no reference within the Summary of Product Characteristics (SPC) that administration should only take place in a hospital setting. The Evidence Review Group (ERG) report for NICE technology appraisal 204 suggested that denosumab treatment would probably not be started in general practice because it is a new biological agent that affects other body systems (including the immune system), and long-term adverse events could not be ruled out. However the Appraisal Committee accepted the views of clinical specialists, that follow-up in secondary care would not be necessary as there were no specific safety concerns around the use of denosumab.

The administration of denosumab within primary care is designed to be an enhanced service which supports the recommendations from AWMSG:

- Patients with an established diagnosis and agreed treatment plan from secondary care, can undergo part of their treatment safely, effectively and conveniently close to their home.
- With greater integration of primary and secondary care services, this specification recognizes the increasing contribution that primary care can make in medical management and treatment of the hitherto predominantly hospital based approach.

4. Requirements of Service Delivery

Denosumab should be initiated by a specialist within secondary care for the first dose (six months) and thereafter prescribing and administration responsibility is transferred to primary care.

Administration should be performed by an individual who has been adequately trained in injection techniques. The ERG noted that subcutaneous injection of denosumab is simple and could be carried out by a GP, practice nurse or the patient. Based on the GP Research Database dataset, the average age of women taking medication for the prevention of fracture was 71.4 years and many would be older. The ERG noted therefore that such women might not be able to give themselves a subcutaneous injection because of poor eyesight, poor manual dexterity or cognitive impairment. Furthermore, training women to self-administer denosumab might not be regarded as worthwhile

because they would have to visit a healthcare provider to obtain the pre-filled pen injection device and after six months some may have forgotten how to administer it.

Hypocalcaemia must be corrected before initiating therapy with denosumab. The SPC states that clinical monitoring of serum calcium levels is only recommended for patients predisposed to hypocalcaemia. Patients with severe renal impairment (creatinine clearance <30 ml/min) or receiving dialysis are at greater risk of developing hypocalcaemia. Results from two phase III placebo-controlled clinical trials show a hypocalcaemia rate of 0.05% (2 in 4,050 trial patients). The SPC for denosumab contains no other specific monitoring requirements.

The Hywel Dda UHB Shared Care Protocol for denosumab requires that prior to each denosumab injection: renal profile, vitamin D and bone profile (serum calcium, alkaline phosphatase, phosphate, albumin) should be measured. Refer to the SCP for full monitoring requirements and additional information.

It is a requirement of this LES that the contractor:

a) Provides a register – the practice will need to produce and maintain a valid up-to-date register of patients being treated as part of this enhanced service.

b) Demonstrates a call and recall system – the practice will need to ensure a systematic call and recall of patients on this register is taking place and have in place the means to identify and follow up patients in default.

c) Agrees a joint clinical management programme – patients should be managed on the basis of individual treatment plans that will normally be drawn up by local consultants. The practice will be expected to follow these treatment plans unless there has been discussion and agreement with local consultants to modify them.

d) Supports the education of both newly diagnosed patients and those with established disease.

e) Provides an outline individual management plan – wherever possible the practice should ensure that the patient has an individual management plan which has been developed by secondary care and giving:

   a. The reason for treatment;
   b. The agreed treatment programme;
   c. The planned duration.

f) Maintains adequate records – the practice should keep adequate records of the service provided incorporating all known information relating to any significant events e.g. adverse reactions, hospital admissions and relevant deaths of which the practice has been notified.

g) Ensures primary care staff training – the practice should ensure that all staff involved in providing any aspect of care under this scheme have the necessary training and skills to do so. The practice should be able to demonstrate that they have in place a policy to cover staff training and maintenance of skills.

h) Provides safe and suitable facilities for undertaking invasive procedures – the practice should be able to demonstrate that they not only have appropriate facilities but also the policies and procedures in place for their correct use.

i) Reports untoward events – the practice must undertake to notify the Health Board clinical governance lead of untoward events within 72 hours of their occurrence. These are in addition to any statutory obligations and should include:

   a. Significant adverse events;
   b. Emergency admissions or deaths of any patient treated under this service.

Further information regarding the prescribing of denosumab, including monitoring and potential side effects, is available from the Summary of Product Characteristics (SPC) or British National Formulary (BNF).

5. Activation

This specification will be agreed between Hywel Dda Health Board and practices.

Where a Practice has opted in advance not to participate in this LES, the HB is responsible for making alternative arrangements to provide a denosumab service to those patients.

This LES will come into effect on 1st April 2014.

This LES will continue to be commissioned until further notice.

Claims may be submitted for activity from 1st April 2014 onwards.

6. Accreditation

A practice may be accepted for the provision of this enhanced service if it has a partner or partners, employee or sub-contractor, who has the necessary skills and experience to carry out the contracted procedures.

Doctors will need to satisfy, at appraisal, that they have the necessary medical experience, training and competence to enable them to provide for a safe and effective denosumab enhanced service.

Clinicians taking part in this enhanced service should be competent in resuscitation and, as for other areas of clinical practice, have a responsibility for ensuring that their skills are regularly updated. Doctors carrying out denosumab administration should demonstrate a continuing sustained level of activity, conduct regular audits, be appraised on what they do and take part in necessary supportive educational activities.

Please register your Practice's intention to provide this LES via the Annual Return.

7. Pricing

A fee per injection has been set in order to cover patients whose care starts part way through the year.

The tariff is:

[redacted] **per injection**

Claims can be made on submission of the number of injections administered each month to Contractor Services NWSSP.